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TRANSFERS MATTER MOST

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Transfers Matter Most:

How Changes in Transfer Systems of Canada and the United States Explain the Divergence in Household Poverty Levels from 1974-1994

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Introduction

Three decades ago, Canada and the United States shared almost identical relative poverty and inequality levels. Yet despite experiencing similar macro-level social and economic transformations from 1974 to 1994[1], the two nations have experienced diametrically opposite trends in relative household poverty. While levels of poverty increased in the U.S. during this period, Canada has experienced declining household poverty. Several institutional economists have utilized the comparative case of Canada to emphasize the important role of one kind of institution for explaining differences in poverty or inequality rates at one point in time[i]. These economists have presented compelling evidence that institutional differences, and not broader cultural or economic differences, explain the poverty and inequality differences between Canada and the U.S. in the late 1980s. These institutional differences include unionization policy and social welfare packages. Yet despite the importance of these institutional differences for explaining differences in poverty or inequality levels at one point in time, my analysis of Luxembourg Income Survey (LIS) data on Canada and the U.S. over this period clearly demonstrates that it is the different ways each nation has reformed their ***transfer systems*** over this period, and *not* other institutional differences or reforms, that comprehensively explain the divergent ***trends*** in relative household poverty rates from 1974 to 1994. My analysis utilizes harmonized LIS data to identify the relative explanatory strength of different facets of the transfer systems for explaining the divergence in poverty from 1974-1994. Surprisingly, the breakdown analysis reveals that the divergent trends can largely be explained by differences in the structure and reform of each nation's Social

[1] Drastic changes in the Canadian and U.S. social welfare systems as well as the lack of "lissified" "lissified" Canadian income data for 1997 limits this analysis from 1974 to 1994.

Retirement benefits, a factor not mentioned as an explanatory factor in the previous literature. Differences in other "Social Insurance" transfers and "Means-Tested" benefits together also helped explain the divergence in poverty trends, but with less power than expected. The increased effectiveness of the Canadian transfers for reducing its relative household poverty rate compared to the American system over this period has consequences for explaining divergence in inequality and possibly health outcomes and other measures of well-being between these two nations.

Literature Review: Explaining U.S. and Canadian Differences at One Point in Time

Past comparative cross-national Canadian-U.S. research has largely focused on explaining differences in poverty and inequality at one point in time. This research compellingly argues that institutional differences in unionization policy and social safety nets between the two nations explain differences in union coverage rates, inequality and poverty.

Unionization Policy Matters

Previous research has proposed that differences in poverty and inequality rates between Canada and the U.S. can be explained in part by differences in labor policy related to unionizing. This research suggests that Canada and U.S. comparative research suggests that labor policy differences, with regards to worker's right to organize and management's ability to block union organizing played a critical role in explaining differences in rates of union coverage between the nations in the late 1980s. Economist W. Craig Riddell utilizes data from multiple comparable data sources to examine possible explanations for lower levels of union coverage in the United States (1993). These potential explanations include differences in desire to unionize, changing economy and

labor force, management opposition, and the legal regime (Riddell 1993: 15). Riddell's analysis of comparable social attitude data casts serious doubt on Lipset's (1990) hypothesis that the unionization gap between Canada and the U.S. could be explained by underlying social value differences between Canadians and Americans. Based on comparative demand side analysis, he also finds that only a small part of the unionization gap can be explained by the higher percentage of Canadian workers in the public sector. Rather, Riddell concludes that his analysis of the evidence modestly supports the hypothesis that the unionization gap can be explained by the *differences in government policies and enforcement with regards to union organizing and collective bargaining as well as somewhat lower levels of management opposition in Canada* (Riddell 1993: 143). In Canada, workers who desire collective representation or to unionize have a much easier time organizing and joining a union than in the U.S. because labor laws do not grant nearly as much power to management to challenge unionizing efforts. What are the implications of these differences? Economist Thomas Lemieux found that the union wage effects on both the dispersion as well as mean of wages are similar in the U.S. and Canada utilizing the 1986 Labour Market Activity Survey (LMAS) for Canada and the 1986 outgoing rotation group file of the Current Population Survey (CPS), (1993: 97). He concludes that, "…differences in the pattern and extent of unionism in Canada and the United States explain 40% of the difference in wage inequality between men in the two countries" (Lemieux 1993: 97).

Social Safety Nets Matter:

Economists Rebecca Blank and Maria Hanratty utilize comparable survey data from the Current Population Survey on 50,000 American families and the Survey of

Consumer Finances on 30,000 Canadian families' income and work behavior and find that these differences help explain the differences in poverty rates between the U.S. and Canada in 1986 (Blank and Hanratty 1993: 199). Blank and Hanratty standardize the income and poverty measures to compare differences between the U.S. and Canada in poverty rates based on an absolute poverty line. As shown in the table below, they find that, despite the modestly lower income of Canadians relative to Americans, cross-sectional evidence demonstrates that Canada had lower-levels of family poverty (Blank and Hanratty 1993: 191).

Table: Cross-Sectional Evidence on Poverty Rates 1986:

	Canada	United States
Single-Parent Families	**32.3%**	**45.3%**
Two-Parent Families	**5.2%**	**6.8%**

-- Source: Blank and Hanratty (1993: 191)

Not only did Canada have lower levels of family poverty, Blank and Hanratty also find that Canada has a smaller poverty gap, i.e. less income would be required to bring poor families up to the poverty line (Card and Freeman 1993: 10).

To more accurately assess the impact of social policy differences, Blank and Hanratty compare poverty rates before and after governmental transfers in both the U.S. and Canada, with the controversial assumption that income support policies do not impact other sources of income (based on rising labor force participation rates in both a nations). They find that the Canadian system was much more effective at reducing poverty through government transfer programs. These programs reduced family poverty rates by 5.7 percentage points in Canada compared to only 1.9 percentage points in the U.S. The Canadian system reduced poverty among single parent families by 14.3

percentage points as compared to 5.3 percentage points in the U.S. (Card and Freeman 1993: 10). Subsequently, they ran methodologically complex simulations to estimate the impact of U.S. anti-poverty programs on Canadians and the Canadian system on Americans. While adopting U.S. program rules and benefits to the Canadian data predictably increased poverty levels, the results of applying Canadian policies to U.S. data are particularly striking, especially for single parent families:

> The poverty rates of single parent families with children would decline from 43% to 16% if the United States adopted the 'mean' Canadian program, assuming Canada's participation rates were duplicated in the United States. Assuming 100% participation rates, poverty among this group would nearly disappear. The results are not very sensitive to the a range of assumed labor market elasticities (Blank and Hanratty 1993: 192)

The findings of these simulations, however, rely on some debatable assumptions. First, Blank and Hanratty assume that the more generous and flexible benefits would not effect individual's labor market behavior. Yet Blank and Hanratty argue that this is a reasonable assumption in light of the fact that earnings and work effort among single parents are similar in the U.S. and Canada, despite Canada's more generous social assistance benefits (1993: 212-214). Second, many more Canadians take advantage of the social assistance benefits for which they are eligible relative to Americans. Participation rates, or benefit take-up, are much harder to estimate in a simulation as these are both culturally and program rules determined. The higher the estimated participation rates, the more the simulation of Canada's social assistance policies applied to the United States pre-tax income data would almost completely eliminate poverty among families with children (Blank and Hanratty 1993: 216-217). These results prompted them to conclude, "the principal reason for higher total income among the disadvantaged groups in Canada is higher transfer income. Poor, near poor, and single

parent family earnings are no higher in Canada, but transfers are substantially higher (Blank and Hanratty 1993: 202)." Other scholars working with Luxembourg Income Survey data had similar findings, such as Lee Rainwater (LIS Working Paper 89, 1993)

Not Different Economic, Historical, or Other Trends

Although previous research has not focused so much on explaining the divergent trends between the U.S. and Canada, some scholars have utilized trend data and analysis to demonstrate that institutions, in general, and not cultural or social differences between Canada and the U.S. are responsible for differences in poverty.[ii] Over the past twenty years, Canada and the United States have experienced similar forces of globalization, technological change, demographic, and social changes, including rising rates of divorce and solo parenthood. Economists Card and Freeman describe the similarities well:

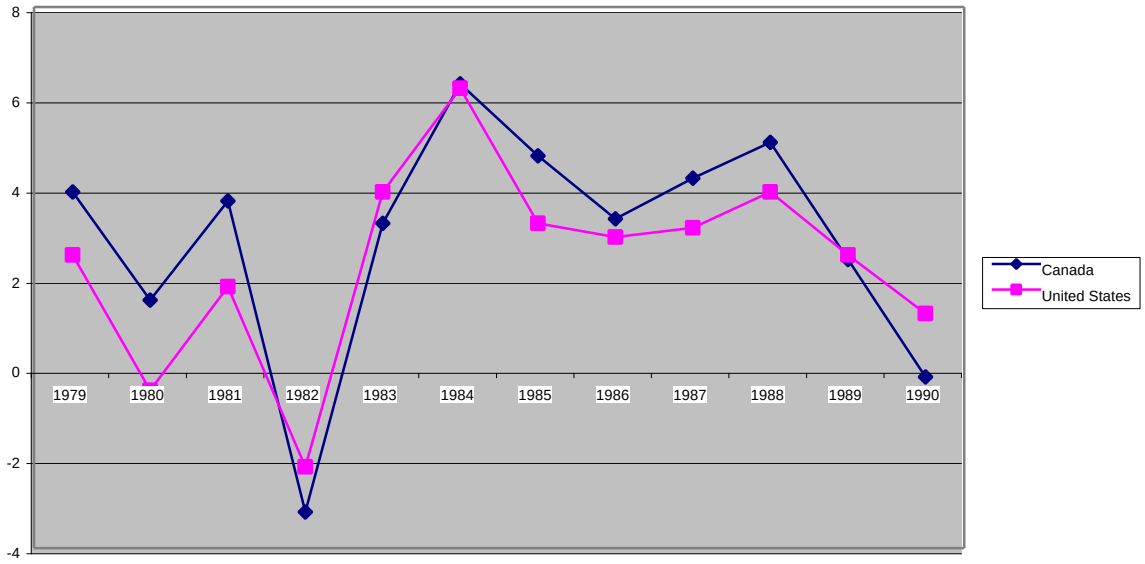
> Canada and the United States are as close economically and socially as any pair of countries in the world. The two nations share similar cultural traditions and enjoy comparable living standards. Both countries have highly educated and skilled workforces, with similar industrial and occupational structures. Many of the same unions and firms operate on both sides of the border… Throughout the past century Canada and the U.S. have shared similar economic experiences. Both were major recipients of the European immigration and capital flows; more recently, both have experienced large in-flows of non-European immigrants. Both escaped the destruction of World Wars I and II. Both had "baby booms" in the 1950s that produced comparable demographic structures. And both developed broadly similar income security and labor market regulations over the course of the twentieth century. But against this backdrop of similarity are "small differences" in policies, institutions, and economic outcomes… (1993: 1)

The two nations have also experienced remarkably similar labor force sector shifts away from manufacturing and agriculture to the service sector, as shown by Reitz (1998).

Although differences between two nation's particular business cycles of booms and recessions often provides a challenge to the validity of conclusions based on cross-national comparative research, the following figure based on evidence by Anthony

Atkinson, Lee Rainwater, and Timothy M. Smeeding from OECD data suggests that Canada and the U.S. largely share similar patterns and rates of economic growth from 1979 to 1990:

Fig. 1: Rates of Real GDP Growth 1979-1990*



* Note: The tables for each figure are attached in Appendix 1 after the bibliography

The similarities in economic structure and trends between Canada and the United States over the past several decades increases the validity of a comparative cross-national research design for isolating the impact of institutional differences at one point in time. In combination with similar starting points, the similarity in social and economic transformations and cycles also increases the validity of drawing conclusions from testing the impact of institutional impacts on trends in rates of poverty.

Transfers Matter Most:

While past research has established that various institutional and policy differences between the U.S. and Canada can explain the difference after tax and transfer relative poverty levels at one point in time, my analysis of LIS data clearly demonstrates

that only differences in the structure and reform to the transfer systems of each nation can explain the divergent trends of these poverty levels from 1974 to 1994.

This section begins with a discussion of why relative and not absolute poverty levels are utilized for this analysis. Second, it provides some background on the primary data source, the Luxembourg Income Survey (LIS), as well as the specific sources and limitations of LIS data on Canada and the United States for this kind of analysis. Third, it explicitly describes the divergent trends in after tax and transfer poverty rates after 1974. Fourth, it clearly demonstrates that the explanation for this divergent trend must be in the tax and transfer system differences. Fifth, it demonstrates that these divergent trends cannot be explained by differences in the tax system, and must be attributed to differences in the structure and reform of each nation's transfer system. Finally, it reviews and casts serious doubt on other possible explanations of the divergence in poverty rates.

Relative vs. Absolute Poverty Rates:

My analysis utilizes data on relative household poverty rates precisely because they allow the poverty line to change over time and provide a more consistent standard measure across advanced industrial nations. Hence relative, rather than absolute, poverty rates are the more valid metric for the analysis of poverty trends if the primary concern is the comparative cross-national analysis of how policy effects households. The use of relative vs. absolute poverty measures in this paper is further supported by its concern with household's earning enough income to purchase the basket of goods necessary to prevent social exclusion (see Osberg 2000 for an excellent moral traditions and the significance of income poverty). As Osberg explains, the real difference between relative

and absolute poverty lines is the transparency of what determines the poverty line: relative poverty explicitly links it to the income distribution, while absolute poverty lines is based on the value of a market basket of goods that is implicitly connected to the income distribution anyway (2000: 4). Yet there clearly exists a dynamic and changing basket of goods necessary for inclusion and full participation in society that changes over time and between nations. So for this analysis, the relative poverty rate represents the most conceptually useful and empirically valid measure.

Luxembourg Income Survey Data Sources and Limitations:

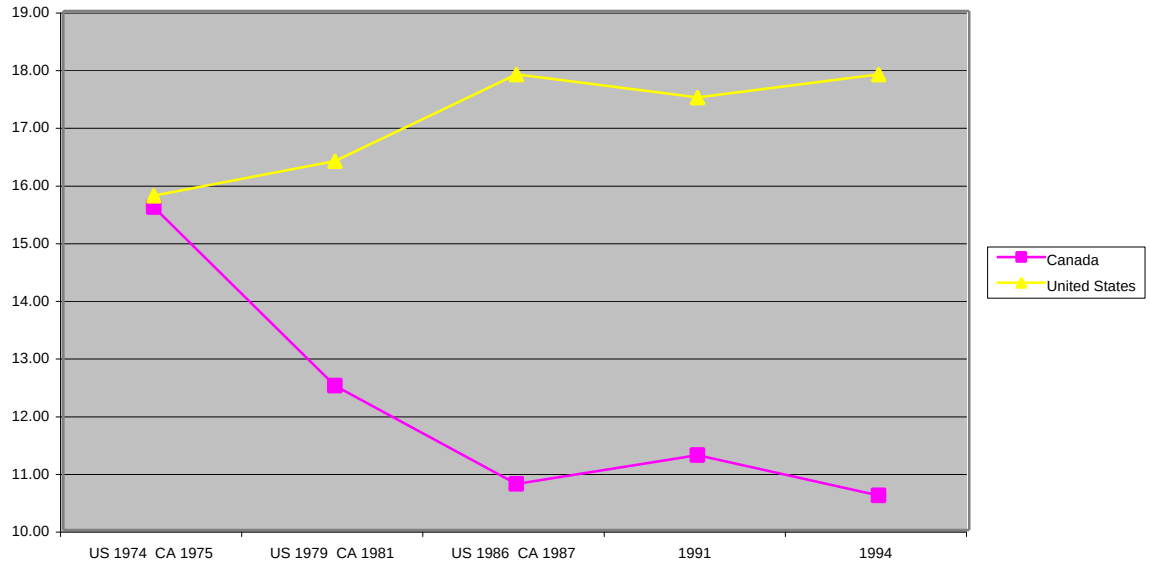
The Luxembourg Income Survey provides the highest quality, accessible, and comparable data for cross-national comparisons (for more information see http://www.lis.ceps.lu). Income data from national sources is collected and stored in Luxembourg, the Canada's Survey of Consumer Finances and the U.S. March Current Population Survey in this case, and the income and demography variables "harmonized" to have the same meaning across these datasets (Smeeding and Ross 1999 10-11). National data goes through the "lissification" or harmonization process once every five years; and especially in the early years the comparable U.S. and Canadian data may be a year apart. While this process provides accessible and comparable data, it certainly does not perfectly "standardize" the data or eliminate all the problems of noise in the original data sets (Smeeding and Ross 1999 11). Some of these noise problems may have a particularly serious impact on the accuracy of analysis of poverty. Hence, it is important to outline these limitations and potential problems and consider the impact of these drawbacks on the comparative analysis. Although both datasets have been cleaned up as much as possible, both the Canadian and U.S. contain missing income data, likely biased

downwards, and inaccuracies in income reporting that are more dramatic systematically at the top and the bottom of the income distributions. Both of these weaknesses can challenge the validity of findings from cross-national comparisons, particularly if one variable is systematically more biased in one direction. The greatest danger in the U.S. and Canadian comparative case is that low-income families in the U.S. are severely under-reporting their income, from all sources including transfers, relative to Canadian low-income families. Yet the good must not be the enemy of the perfect, and many powerful research findings have been derived about poverty based on these two datasets, despite these potential limitations. While they are an important limitation to consider, these drawbacks likely do not fundamentally invalidate the findings of this analysis. As both Canada's Survey of Consumer Finances and America's March Consumer Population Survey share these problems of missing data and underreporting at the top and bottom, the detrimental effects are partially nullified or partially canceled out.

Past Similarity and Twenty Years of Divergence:

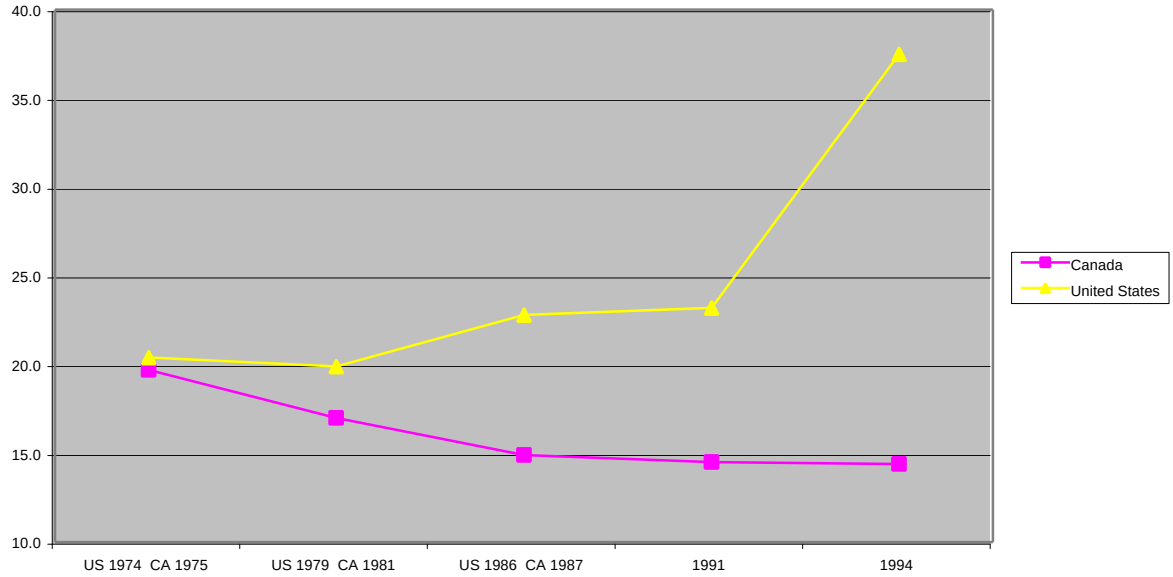
The LIS data clearly reveal that the United States and Canada experienced divergent poverty trends, from similar starting points in 1974, in the period 1974 to 1994. The following figure highlights the post-tax and transfer rates of poverty from LIS data:

Fig. 2: Poverty Rates After Taxes and Transfers (<50% Median Household Income)



As presented in the figure above, the household poverty rate in Canada, based on median income, decreased from 15.6% in 1975 to 10.6% in 1994. In the United States, on the other hand, the household poverty rate increased somewhat over the same period from 15.8% in 1974 to 17.9% in 1994. The same divergence in trends is even more pronounced based on relative household poverty measured against the mean income.

Fig. 3: Poverty Rates After Taxes and Transfers (<50% Mean Household Income)



As presented in figure 3 above, the relative household poverty rate after taxes and transfers in Canada, based on mean income, decreased from 19.7% in 1975 to 14.4% in 1994. During nearly the same time period, the U.S. post tax and transfer relative household poverty rate increased from 20.4% in 1974 to 37.5% in 1994.

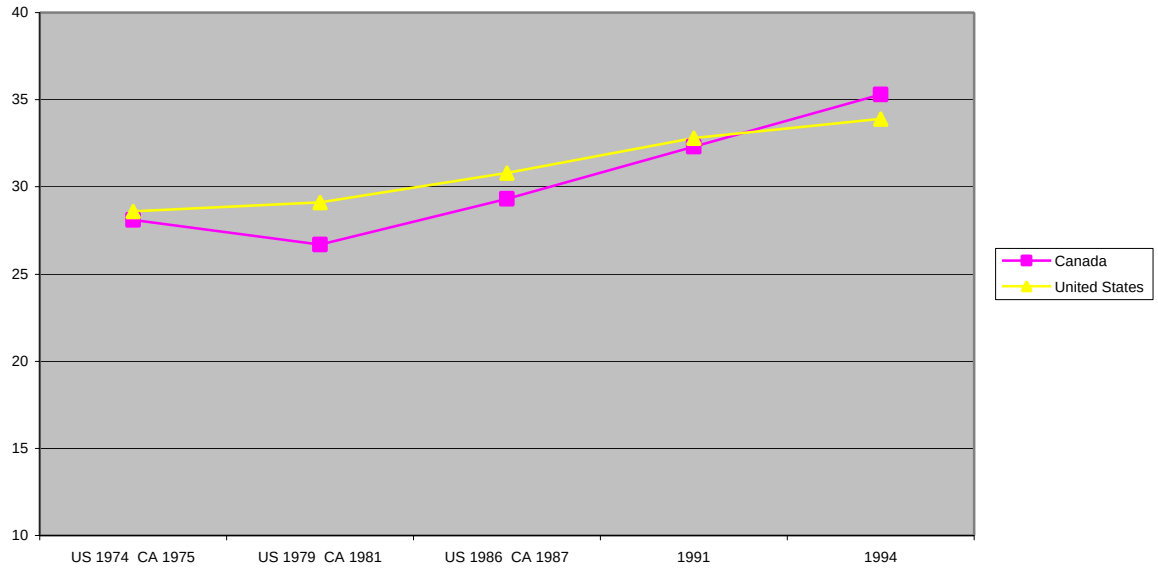
The Explanation Must Be in Differences in the Tax and Transfer Systems:

My analysis of the LIS clearly demonstrates the overwhelming explanatory power of differences in transfer systems and reforms, and not other kinds of institutions or explanations, for explaining the divergence in poverty trends in Canada and the United States from 1974 to 1999.

If market, cultural, or economic differences could explain the divergence in poverty trends, then these rates must also diverge based on pre-tax and transfer income data. Yet, as shown in the figure 4 below, pre-tax and transfer poverty rates based on

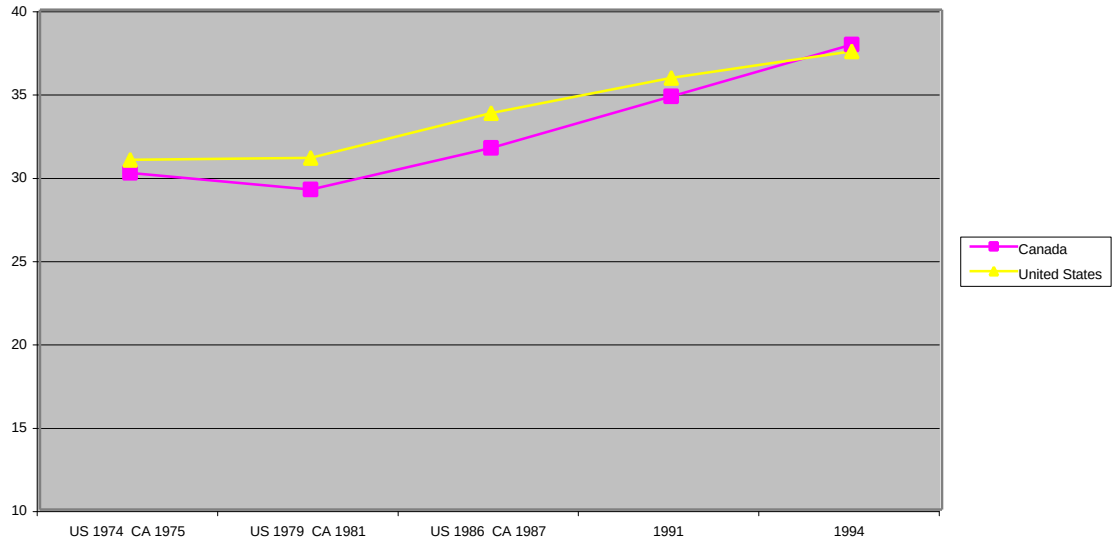
median income in Canada increased at about the same rate and level as in the United States from 1974 to 1994.

Fig. 4: Poverty Rates Before Taxes and Transfers (<50% of Median Household Income)



In Canada, the pre-tax and transfer relative poverty rate increased from 28.1% in 1975 to 35.5% in 1994; similarly in the United States it increased from 28.6% in 1974 to 33.9% in 1994. Before taxes and transfers, Canada has a marginally *higher* rate of household poverty against median income in 1994 as compared to the United States. The following table shows that pre-tax and transfer household poverty trends follow the similar identical pattern, as measured against mean income.

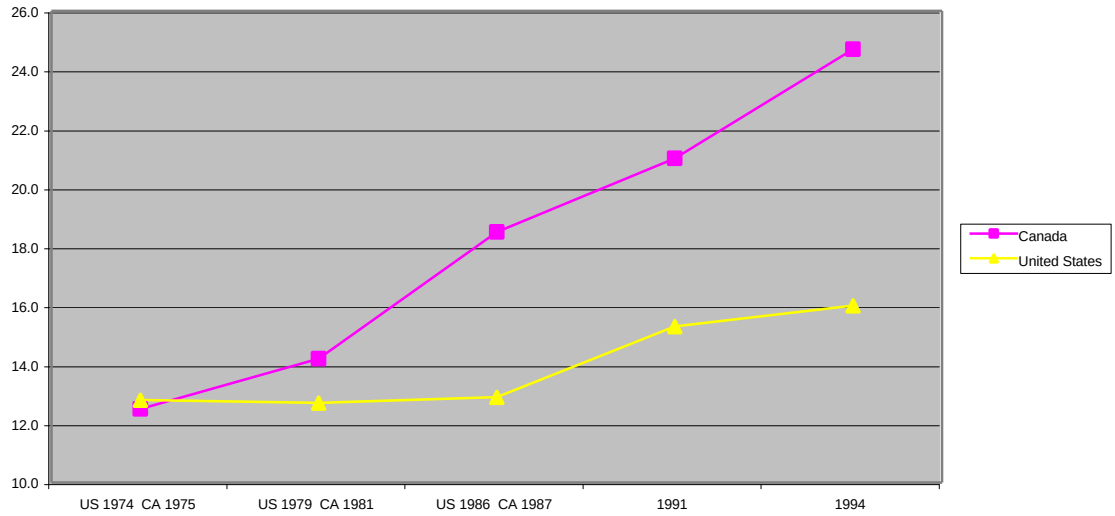
Figure 5: Poverty Rates Before Taxes and Transfers (<50% of Mean Household Income)



As presented in figure 5 above, pre-tax and transfer household poverty rate rose in Canada from 30.2% in 1975 to 37.9% in 1994; similarly the household poverty rate increased from 31% in 1974 to 37.5% in 1994. So, the evidence from the Luxembourg Income Survey clearly shows that explaining the divergence in trends must arise from differences in the tax and transfer systems.

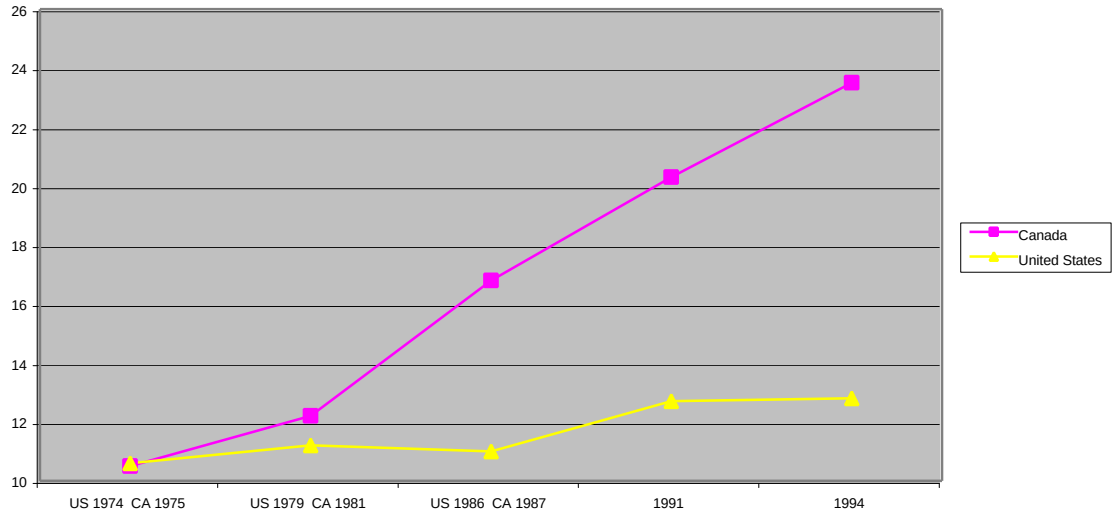
From similar starting points, the Canadian tax and transfer system clearly has become more effective at reducing market generated relative household poverty. The following table presents the percentage point reduction or "effectiveness" of the tax and transfer system in each nation over time for reducing relative household poverty rate.

Fig. 6: Percent Point Reduction of Poverty Rates from Taxes and Transfers Income (based on <50% Median Household Income)



Based on a relative poverty rate against the median household income, figure 6 above demonstrates that the Canadian system substantially increased its "effectiveness" at reducing pre-tax and transfer household poverty rates from 12.5 percentage points in 1975 to 24.7 percentage points in 1994. While also increasing its poverty reduction "effectiveness" over the same period, the United States tax and transfer system went from reducing pre-tax and transfer household poverty rates from 12.8 percentage points in 1974 to only 16 percentage points in 1994. The same pattern is affirmed in the following figure 7, which contrasts the trends in poverty reduction effectiveness of the Canadian and U.S. tax and transfer systems over the same period, but on poverty rates generated against the mean income in each nation.

Fig. 7: Percent Point Reductions of Poverty Rates from Taxes and Transfers (based on <50% Mean Household Income)



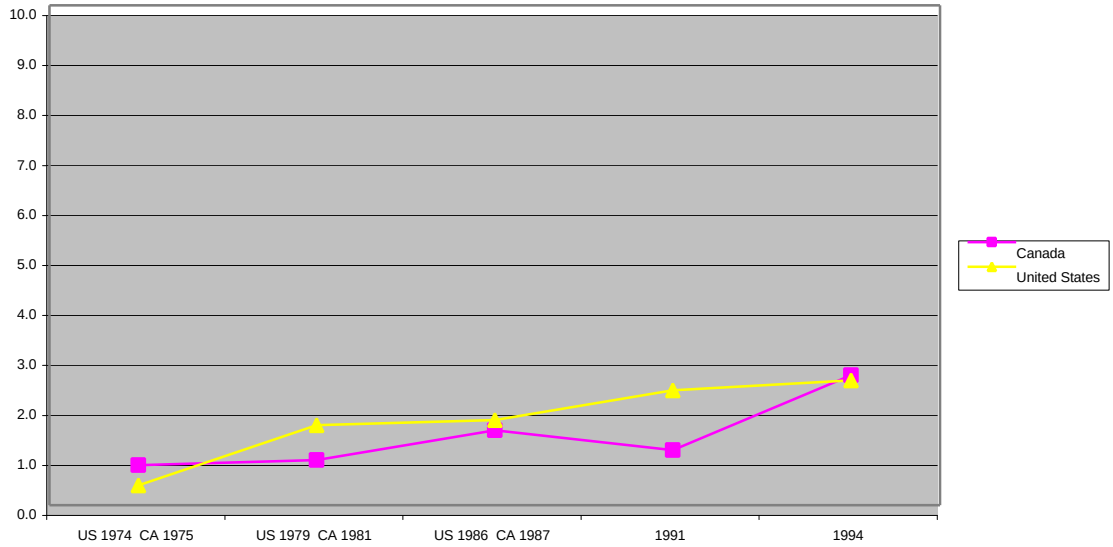
The evidence presented in figure 7 above shows that the Canadian tax and transfer system increased its relative household poverty effectiveness from 10.5 percentage points in 1975 to 23.5 percentage points in 1994, while the U.S. system only marginally increased from 10.6 percentage points in 1974 to 12.8 percentage points in 1994.

Differences in Transfer Systems and Reforms must be the Key Explanatory Variable:

Until this point, the impact of taxes and transfers have been considered together. Removing **tax** income from the U.S. and Canadian income data and re-calculating the relative household poverty rates after transfers over this period highlights the lack of explanatory power of tax system differences; and demonstrates that differences in the structure and reforms of the Canadian and U.S. **transfer systems** explain the divergent relative household poverty trends between the U.S. and Canada from 1974 to 1994. If the divergence in household poverty trends could be explained by differences in the structure and reform of the tax systems between the U.S. and Canada, then we would expect

diverging trends in the "effectiveness" of the two tax systems for reducing household poverty rates over this period. Yet the following table presents evidence that the Canadian and U.S. tax system basically have followed a similar pattern of increasing, yet still minimal, effectiveness of reducing relative household poverty rates over this period. Although the case of the poverty rate based on the mean provides extra supporting evidence, the remaining analyses in this paper will focus on poverty rates in each nation calculated against the median as this represents a less sensitive against extremes income values, which tend to be problematic in both the U.S. and Canadian case.

Fig. 8: Percent Point Reductions of Poverty Rates from Taxes Alone



The above figure 8 shows that Canada's tax system reduced relative household poverty rate by 0.8 percentage points in 1975 and 2.6 percentage points in 1994. Similarly, the U.S. system reduced the relative household poverty rate 0.4 points in 1975 and 2.5 percentage points in 1994. So there is no way that differences in the structure or reforms of the Canadian and U.S. tax systems can be responsible for the divergence in post-tax and transfer poverty rates from 1974 to 1994. Hence *the divergence in poverty rates must*

be explained by differences in the structure and reform of Canada and the U.S. respective ***transfer systems****.*

Not Directly Unionization Policy:

Despite suggestive evidence and contrary findings of the previous literature on U.S. and Canadian differences at one point in time, the above evidence strongly suggests that labor policy differences between the U.S. and Canada as related to unions do not directly explain the divergent trends in poverty rates between the U.S. and Canada from 1974 to 1994.

The correlated trends of divergent union coverage with poverty rates may initially suggest that these labor policy differences directly impact poverty rates. In both Canada and the United States approximately 30% of the non-agricultural labor force were members of a union during the period 1950 to 1970. After 1970, union coverage rates in the United States began to fall steadily every year, particularly after 1975. By 1985, union coverage had declined to 20% of the labor force and has continued to fall (U.S. Department of Labor 1996 in Banting, et. al. 1997). In sharp contrast, Canada's rate of union coverage of its workforce increased steadily after 1970 to a high of 40% in 1970 in 1985 before dipping slightly down to 35% in 1990 and then increasing again slightly through 1994 (Labor Canada 1995 in Banting, et. al. 1997). After thirty years of divergence, Canada's union coverage currently is at least double that of the United States, across all economic sectors. Indeed, the divergence between Canadian and U.S. levels of union coverage is largest and growing fastest among traditionally low-union workers – including females and part-time workers – and the service sector (Riddell 1993: 112, 113).

The labor policy differences as related to unions would appears to be a promising theory for explaining the divergence in relative household poverty rates in Canada and the U.S. from 1974 to 1994. Higher rates of unionization have been associated with lower levels of wage inequality for both unionized and non-unionized workers, and hence lower relative poverty rates. Yet if labor policy differences had mattered more to *household income,* the pre-tax and transfer poverty rates should have declined in Canada as compared to the United States over this period. Yet the evidence presented in the above section shows that the pre-transfer poverty rates grew at the same rate in both Canada and the U.S. from 1974 to 1994. Indeed this evidence would cast doubt on hypotheses claiming that any other institutions, including higher education policy differences (see Freeman and Needels 1994), could explain the divergence in relative household poverty trends. Of course, this does not rule out the possibility that the differences in labor policy as related to unions caused the divergence in rates of union coverage of the labor force that *indirectly* caused differences in the political outcome of general transfer retrenchment in the U.S. and expansion in Canada during this period.

Going beyond "Transfers":

The harmonized variables provided by the Luxembourg Income Survey data allows for going beyond the "transfers" argument to begin to examine somewhat more specifically which kinds of transfer differences matter for explaining the divergence in relative household poverty rates between Canada and the U.S. from 1974 to 1994. The LIS disposable income variable utilized in the above analysis emerge from summary income, tax, and benefit data where:

Disposable Household Income = (Market) Earnings + Cash Property Income + Social Insurance Transfers + Means Tested Benefits + Public Pensions + Private Pensions + Other Cash Income – Mandated Employee Contribution – Income Tax

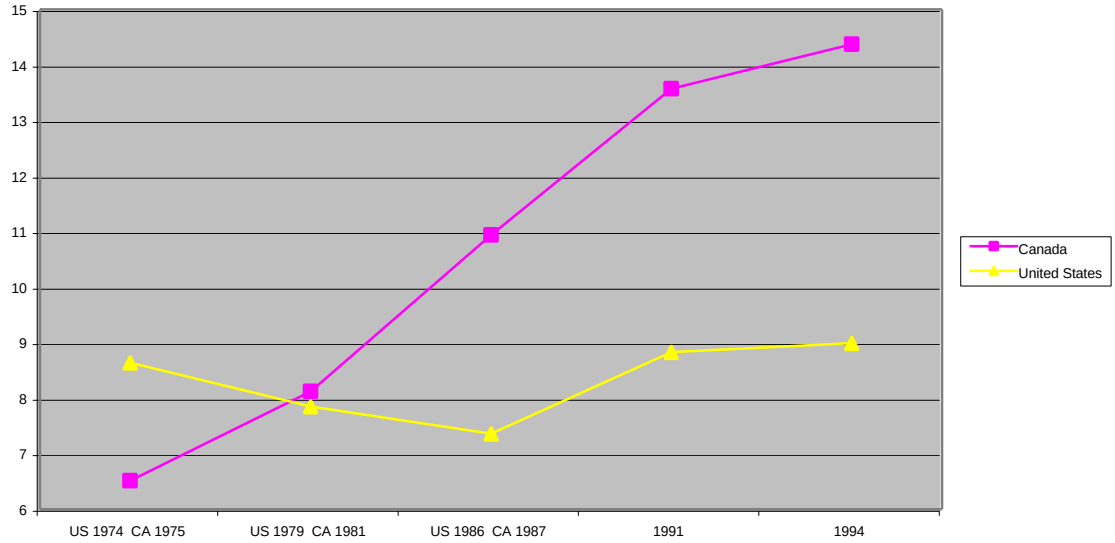
Each of these summary variables listed above represent more detailed variables; for example:

Social Insurance Transfers = Sick Pay + Disability Pay + Social Retirement Benefits + Child or Family Allowances + Unemployment Compensation + Maternity Pay + Military/Vet/War Benefits + Other Social Insurance

Removing each one of these variables and re-calculating the relative household poverty rate for each nation allows for a "sensitivity" type analysis that isolates the strength and trends in impact of each variable on the poverty rate.

The following analysis reveals that the differences in the systems and reforms of **Social Insurance Transfers** in Canada and the U.S. provide a major explanation for the divergence in relative household poverty rate trends from 1974 to 1994. Removing **Social Insurance Transfer** Income from the post-tax and transfer income data and re-calculating relative household poverty rates reveal that the Canadian system of social insurance transfers went from being less effective than American system at reducing relative household poverty in 1974 to being nearly twice as effective in 1994.

Fig. 9: Percent Point Reductions of Poverty Rates from Social Insurance Transfers



As presented in figure 9 above, Canada's **Social Insurance Transfers** steadily increased its reduction of relative household poverty rates 6.51 percentage points in 1975 to 14.37 percentage points in 1994. At the same time, America's **Social Insurance Transfers** continued to only reduce relative household poverty between approximately 7 and 9 percentage points. The increasing gap in poverty reduction effectiveness over time between their **Social Insurance Transfers** over time provides a major, yet not complete, explanation for why Canada's relative household poverty rate did not increase nearly as fast as the U.S. rate over the same time period.

Divergent trends in the strength of means tested benefits for lifting families out of poverty also helps explain the differences in poverty trends between the U.S. and Canada. Although less powerful as an explanatory summary variable than **Social Insurance Transfers**, the impact of removing **all means tested income transfers** (means-tested cash benefits + near-cash benefits) from the disposable income on relative household poverty rate reveals a similar pattern.

Fig. 10: Percentage Point Reductions of Poverty Rates of All Means Tested Income Transfers

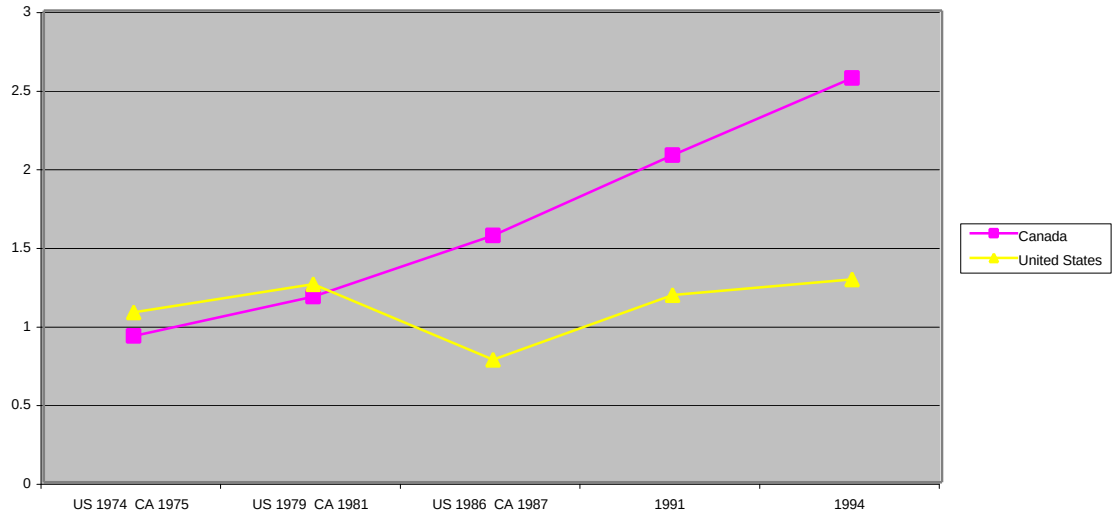


Figure 10 above shows that the effectiveness of Canada's means tested programs steadily increased from reducing the relative household poverty rate .94 percentage points in 1975 to 2.75 points in 1994. In the U.S. on the other hand, means tested programs continued to only reduce the poverty rate approximately 1 percentage point throughout this period. Although the magnitude of the difference may appear small, the differences in the changing effectiveness of **Social Insurance Transfers** and all **Means Tested Transfer** income almost completely explains the divergent relative household poverty trends between the U.S. and Canada from 1974 to 1994.

Going Beyond "Social Insurance Transfers":

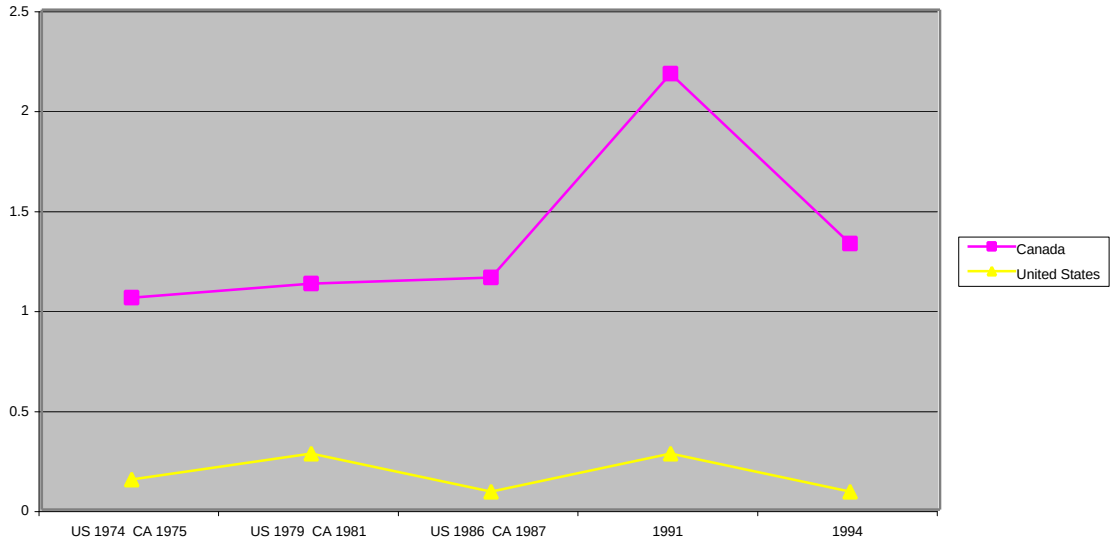
As the differences in the income transfers provided by the **Social Insurance Transfers** summary variable explain most of the divergence in poverty rate trends between the U.S. and Canada from 1974 to 1994, the following analysis examines the impact of removing each individual variable and recalculating the poverty rate. The "**Social Insurance Transfers"** variable includes Sick Pay, Disability Pay, Social

Retirement Benefits, Child or Family Allowances, Unemployment Compensation, Maternity Pay, Military/Vet/War Benefits and Other Social Insurance. Unfortunately as these categories of transfers alone often are not significant enough to lift low-income households above the poverty line, it is difficult to isolate the impact of each type of transfer as well as if a more sensitive measure was used, such as the Sen-Shorrocks-Thon poverty intensity measure Osberg proposes (Osberg 2000). Despite these limitations, this analysis reveals some strong and surprising results.

Although Unemployment Compensation, Child and Family Allowance, Other Social Insurance, and Military/Vet/War Benefits differences have a small role in driving the divergence of relative poverty rates, the most important explanatory factor for explaining the divergence in poverty rates is differences in the Social Retirement Benefits.

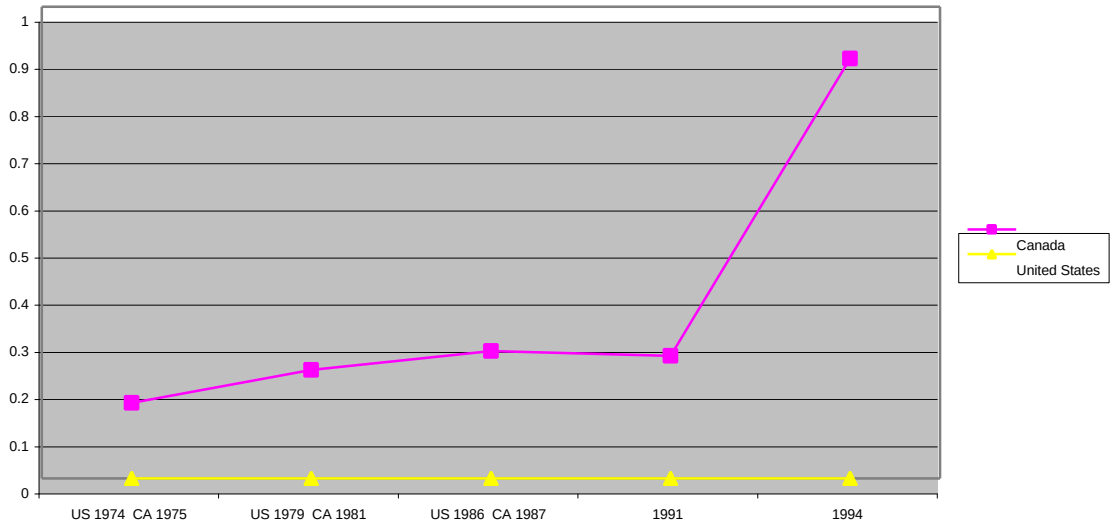
Canada's unemployment compensation income consistently lifted more households out of relative poverty as compared to the U.S. and showed a slight, but inconsistent upward trend over this period.

Fig. 12: Percent Point Reductions of Poverty Rates from Unemployment Compensation



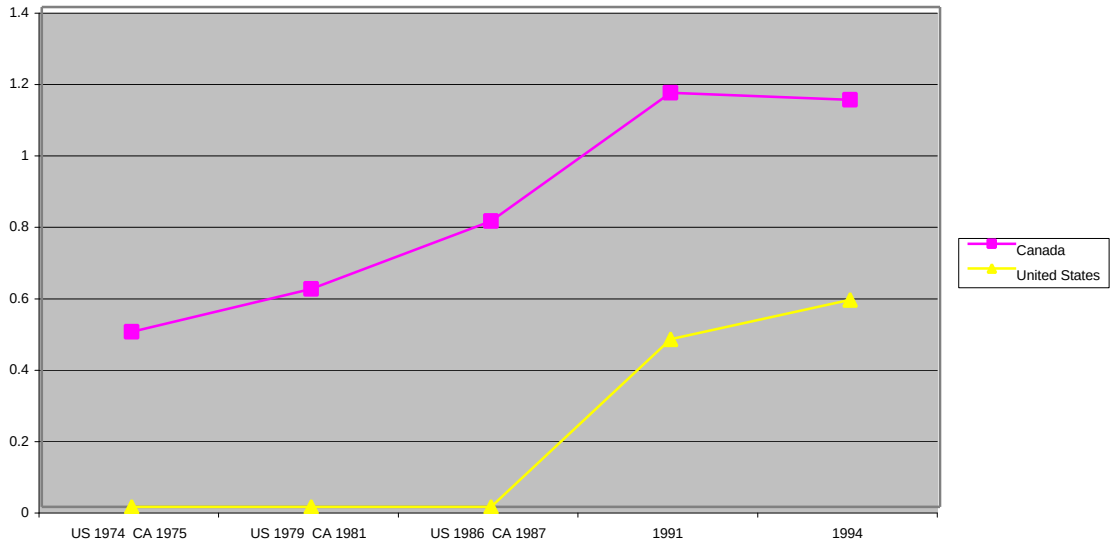
Canada's child and family allowances transfer income pulled a small, but steadily increasing, percentage of households out of poverty over this period. At the same time, income from child and family allowances continued to not pull any households above the poverty line in the U.S. over this period.

Fig. 13: Percent Point Reduction of Poverty Rates from Child and Family Allowance Transfer Income



The transfer income generated from "Other Social Insurance" also lifted a very small, but increasing percentage of families out of poverty in Canada over this period. In the U.S., "Other Social Insurance" transfer income began to raise about half a percentage of households out of poverty after around 1991.

Fig. 14: Percent Point Reduction of Poverty Rates from Other Social Transfer Income



Not surprisingly, removing Military/Vet/War Benefits, Sick Pay transfer income, Disability Pay Benefits, and Maternity Pay transfer income individually had no effect on poverty rates in either Canada or the United States.

The most significant and critical finding of this paper is that the most important transfer system differences for explaining the divergence of relative household poverty rates between the U.S. and Canada from 1974 to 1994 is between the Canadian and U.S. *Social Retirement* systems.

Fig. 16: Percent Point Reductions in Poverty Rates from Social Retirement Transfer Income

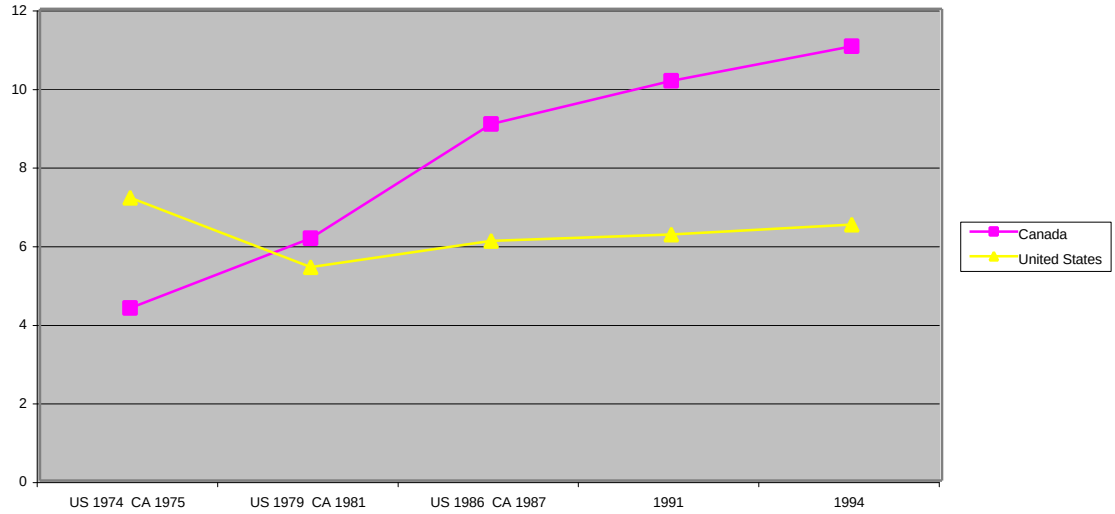


Figure 16 above demonstrates that Canada's Social Retirement transfers only reduced the relative poverty rate 4.39 percentage points of households above the relative poverty line in 1974; yet increased rapidly to reduce the relative poverty rate 11.05 percentage points above the relative poverty line in 1994. In 1974, the U.S. Social Retirement benefits reduced the household poverty rate than in Canada – reducing the rate by 7.2 percentage points. Yet, by 1994, the U.S. Social Retirement benefits were having significantly less impact on the household poverty rate than in Canada, and continued to only reduce the relative household poverty rate by 6.51 percentage points. **The divergence in the effectiveness of Social Retirement Transfer Income** over time largely explains the divergence in relative household poverty rates between the Canada and the U.S. from 1974 to 1994.

What Policy Reform Explains the Divergence in Effectiveness of Retirement Benefits?

Canada's expansion of its **Guaranteed Income Supplement (GIS)** for the elderly explains the improved effectiveness of Canada's "**Social Retirement Transfer Benefits"**

for reducing Canada's overall rate of household poverty relative to the U.S. from 1974 to 1994. Hence, increases in this targeted "negative income tax" style supplement to Canada's universal **Old Age Security (OAS)** and **Canada and Quebec Pension Plans (C/QPP)** benefits largely explains the divergence of Canadian and U.S. household poverty rates over this period. First introduced in 1966, the **GIS** provides an income-tested benefit to low-income elderly in order to supplement their retirement benefits, with assets excluded and each dollar of income reducing benefits only 50% cents (Myles and Pierson 1997). Through the 1970s and 1980s, the Canada's **GIS** was expanded in stages and the value of the benefits increased relative to mean wages; at the same time the value of **OAS** and **C/QPP** benefits stagnated during the 1980s (Myles and Quadango 1994 cited in Myles and Pierson 1997). A simplified tax form also increased the take-up rates of the GIS to over 90% of eligible low-income elderly (Myles and Pierson 1997). In 1989, the Canadian government reduced **OAS** benefits, but only to those elderly with incomes higher than $51,765 (CAD) so that all benefits disappeared for those elderly with approximately $89,000 (CAD) per year (Myles and Pierson 1997). The expansion of the **GIS** benefit to elderly families had quite a dramatic effect on the poverty rates of elderly households over this period. According to the analysis of LIS data by Smeeding, Torrey and Rainwater, the elderly poverty rate in Canada was higher than in the U.S. in the mid-1970s; yet by the mid-1980s, only 7% of Canadian elderly were living in poverty compare to 22% of American elderly (Myles and Pierson 1997).

Implications for Explaining Divergent Trends in Inequality:

The above analysis demonstrates that differences in the structure and reform of primarily U.S. and Canadian "social insurance transfers", in particular social retirement

transfers and the expansion of the **Canadian Guaranteed Income Supplement (GIS)** largely explain the divergent trends in relative household poverty from 1974 to 1994 which also helps explain divergent trends in household inequality levels experienced by the two nations over this period. A closer examination of changes in the rates of inequality suggests that the divergence in levels of inequality is primarily driven by the improved position of Canadian families at the 10th percentile of the income distribution as compared to the median family.

Three decades ago, Canada and the United States shared similar levels of household inequality, as measured by LIS data. With households made equivalent through the use of a square root of family size factor, Canadian and American households at the 90th percentile of the income distribution had approximately five times the amount of household income compared to the income of households at the 10th percentile. In the United States, this "P90/P10" ratio increased steadily from 5.16 in 1974 to 6.42 in 1994 (LIS Data). The U.S. Gini measure of household inequality also increased from 32.3 in 1974 to 37.5 in 1994 (LIS Data). In sharp contrast, Canada's "P90/P10" ratio of inequality dropped steadily from 5.01 in 1974 to 3.93 in 1994 (LIS Data). So by 1994, those households in the 90th percentile of the income distribution in Canada were receiving less than four times the income of those at the 10th percentile. As expected, the Canadian Gini measure of household inequality also dropped over this period from 32.3 in 1971 to 28.6 in 1994.

According to LIS data, the ratio of incomes of households at the 90th percentile of the income distribution compared to the median income only declined ever so slightly in Canada from 1.90 in 1971 to 1.85 in 1994; while in the United States it increased from

1.90 in 1974 to 2.19 in 1994, a change of +.29. Yet the ratio of median household income in Canada to the income received by those at the 10th percentile dramatically declined over the same period from 2.63 in 1971 to 2.13 in 1994, or a change of -.50. In the United States, the ratio of median household income to the income of households at the 10th percentile increased steadily from 2.71 in 1974 to 2.93 in 1994, a change of +.22. So, the majority of the increasing divergence in inequality levels between Canada and the U.S. over this period is explained by the growing income gap between those households at the bottom or 10th percentile in the U.S. (compared to a shrinking gap in Canada) and not increasing inequality between those at the top or 90th percentile compared to the mean (which marginally increased in both nations). The above data demonstrates that divergence in overall rates of household inequality between Canada and the U.S. over the past thirty years has more to do with the relative improvement of Canada's households at the 10th percentile as compared to median income and the somewhat worse position of U.S. households at the 10th percentile compared to the mean than with differences in growing inequality at the top of the household income distribution.

As the divergence in inequality rates over this period is largely explained by the improved position of those families at the 10th percentile as compared to the median in Canada as compared the U.S. over this period, it appears that the differences in the structure and reform of the transfer systems, in particular "social insurance" transfers, provide a critical explanation for the divergent trends in household inequality experienced by the U.S. and Canada from 1974 to 1994. The increasingly generous and effective transfer system in Canada, especially the Social Retirement Benefit system or the expansion of the **Guaranteed Income Supplement (GIS),** played a critical role in

improving the relative position of households at the low-end of the income distribution, as compared to the U.S. By lifting an increasing percentage of households out of poverty, the Canadian transfer system has also significantly contributed to the overall reduction of household income inequality in Canada, during a period in which similar economic and social changes have resulted in an increase in household inequality levels in the U.S. Hence, the differences in the reforms of the tax and transfer system arguably play a more important role than differences in education wage differentials, unionization , etc. for explaining the diverging inequality trends between Canada and the U.S.

CONCLUSION

From 1974 to 1994, Canada and the United States experienced quite substantial divergences in relative household poverty rates and inequality levels from similar starting points. Although several scholars have attempted to explain Canadian and U.S. differences in poverty and inequality levels at one point in time, none have satisfactorily explained what explains these divergent trends. Utilizing high quality comparable Luxembourg Income Survey data, my analysis of the household poverty data demonstrates that differences in the policy and reforms of the two nations' **transfer systems** must explain the divergence relative household poverty rates. The data also seriously casts doubts on other potential market, cultural, or tax system explanations. Further, by selectively removing the income from each specific category and then specific type of transfer income and re-calculating the household poverty rate, my analysis clearly demonstrates the predominant explanatory power for differences in the structure and reforms of **social insurance transfers income** and more specifically, **social retirement benefits**. In Canada, the expansion of the **Guaranteed Income Supplement**

(GIS) for low-income elderly families over this period provides the only plausible explanation for the dramatic reduction in the poverty rate of the elderly households relative to the U.S. witnessed in the LIS data, and perhaps somewhat surprisingly explains most of the divergence in household poverty rates between the two nations from 1974 to 1994. As a large part of the divergence in inequality rates is also driven by reduction in household poverty rates in Canada relative to the United States, the expansion of the **GIS** benefits also provides a major explanation for the divergence in levels of household inequality over this period.

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Appendix 1: The Numbers Behind the Figures

Table 1: Rates of Real GDP Growth 1979-1990

Country	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**	**1989**	**1990**
Canada	3.9	1.5	3.7	-3.2	3.2	6.3	4.7	3.3	4.2	5.0	2.4	-.2
United States	2.5	-.5	1.8	-2.2	3.9	6.2	3.2	2.9	3.1	3.9	2.5	1.2

-- Source: Table 3.2b in Atkinson et. al. 1995: 28

Table2 : Poverty Rates after taxes and transfers (% Households with Disposable Income below 50% of **Median** Disposable Income (Standardized with the Square Root of Family Size Factor)

Canada (1975): 15.6%	United States (1974): 15.8%
Canada (1981): 12.5%	United States (1979): 16.4%
Canada (1987): 10.8%	United States (1986): 17.9%
Canada (1991): 11.3%	United States (1991): 17.5%
Canada (1994): 10.6%	United States (1994): 17.9%

-- Source: LIS Data

Table 3: Poverty Rates after taxes and transfers (% Households with Disposable Income below 50% of **Mean** Disposable Income, Standardized with the Square Root of Family Size Factor) and the Percentage Point Reduction from Pre-Tax and Transfer Rates of Poverty (as shown above)

Canada (1975): 19.7%	United States (1974): 20.4%
Canada (1981): 17.0%	United States (1979): 19.9%
Canada (1987): 14.9%	United States (1986): 22.8%
Canada (1991): 14.5%	United States (1991): 23.2%
Canada (1994): 14.4%	United States (1994): 37.5%

-- Source: LIS Data

Table 4: Pre-Tax and Transfer Poverty Rates (% Households with Disposable Income Below 50% of **Median** Disposable Household Income, Standardized with the Square Root of Family Size Factor)

Canada (1975): 28.1%	United States (1974): 28.6%
Canada (1981): 26.7%	United States (1979): 29.1%
Canada (1987): 29.3%	United States (1986): 30.8%
Canada (1991): 32.3%	United States (1991): 32.8%
Canada (1994): 35.3%	United States (1994): 33.9%

-- Source: LIS Data

Table 5: Pre-Tax and Transfer Poverty Rates (% Households with Disposable Income Below 50% of **Mean** Disposable Household Income, Standardized with the Square Root of Family Size Factor)

Canada (1975): 30.2%	United States (1974): 31.0%
Canada (1981): 29.2%	United States (1979): 31.1%
Canada (1987): 31.7%	United States (1986): 33.8%
Canada (1991): 34.8%	United States (1991): 35.9%
Canada (1994): 37.9%	United States (1994): 37.5%

-- LIS Data

Table 6: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income (Standardized with the Square Root of Family Size Factor) from Taxes and Transfers

Canada (1975): -12.5%	United States (1974): -12.8%
Canada (1981): -14.2%	United States (1979): -12.7%
Canada (1987): -18.5%	United States (1986): -12.9%
Canada (1991): -21.0%	United States (1991): -15.3%
Canada (1994): -24.7%	United States (1994): -16.0%

-- Calculated from LIS Data

Table 7: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Mean** Disposable Income, Standardized with the Square Root of Family Size Factor) from Taxes and Transfers

Canada (1975): -10.5%	United States (1974): -10.6%
Canada (1981): -12.2%	United States (1979): -11.2%
Canada (1987): -16.8%	United States (1986): -11.0%
Canada (1991): -20.3%	United States (1991): -12.7%
Canada (1994): -23.5%	United States (1994): -12.8%

-- Calculated from LIS Data

Table 8: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income (Standardized with the Square Root of Family Size Factor) from Taxes Alone

Canada (1975): -0.8%	United States (1974): -0.4%
Canada (1981): -0.9%	United States (1979): -1.6%
Canada (1987): -1.5%	United States (1986): -1.7%
Canada (1991): -1.1%	United States (1991): -2.3%
Canada (1994): -2.6%	United States (1994): -2.5%

-- Calculated from LIS Data

Table 9: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income, Standardized with the Square Root of Family Size Factor) from **Social Insurance Transfers**

Canada (1975): -6.51%	United States (1974): -8.64%
Canada (1981): -8.12%	United States (1979): -7.85%
Canada (1987): -10.94%	United States (1986): -7.36%
Canada (1991): -13.57%	United States (1991): -8.83%
Canada (1994): -14.37%	United States (1994): -8.99%

-- Calculated from LIS Data

Table 10: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income, Standardized with the Square Root of Family Size Factor) from **All Means Tested Income Transfers**

Canada (1975): -0.93%	United States (1974): -1.08%
Canada (1981): -1.18%	United States (1979): -1.26%
Canada (1987): -1.57%	United States (1986): -0.78%
Canada (1991): -2.08%	United States (1991): -1.19%
Canada (1994): -2.57%	United States (1994): -1.29%

-- Calculated from LIS Data

Table 11: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income, Standardized with the Square Root of Family Size Factor) from **All Pension Transfer Income**

Canada (1975): -1.68%	United States (1974): +0.17%
Canada (1981): -1.25%	United States (1979): -0.24%
Canada (1987): -1.51%	United States (1986): -0.57%
Canada (1991): -1.57%	United States (1991): -0.88%
Canada (1994): -1.57%	United States (1994): -0.13%

-- Calculated from LIS Data

Table 12: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income, Standardized with the Square Root of Family Size Factor) from **Unemployment Compensation Transfer Income**

Canada (1975): -1.06%	United States (1974): -0.15%
Canada (1981): -1.13%	United States (1979): -0.28%
Canada (1987): -1.16%	United States (1986): -0.09%
Canada (1991): -2.18%	United States (1991): -0.28%
Canada (1994): -1.33%	United States (1994): -0.09%

-- Calculated from LIS Data

Table 13: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income, Standardized with the Square Root of Family Size Factor) from **Child and Family Allowance Transfer Income**

Canada (1975): -0.16%	United States (1974): -0.00%
Canada (1981): -0.23%	United States (1979): -0.00%
Canada (1987): -0.27%	United States (1986): -0.00%
Canada (1991): -0.26%	United States (1991): -0.00%
Canada (1994): -0.89%	United States (1994): -0.00%

-- Calculated from LIS Data

Table 14: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income, Standardized with the Square Root of Family Size Factor) from **Other Social Insurance Transfer Income**

Canada (1975): -0.49%	United States (1974): -0.00%
Canada (1981): -0.61%	United States (1979): -0.00%
Canada (1987): -0.80%	United States (1986): -0.00%
Canada (1991): -1.16%	United States (1991): -0.47%
Canada (1994): -1.14%	United States (1994): -0.58%

-- Calculated from LIS Data

Table 15: Percent Point Reductions of Poverty Rates (% Households with Disposable Income below 50% of **Median** Disposable Income, Standardized with the Square Root of Family Size Factor) from **Social Retirement Transfer Income**

Canada (1975): -4.39%	United States (1974): -7.20%
Canada (1981): -6.16%	United States (1979): -5.43%
Canada (1987): -9.07%	United States (1986): -6.10%
Canada (1991): -10.17%	United States (1991): -6.26%
Canada (1994): -11.05%	United States (1994): -6.51%

-- Calculated from LIS Data

End Notes

[i] Many sociologists tend to underplay or ignore the critical role played by government policy and labor market institutions of advanced industrial countries in shaping social stratification and social mobility. All too often, social phenomenon such as rising inequality, urban poverty, and economic hardship are examined without an explicit examination of the kind of government policies that have contributed to their formation or crystallization. For example, many stratification sociologists focus on the impact of educational attainment or family background on social inequality and mobility (e.g. Blau and Duncan 1967). Other sociologists focus on the role of organizational ascription on inequality (see Kanter 1977; Baron and Newman 1990). Yet these theories miss the embeddedness of social stratification in a nation's policy regime that can have a dramatic impact on both outcomes and opportunity.

Perhaps the best comparative cross-national analysis of the profound impact government policy and institutions has on advanced industrial nations comes from Danish sociologist Gosta Esping-Andersen. In *The Three Worlds of Welfare Capitalism*, Esping-Andersen outlined three Weberian ideal-type typologies to categorize the welfare states of advanced industrial nations: Neo-Liberal, Conservative, and Social Democratic (1990). Esping-Andersen focused on the degree to which a nation's welfare state "de-commodifies" workers by providing social and economic sufficiency based on citizenship outside of the market (Esping-Andersen 1990). He convincingly argued that welfare states within a particular typology shared certain similar historical patterns of development and social structures.

Based on degree of worker de-commodification, Esping-Andersen classified both the United States and Canada as neo-liberal welfare states (1990). Yet classifying both of these nations in the same category obscures significant differences between U.S. and Canadian government policies and institutions. The findings of past empirical studies and this paper suggest that these policy differences, although marginal as compared to the differences between America and Sweden's policy regimes, play a significant role in the divergence of Canada and the United States along particular socio-economic indicators over the past thirty years.

[ii] Despite sharing many similarities, Canada and the U.S. also differ socially and culturally in many ways, with the roots of these differences extending back to the early in the colonial era (see Lipset 1990). Hence, for example, while differences in legal and gun control policies may be partially responsible for differences in violent crime rates in the two nations, the effects of policy and culture are extremely difficult to isolate because violent crime rates have always been lower in Canada than in the United States. While cultural differences surely play a role in the formation of social policy differences in the two nations, this does not help us isolate the causal impact of these differences. So, the next four sections focus on the domains of unionization, inequality, poverty, and health care because past similarity in these domains and subsequent divergence allows for more persuasive and empirically valid isolation of the impact of social policy differences.