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Introduction

David Card and Richard B. Freeman

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 work forces, with similar industrial and occupational structures. Many of the same firms and unions operate on both sides of the border. Large American firms such as DuPont are Canadian-owned, while American multinationals are active in virtually all areas of the Canadian economy.[1] The massive trade and capital flows that link the two economies promise to become even greater in the wake of the 1988 Canada-U.S. free trade agreement.

Throughout the past century Canada and the United States shared similar economic experiences. Both countries were major recipients of European immigration and capital flows; more recently, both have experienced large inflows 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. Although the United States initially led Canada in the adoption of a universal social insurance system, Canadian income maintenance programs are now more clearly redistributive than compa-

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1. See U.S. Department of Commerce (1991, chap. 4) for an analysis of the importance of foreign ownership in the U.S. economy. The ownership status of DuPont is noted on p. 70 of the same document.

rable U.S. programs. Labor legislation and health policies in Canada reveal a greater reliance on collectivist solutions to economic problems. On the outcome side, unemployment rates and union membership rates in the two countries have diverged over the past two decades. Unemployment rates, which were nearly equal in the two countries in the 1950s and 1960s, were markedly higher in Canada in the 1980s. Unionization rates, comparable in the 1950s, were twice as high in Canada as in the United States by 1990. Family income inequality and poverty rates both increased in the United States over the 1980s, while they fell in Canada.

The mix of differences and similarities creates a valuable "natural experiment" for analyzing the effects of economic policy, institutions, and market shocks on labor market outcomes. If one wants to study the impact of differing unemployment insurance, income maintenance, or labor laws on economic behavior and outcomes, comparisons of Canadian and U.S. experiences hold out the promise of relatively straightforward inferences. A program that works in one country stands a good chance of working in a similar way in the other country because so much else is the same. Alternatively, if one wants to discover the sources of differences in wage structures, unemployment, unionization rates, or poverty, the basic similarities of the U.S. and Canadian economies make it easier to link the differences to specific causal factors.

Recognizing the potential for learning from each other, public policy debates within Canada and the United States frequently refer to the experiences of the other country to support or oppose particular initiatives. U.S. policy analysts routinely point to the Canadian example in arguing for more activist labor market or social policy. U.S. unionists look longingly at Canadian labor laws. Canadian analysts often cite the United States as an exemplar of reduced government intervention in the labor market and in economic affairs more generally. Liberals and social democrats worry about the viability of Canada's national health insurance and strong unions in a competitive international market.

In short, while Canada-U.S. comparisons are not ideal laboratory-style controlled experiments, they are highly credible sources from which to draw conclusions about economic behavior and the effect of institutions and policies on outcomes. Yet despite widespread interest in how things work across the border, detailed and systematic comparative studies of labor markets and income maintenance programs in the two countries have been surprisingly rare.

What are the principal differences in income inequality, poverty rates, unemployment, and other labor market outcomes between Canada and the United States in the 1980s? Can one plausibly relate these differences to differences in labor market and income maintenance policies? How did Canada's more redistributive policies affect economic outcomes in this difficult decade compared to the United States' greater reliance on unrestricted market forces?

What are the economic effects and costs of the "small differences" between Canadian and U.S. policy and institutions?

This volume seeks to answer these important questions. Some of the studies begin with differences in specific policies—immigration (George J. Borjas), unemployment compensation (David Card and W. Craig Riddell), income maintenance (Rebecca M. Blank and Maria J. Hanratty)—and examine how they have generated different economic outcomes. Other studies begin with differences in outcomes—educational wage differentials (Richard B. Freeman and Karen Needels), the extent of unionism (Riddell), the dispersion of earnings (Thomas Lemieux)—and seek to relate those differences to policies, economic shocks, and the operation of the labor market. The final chapter (McKinley L. Blackburn and David E. Bloom) brings together several of these themes in an overall comparison of income distributions in the two countries.

All the studies in this research project employ a similar methodology—one that has become feasible only with the recent computer data revolution in economics. Each study analyzes detailed microdata on thousands of individuals in Canada, the United States, or both countries, and bases its conclusions on comparisons of these data.

It is difficult to exaggerate the value of such data in a cross-country comparison. At one stage, researchers interested in why economic outcomes varied across countries were limited to aggregate statistics—twenty or thirty time-series observations, or published means from government surveys—that permitted only crude comparisons. Such limited data make it impossible to explore in depth how people in one country might respond to the incentives and institutions in another, or to assess how different market institutions might explain differences in outcomes. All too often, the addition of a few more years of data or another control variable would overturn the conclusions drawn from limited and highly collinear time series.

By contrast, the microdata sets available from Statistics Canada and the U.S. Bureau of the Census—drawn from similar monthly labor force surveys, annual supplementary surveys, and population censuses—permit an extraordinarily rich portrait of the labor markets in the two countries. With comparable information on tens of thousands of people differing only in country of residence, we can draw stronger inferences about differences between Canada and the United States than were previously possible. As a case in point, consider Card and Riddell's analysis of unemployment. They note that the divergence in unemployment rates between Canada and the United States reflects a change in labor supply behavior and argue that some Canadians with low work attachment tailor their work effort to Canada's more generous unemployment support program. In the absence of suitable microdata, it would be impossible to document the divergence in individual labor supply behavior, with the result that previous discussions of the unemployment gap have fo-

cused on differences in the extent of macroeconomic recession and recovery—differences that Card and Riddell reject as the prime cause of the differences in unemployment.

While any inference of individual behavior and market interactions from nonexperimental data across countries is fraught with problems, detailed microdata on individual decision units give economists and policy analysts at least a fighting chance of assessing whether "small differences" in policy and institutions matter between the United States and Canada.

Outcomes and Policies

The starting point for our project is the differences in outcomes between the Canadian and U.S. labor markets and in the institutions and policies that affected those outcomes in the 1980s. Some of the differences between the two countries arose only in the past decade, while others reflect longer-term trends.

Table 1 gives a capsule summary of the aggregate differences in labor market outcomes between the two countries. Line 1 illustrates the unemployment gap between Canada and the United States that developed in the 1980s, by comparing average decadal rates of unemployment. There are two possible explanations for this gap: failure of employment to expand in Canada as rapidly as in the United States, and increased labor force participation in Canada relative to the United States. The employment-population rates in line 2 show a small difference favoring the United States, but line 3 shows an opposite difference in labor force participation rates. After lagging the United States for many years, labor force participation rates in Canada surpassed U.S. rates in the 1980s. The gap in unemployment rates thus appears to be associated as

Table 1 **Aggregate Labor Market Outcomes in Canada and the United States in the 1980s**

	Canada	U.S.	Difference, Canada − U.S.
Average, 1981–90			
1. Unemployment rate	9.4	7.1	2.3
2. Employment-population rate	59.5	60.4	−0.9
3. Labor force participation rate	65.6	64.9	0.7
Average annual rate of change, 1979–90			
4. Employment	1.8	1.6	0.2
5. Real hourly earnings in manufacturing	0.6	−1.2	1.8
6. Real compensation per employee	0.8	−0.2	1.0

Sources: Lines 1–4—Card and Riddell, table 5.1 in this volume. Lines 5–6—*OECD Economic Outlook* (June 1992), table 54, 56, 59.

Note: Real earnings and compensation are deflated by GNP consumption deflator.

much with increased labor force participation as with the failure of the Canadian economy to generate jobs.

Lines 4–6 turn from decadal averages to growth rates over the 1980s. The employment growth rates in line 4 actually show slightly faster job creation in Canada, although we note that different beginning and ending dates would tip the balance the other way. We infer that both Canada and the United States had significant (and roughly comparable) employment growth in the 1980s in contrast, say, to Western Europe. The growth rates of real earnings in lines 5 and 6 also favor Canada—though in both countries earnings growth rates fell below the historical averages that gave North America one of the highest living standards in the world. We make little of the Canadian advantage here, because again other earnings series and other beginning and ending dates would give somewhat different relative standings. For instance, microdata on the earnings of family heads show earnings increasing more rapidly in the United States than in Canada from 1979 to 1987. The evidence does not support the conclusion that either country had markedly superior growth in real earnings or employment over the period, despite the emergence of an unemployment gap.

Inequality and Poverty

It is well known that the distribution of income in the United States widened substantially in the 1980s. Differentials between more- and less-educated workers and between white-collar and blue-collar workers grew sharply. Inequality also increased among those with similar nominal skills (Blackburn, Bloom, and Freeman 1990; Katz and Murphy 1992; Murphy and Welch 1992). Rising inequality combined with stagnant average real wages, declines in the real value of some economic transfers, and the continued growth of single-parent families to produce increases in poverty rates, particularly among children (Blank 1991). Did Canada have similar or different experiences?

Table 2 compares the changes in the distributions of earnings and income in Canada and the United States during the 1980s. The estimated earnings gap between male college graduates and male high school graduates in line 1 shows that Canada had a notably smaller increase in the college premium than did the United States. The pattern among female wage earners is similar (Freeman and Needels, chap. 2 in this volume). The measure of earnings inequality for male workers in line 2 (the variance of log earnings) shows that earnings inequality was greater in the United States at the beginning of the decade and that the intercountry difference grew over the 1980s. An even more striking pattern is revealed in line 3, which shows that family income inequality—measured by the Gini coefficient—actually fell in Canada at the same time it rose in the United States. Other measures of family income inequality tell a similar story (Blackburn and Bloom, chap. 7 in this volume).

Table 2 **Inequality and Poverty Outcomes in Canada and the United States in the 1980s**

	Country	1979	1986/87	Change
1. Education premium: difference in log weekly earnings between male college graduates and male high school graduates (adjusted)	Canada	0.29	0.33	0.04
	U.S.	0.23	0.39	0.16
2. Variance of log earnings of prime-age male workers	Canada	0.270	0.288	0.018
	U.S.	0.286	0.320	0.034
3. Gini coefficient of family income	Canada	0.373	0.371	−0.002
	U.S.	0.398	0.411	0.013
4. Poverty rate of nonelderly-headed families (%)	Canada	7.8	7.1	−0.7
	U.S.	9.0	11.6	2.6
5. Poverty rate of single-parent families with children (%)	Canada	31.5	25.9	−5.6
	U.S.	34.0	40.5	6.5

Sources: Line 1—Freeman and Needels, table 2.2, in this volume. Line 2—Blackburn and Bloom, table 7.10, in this volume. Line 3—Blackburn and Bloom, table 7.5, in this volume. Lines 4–5—Blank and Hanratty (1992), tables 5 and 6.

Given comparable employment-population ratios and rates of growth of average earnings in the two countries, and the differing trends in the distributions of income and earnings, one would expect to find relatively slower growth of poverty in Canada than in the United States. Lines 4 and 5 confirm this expectation and in fact show an even stronger relative trend: poverty rates fell in Canada over the 1980s while they rose in the United States. The relative divergence was particularly striking for single-headed families with children.

Institutions and Policies

What about economic policies and institutions? Do they differ between Canada and the United States in ways likely to explain the differing trends in labor market outcomes and family incomes?

At the outset it is important to recognize that both Canada and the United States are large and geographically diverse countries that operate under relatively decentralized federal systems. Provinces or states play a role in determining labor market regulations and income support policies. Some provinces of Canada are closer geographically and economically to nearby U.S. states than to other parts of Canada. Similarly, some U.S. border states look more like their nearest Canadian neighbor (in terms of resources, climate, and economic base) than like Mississippi or New Mexico. The province of Quebec differs in laws, culture, and predominant language from either English-speaking Canada or the United States.

Which particular policies are under federal as opposed to provincial or state control often differs between the countries. Even where Canadian provinces have considerable autonomy in determining laws or expenditures, however,

they often show less regional variation than the individual states. Income support payments in Canada, for instance, vary less across provinces than Aid to Families with Dependent Children (AFDC) payments vary across states or regions in the United States. One important exception is labor law, which lies largely under provincial rule in Canada but is determined by the Congress in the United States (save for state and local employees).

Immigration policies in both countries are set nationally. Both Canada and the United States altered immigration laws in the 1960s to allow greater inflows of immigrants from non-European source countries. The United States adopted a policy that stressed family reunification, although admission of refugees and substantial inflows of illegal immigrants (Borjas, Freeman, and Lang 1991) meant that immigrants admitted under the quota system made up less than one-half of total immigrants in the 1980s. Canada adopted a point system for allocating visas, designed to produce a more skilled immigrant flow. These laws were later amended to allow a greater role for family reunification.

Following the example of the Wagner Act in the United States, Canadian labor laws were substantially modified during and after World War II. Despite this common heritage, Canadian laws have become more favorable to unions as institutions have evolved and economic circumstances have changed. Under Canadian law it is easier to unionize: in most cases, unions need only obtain the signatures of a majority of workers, and management has less scope to express opposition to unionism. Firms cannot permanently replace strikers, and legislation in some provinces makes even temporary strike replacements illegal. Quebec has Western European–style extension of union contracts to nonunion workers.

Whether because of differences in labor laws or other factors (Riddell, chap. 4 in this volume), the unionization rates in the two countries have diverged from rough equality in the 1950s to a substantial difference in the 1980s. The overall union density in Canada remained fairly stable in the 1980s (although it fell slightly in the private sector), while the unionization rate fell sharply in the United States.

Canadian and U.S. educational systems differ in ways that affect the supply of highly educated labor. The Canadian system varies across provinces, with high school graduation after 11 years of schooling in some provinces and after 12 or 13 in others. These differences feed into different paths to a university degree (a minimum of 3 years of university in Ontario; 2 years of CEGEP and 3 years of university in Quebec; 4 years of university elsewhere). In the United States all states have 4 years of high school and 4-year university programs.

Many more Canadian than U.S. students leave high school without completing the requirements to attend university, but many more attend vocational and community college programs. In the 1960s the United States expanded its higher education system more rapidly than Canada did, with the result that by

1987 18 percent of U.S. adults had 16 or more years of schooling compared to only 12 percent of Canadian adults. At the other end of the spectrum 8 percent of Americans had less than 8 years of schooling compared to 14 percent of Canadians.

Canada's unemployment compensation system is more generous than the United States' system, primarily because of its less restrictive eligibility requirements and the longer duration of benefits. Unemployment benefits are available for up to fifty weeks in Canada as opposed to only twenty-six weeks in the United States, although the U.S. government often extends benefit durations in major recessions. Less restrictive eligibility rules imply that a larger share of unemployed workers are eligible for benefits in Canada than in the United States. Benefits are also available for maternity leaves, sickness, and training in Canada. Finally, the take-up rate among those eligible for benefits is higher in Canada. For reasons that are poorly understood (Blank and Card 1991), many American workers fail to apply for the benefits available to them.

Like the unemployment insurance system, Canada's income support system for nonelderly persons is broader than the U.S. system. Canada's means-tested programs have wider eligibility and higher benefits than comparable U.S. programs. And Canada has universal non-means-tested programs that are not found in the United States. Canadian antipoverty transfer programs include family allowances (child bonuses of the form found in much of Western Europe), child tax credits, and, most important, social assistance to low-income families and individuals.[2] Comparable U.S. programs (AFDC, food stamps, and Earned Income Tax Credits) are more narrowly targeted and less generous. In addition, Canada allows greater discretion for caseworkers in determining benefits, making for a less bureaucratic and potentially more flexible and personalized system.

The Major Theme

The results of the studies in this volume relating economic outcomes to policies and institutions in the United States and Canada are striking. Although the chapters were written and can be read independently, they tell a surprisingly similar story that gives us the title for the book and shows the interrelations among the various policies, institutions, and outcomes, which make the book more than the sum of its parts. The most important theme in the volume is that small differences matter. Albeit in different ways, the studies show that differences in safety-net systems, labor market regulations, and labor market conditions have discernible effects on outcomes and explain a substantial share of the differing labor market and income experiences of the two countries in the 1980s.

2. The family allowance program was phased out as a universal program in Canada at the end of 1992.

One reason why small differences matter is that individuals and institutions respond in economically significant ways to incentives. Immigration patterns between Canada and the United States, for example, show evidence of self-selection consistent with the broader redistribution policies in Canada and with Canada's point-based immigration system. Canadians who migrate to the United States come from the upper part of the Canadian earnings and education distributions, whereas Americans who migrate to Canada come from relatively lower parts of the U.S. earnings and education distribution. The greater emphasis on skills in Canadian immigration rules has produced a more modest decline in the skills of immigrants compared to natives than in the United States. Annual labor supply patterns suggest that individuals adjust their work activity to the specific features of unemployment insurance systems. And changes in educational earnings differentials affect the pattern of enrollment in colleges and universities.

A second reason why small differences matter is that they interact in various ways. The convergence in educational attainments between Canada and the United States in the 1980s, due in part to differences in the timing of expansion of university education, contributed to the divergence in earnings differentials and income inequality. The convergence in female labor force participation rates likewise contributed to the relative rise in Canadian unemployment rates. Differing trends in union membership rates contributed to the divergence in earnings inequality. And differences in immigration policies brought a relatively more educated work force into Canada, with consequences for the distribution of earnings. Some of these relations—between stronger unions, unemployment, and income support—fit together in a systematic way that is consistent with a more collectivist and welfare-state orientation in Canada. A thorough understanding of labor market and income developments in the two countries thus requires an analysis of the full spectrum of small differences between the countries.

The chief empirical finding of the volume is that Canadian labor market and income support policies mitigated against the 1980s trend of rising inequality that swept the United States. By leaning against the wind, Canada managed to lower poverty rates during a decade when slow economic growth and structural economic and social change made it exceedingly difficult for less-skilled individuals to maintain their living standards. This finding emerges most clearly in the analyses of unemployment, poverty, and income distributions. Simulations by Blank and Hanratty suggest that if the United States had adopted Canada's welfare policies, it would have avoided the trend of rising child poverty that has cast such a pall over the future of U.S. society. Blackburn and Bloom's analyses show that Canada's income transfer system played a major role in keeping family income inequality from rising. And Card and Riddell's analysis of unemployment compensation suggests that the unemployment insurance system encouraged some persons with limited skills and labor force attachment to continue working just enough to maintain eligibility.

The finding that Canada's more activist labor market and income support

policies successfully mitigated some of the adverse economic forces of the 1980s does not, of course, mean that these policies were ideal or indeed desirable. After all, there is no such thing as a free lunch: these programs cost real resources, which must be considered in evaluating their overall social merit.

Specific Findings

1. Canada's social safety net produced markedly lower poverty rates, especially for single-parent families, than did the United States' poverty programs, at a cost of two to three times the U.S. transfer expenditures.

As noted above, Canada's income support programs have higher benefit levels and greater eligibility than the United States' comparable programs. With poverty defined in the same manner, comparable U.S. and Canadian survey data show that, despite modestly lower average income in Canada, rates of poverty are lower than in the United States and the poverty gap—the amount of income necessary to bring families to the poverty line—is smaller. The difference in poverty rates is particularly large among single parents: 32 percent of single parents are poor in Canada, compared to 45 percent in the United States (Blank and Hanratty, chap. 7 in this volume).

To see whether the lower rates of poverty can be attributed to differences in policy, Blank and Hanratty compare U.S. and Canadian rates of poverty before and after government transfers, on the simplifying assumption that transfers do not affect other sources of income. They find that the Canadian transfer system is much more effective, reducing the poverty rate overall by 5.7 points compared to the 1.9 point reduction attributable to the U.S. transfer system. Among single-parent families, the transfer system lowers poverty by 14.3 points in Canada compared to 5.2 points in the United States.

Simulating the effect of applying Canada's transfer system to the United States—by giving Americans the transfers they would have received had they faced Canadian program rules and benefits—Blank and Hanratty find that the Canadian transfer program would essentially eliminate poverty among children in the United States. One possible problem with simulations like these is that a more generous transfer program might increase pretransfer poverty by reducing the work activity of those who receive the transfers. Blank and Hanratty show that this is unlikely to be important in the Canadian context, as one might suspect, given rising labor participation rates in Canada. The cost of the transfer program is not the indirect cost of lost labor supply, but rather the direct expenses: Canada spends two to three times as much per person on transfers as the United States does.

2. The divergence in Canadian-U.S. unemployment rates is due largely to changes in the fraction of nonworking time that is reported as unemployment. Canada's unemployment insurance system induced workers with low labor force attachment to offer low levels of labor supply, but differences between the U.S. and Canadian unemployment insurance systems contributed little to the rise in relative unemployment rates.

One way to obtain insight into the emergence of higher unemployment in Canada than in the United States is to analyze changes in relative unemployment rates among individuals with similar weeks of work. A decomposition of unemployment among individuals with differing amounts of weeks worked during the previous year reveals a relative increase in the likelihood that Canadian family heads, especially women, report nonworking time as time spent unemployed rather than out of the labor force. For instance, Canadian women with 4 weeks of work in 1979 reported 8.2 weeks of unemployment, compared to 4.5 weeks of unemployment reported by comparable U.S. women. In 1986 women with the same work activity reported 16.6 weeks of unemployment in Canada and 6.3 weeks of unemployment in the United States—a relative increase of 6.6 weeks of unemployment in Canada (Card and Riddell, chap. 5 in this volume).

The effect of Canada's more generous unemployment insurance system is revealed by the emergence of spikes in distributions of weeks worked at 10 and 12 weeks. Under the Canadian system, individuals in many regions are eligible for unemployment insurance with a minimum of 10 or 12 weeks of work a year. The relative increase in the fraction of Canadian workers with this low level of annual labor supply, coupled with increases in reported unemployment by these workers, accounts for part of the relative increase in Canadian unemployment. Nevertheless, more generous unemployment benefits are not the only cause of the increase in Canadian unemployment. Much of the relative increase in male unemployment occurred among men with 0 weeks of work—a group with declining unemployment insurance recipiency rates in Canada. In addition, the reductions in maximum unemployment insurance eligibility weeks in the late 1980s failed to reduce the high levels of unemployment.

3. Educational earnings differentials increased less in Canada than in the United States, in large part because of the greater relative increase in the supply of college-educated workers in Canada.

One striking change in the American earnings distribution in the 1980s was the huge increase in the differential between more- and less-educated workers. This increase was particularly large among younger workers, who are more likely to be on the active job market than older workers ensconced in their careers. In Canada, educational differentials between university-educated and high school–educated workers increased very modestly for both men and women. Between 1979 and 1986/87 differentials rose by .16 log points for 25–64-year-old American men compared to .04 points for Canadian men and by .10 points for American women compared to .04 points for Canadian women. Among 25–34-year-olds the increase for Canadians was .04 for men and for women versus an increase for Americans of .21 (men) and .10 (women) (Freeman and Needels, chap. 2 in this volume).

Associated with differing trends in educational wage premiums were differing rates of growth in the relative supply of more-educated workers in Canada and the United States. In the U.S. labor force as a whole the trend rate of

growth in the ratio of college to high school graduates decelerated over the 1980s. Among young male workers the ratio of college graduates to high school graduates actually fell during the 1980s. By contrast, in Canada the ratio of college to high school graduates increased rapidly. Using time-series estimates of the effect of relative supplies on relative earnings, Freeman and Needels estimate that the greater growth of the relative supply of educated workers in Canada explains over one-half of the divergence in Canada-U.S. educational differentials. Although other factors—differing shifts in labor demand, greater unionization and income support in Canada—may also have played a role, the effect of supply is consistent with evidence from other countries that relative supplies are a key determinant of relative earnings by education (Freeman 1976; Katz and Murphy 1992; Schmidt 1992; Edin and Holmlund 1992).

4. Income inequality among families increased in the United States but not in Canada, in part because of increased transfer income in Canada and in part because of smaller increases in earnings inequality.

The distribution of income among families depends on the age and size composition of families, the number of earners, the distribution of earnings among the employed, the distribution of property income, the effect of income transfer programs (including unemployment compensation), and the correlations among these factors. Using several summary measures of the distribution of family incomes, Blackburn and Bloom show that inequality in family incomes increased in the United States but not in Canada in the 1980s, and decompose the differential pattern into its immediate causes.

The faster growth of single-parent families in the United States than in Canada contributed little to the relative change in family income inequality. In fact, microdata show that inequality rose in almost all family types in the United States but in almost no family type in Canada. Inequality of total family earnings and earnings of full-time year-round male workers rose in both the United States and Canada, ruling out a pure labor market explanation for the differing trends in family income inequality. Nevertheless, the smaller increase in earnings inequality for male workers in Canada (due to the slower rise in education differentials, among other factors) ameliorated the rise in income inequality among Canadian families.

The primary explanation for the differential trend in inequality was the differential growth of transfer income. Transfer income had a sizable equalizing impact on the distribution of income in Canada but did little to offset the forces producing income inequality in the United States. That income inequality fell among Canadian families headed by females, whose incomes are most directly affected by transfer policy, while rising among U.S. families headed by females provides strong support for this conclusion.

5. The higher rate of unionization in Canada than in the United States accounts for a sizable part of the difference in earnings inequality between the countries, and the divergence in unionization rates contributed to the more rapid growth of earnings inequality in the United States.

It is well established that unions reduce income inequality, in large part through standardization of wages within the organized sector (Freeman 1980). Both Card (1991) and Freeman (1991) attribute about one-fifth of the recent rise in male earnings inequality in the United States to the decline in unionization. Not only can the higher unionization rate in Canada potentially explain part of the Canadian-U.S. difference in earnings inequality, but the diverging trend in unionization between the countries ought to account for some of the divergence in earnings inequality in the 1980s.

Using cross-section and longitudinal data on Canadian earnings and union membership, and comparing these data with Card's (1991) analysis for the United States, Lemieux shows that these expectations are correct. The effect of unions on the distribution of earnings depends on the size of the union wage premium, the position of organized workers in the nonunion earnings distribution, and the effects of unions on inequality within the organized sector. Lemieux finds that unions in Canada have similar relative wage effects to those in the United States, and similar effects on the extent of wage inequality among union workers. In both Canada and the United States, private sector unionization rates are highest for workers in the middle of the skill distribution. In Canada, however, the high level of unionization among public sector workers implies that unionization rates in the economy as a whole rise with skill levels. Taking all these factors into account, Lemieux shows that in Canada as in the United States the presence of trade unions reduces the variance of earnings among men. About 40 percent of the Canadian-U.S. difference in earnings inequality is due to difference in unionization. In contrast, unionization raises inequality among Canadian women relative to their U.S. counterparts.

Studies that infer union wage effects from cross-section data are subject to the problem of selectivity of union members along unobservable dimensions. Lemieux's analysis of longitudinal changes in the wages of workers who involuntarily lose their jobs and switch union status shows that correcting for selectivity in this manner has little effect on the estimated pattern of union wage differentials but does substantially reduce the estimated effect of unions on the dispersion of earnings in the union sector. However, he attributes this to the peculiarities of the small sample of changers and concludes the cross-sectional differences give better estimates of the union effect on within-group variance.

Given the approximate seven-point drop in union density in the United States relative to Canada in the 1980s, as much as 45 percent of the relative increase in the variance of earnings among U.S. men can be attributed to the differential trend in unionization.

6. Union coverage is approximately twice as high in Canada as in the United States, an outcome that is largely attributable to the higher probability that Canadian workers who desire union representation are unionized.

The differential rate of unionization in Canada and the United States has aroused considerable debate among labor specialists, in large part because of

the implications for policy. Four hypotheses have been offered to explain the differential patterns and trends. First is the claim that differences in union rates result from differences in economic structure: U.S. unionization is falling, as employment shifts to traditionally nonunion private sector industries, whereas Canada's greater governmental employment buttresses the unionization rate. By calculating unionization rates for workers classified by gender, age, industry, occupation, public or private sector employment, and education, Riddell shows that this explanation of the differing rate of union density is false. Comparable differences in union rates are found in all groups. A second hypothesis is that the U.S.-Canada gap in union coverage is due to differences in social attitudes toward unions: Canadians like unions and Americans do not. Survey data on whether people think unions are good or bad or whether they approve or disapprove of trade unions show no difference in attitudes or in trends in attitudes, indicating that this explanation is also false.

Two serious contenders for explaining the different level and trend remain: U.S. workers have less desire for unions than do Canadian workers, and U.S. employers and/or institutions afford workers less possibility for organizing unions when they want to organize, compared to Canadian employers/institutions.

Riddell puts these explanations in the context of a demand-supply framework (developed by Farber [1983]), in which workers demand union representation, and firms and labor market institutions supply union jobs. Comparing Canadian and U.S. surveys on the desire for unionization, he finds that desire for union representation is about 28 percent higher in Canada than in the United States, but that the bigger difference between the two countries is in the higher Canadian unionization rate conditional on the desire for unions. Of Canadians who want to be unionized, 76 percent are in unions, compared to 44 percent of Americans, a difference that remains after controlling for differences in the characteristics of workers. Although Riddell does not explore the reasons for this difference, an obvious candidate is the difference in labor laws and institutions that permit U.S. management greater opportunity to deter unionization through hostile actions (Freeman 1988; Weiler 1990).

7. Canada's point-based immigration system produces a more skilled flow of immigrants than the United States' family unification–based system, largely because it draws more immigrants from industrialized European countries.

Changes in immigration laws in Canada and the United States in the 1960s were associated with changes in skill composition of immigrants. In the early 1960s immigrants to Canada had fewer years of schooling than those to the United States (though more schooling than native-born Canadians). By the 1970s this situation had reversed: immigrants to Canada averaged nearly a year more of schooling than immigrants to the United States. In addition, largely because of the relative difference in schooling, the immigrant-native earnings gap was greater in the United States than in Canada in the 1970s.

Immigrants from the same source country tend to have about the same education and relative earnings in the United States and in Canada. Consequently, the main explanation for the differing education and earnings of immigrants in the two countries is the national origin of immigrants. Although the fraction of immigrants from Asia and Latin America increased in both countries, Canada maintained a larger share of European immigrants, presumably because they better fit the skills requirement for Canadian visas.

Costs of Transfer Policies

As noted, the conclusion that Canada's labor market institutions and income support programs have reduced income inequality and lowered poverty rates does not mean that they are better or more successful than comparable U.S. institutions and programs. Canadian transfer programs expanded through the 1980s in a period of sluggish economic growth. This expansion came at the cost of higher taxation rates and sharp relative increases in government indebtedness in Canada.

The expansion of transfer spending in Canada in the 1980s and the dramatic comparison with U.S. trends over the decade are illustrated in table 3. Here we give a thirty-year perspective on social spending for three main sets of transfer programs: needs-based cash and in-kind transfers for the nonelderly (including payments to blind and disabled individuals but excluding medical payments); unemployment insurance; and cash-based child support programs (Family Allowance and Child Tax Credit programs in Canada, Earned Income Tax Credits in the United States). These programs account for virtually all of

Table 3 **Transfer Program Expenditures in the United States and Canada, 1960–90 (percentage of GNP)**

	Country	1960	1965	1970	1975	1980	1985	1990[a]
1. Need-based transfers including disabled[b]	Canada	0.66	0.98	1.37	1.69	1.76	2.15	2.20
	U.S.	0.80	0.89	1.10	1.72	1.70	1.40	1.30
2. Unemployment insurance	Canada	1.22	0.54	0.78	1.81	1.28	2.13	1.77
	U.S.	0.59	0.44	0.38	0.87	0.68	0.46	0.32
3. Child programs: tax credits and family allowance[c]	Canada	1.36	1.05	0.63	1.06	0.86	0.82	0.77
	U.S.	—	—	—	0.06	0.05	0.04	0.09
4. Sum of three programs	Canada	3.24	2.57	2.78	4.56	3.90	5.10	4.74
	U.S.	1.39	1.33	1.48	2.65	2.43	1.90	1.71

Sources: For Canada, *Canada Year Book* (1980–81, 1991). For the United States, *Social Security Bulletin Annual Statistical Supplement* (1991); *1992 Green Book.*

[a]1990 data for Canada; 1989 data for the United States.

[b]Canadian data include expenditures under the Canada Assistance Program and earlier programs for disabled people, as well as provincial and municipal welfare. U.S. data include AFDC, SSI, food stamps, general assistance, and other categorical payments under the Social Security Act *excluding* Medicaid expenditures.

[c]Canadian data include FA and CTC. U.S. data include the refunded portion of EITC.

the measured transfer income of individuals and families in the two countries (see Blank and Hanratty, chap. 6 in this volume), although they ignore government spending on health care, housing, and education.

Spending on need-based transfers (line 1) shows a rising trend in both the United States and Canada during the 1960s and 1970s. Although spending was lower in Canada in 1960, by 1975 the percentages of national income devoted to needs-based transfer programs was about equal in the two countries. During the 1980s spending rose sharply in Canada (a 25 percent increase to 2.2 percent of GNP), while it fell sharply in the United States (a 25 percent cut to 1.3 percent of GNP).

Line 2 of table 3 shows that spending on unemployment insurance programs was higher in Canada than in the United States throughout the 1960s and 1970s. Nevertheless, the relative ratio of spending was roughly constant—at about 2 : 1—from 1960 to 1980. During the 1980s Canada again had a large increase in spending, while the U.S. unemployment insurance program contracted. By the close of the decade Canadian spending on unemployment compensation was five times greater as a fraction of national income.

The entries in line 3 show that expenditures on Child Tax Credit and Family Allowance have declined in Canada over the past three decades. Spending on tax credits in the United States, by comparison, actually rose over the 1980s (albeit from a very modest base). As in the previous lines, however, the main contrast is in the substantially higher level of spending in Canada. When the three sets of programs are added together (in line 4 of the table), the higher overall level of Canadian spending and the divergence in spending trends after 1980 stand out very clearly.

How has Canada financed its more generous transfer spending? The answer is revealed in figures 1 and 2, which show average "taxation" rates (total government tax revenues divided by total income) and government borrowing rates (total government budget deficits divided by total income) in the two countries.[3] During the past two decades total government revenues followed roughly parallel trends in the two countries. Throughout the period Canadian governments collected about 5 percentage points more of national income. The two countries also had similar (and relatively small) net government borrowing rates in the early 1970s. In the late 1970s and especially after 1980, however, government borrowing increased sharply in Canada relative to the United States. Although the borrowing gap narrowed in the late 1980s, it is clear that Canada paid for its relative expansion in government spending through larger deficits, transferring the burden of this spending to future tax liabilities.

3. We define government spending to include all levels of government: federal, provincial, and local in Canada: federal, state, and local in the United States. Comparisons of the level of government spending in the two countries are affected by the composition of health care spending, which is mostly government spending in Canada.

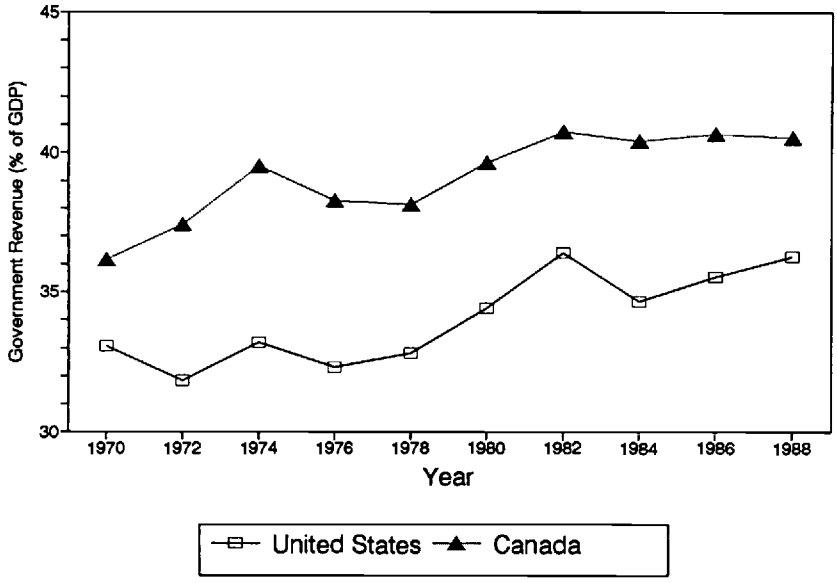

Fig. 1. Government revenue as percentage of GDP, United States and Canada, 1970–88

Sources: For the United States, GDP data are from the *Economic Report of the President* (1992), table B-1; government expenditures data (for all levels of government) are from *Statistical Abstract of the United States* (1982–83 to 1991). For Canada, GDP data are from Statistics Canada, *National Income and Expenditure Accounts Annual Estimates, 1926–86* (1988) and *Bank of Canada Review* (July 1992), Table H-2; government expenditures data (for all levels of government) are from *Canada Year Book* (1975–1988) and International Monetary Fund, *Government Finance Statistics Yearbook* (1991).

Neither source of funding is costless: both taxes and deficits introduce a variety of distortions, which add to the inefficiency of the economy (Romer 1988). Whether the cost of transfer spending in the United States or Canada is greater or less than the benefits created by this spending is beyond the scope of this volume. We note that in the late 1970s the two countries were much closer in the fraction of incomes raised as taxes, borrowed, and spent on income transfer programs. Over the 1980s they diverged, with some of the consequences we have documented here.

Conclusion

The 1980s provided a challenging period in which to judge the effects of more and less activist policy on diverse economic outcomes. It was a decade that featured both the highest unemployment rates and the longest peacetime recovery since the Great Depression. Even with the lengthy recovery, productivity growth was sluggish and unemployment rates never fully recovered to the levels of the previous decade. Diverse forces—new technology, shifts in

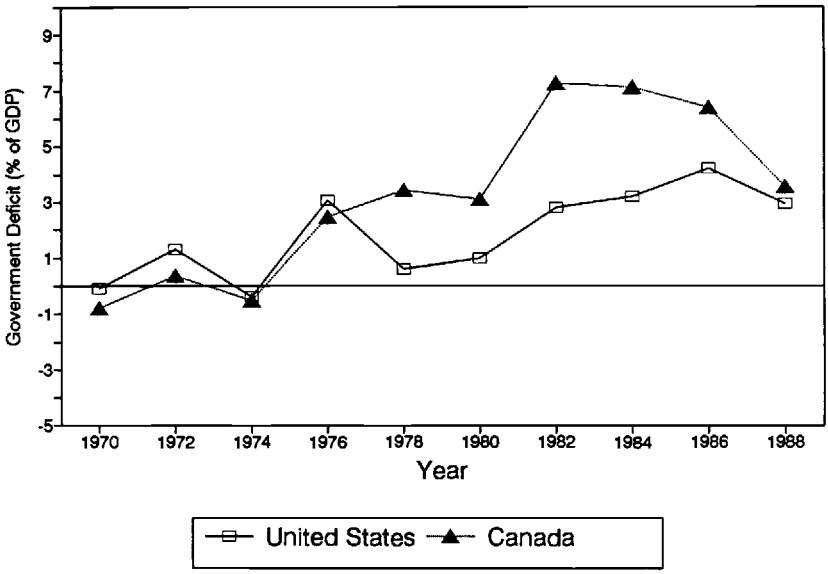

Fig. 2. Government Deficit as percentage of GDP, United States and Canada, 1970–88

Sources: See figure 1.

relative labor supplies, opening of trade—made it difficult for less-skilled workers throughout North America to compete and survive. The United States chose to give relatively free play to market forces during this decade. Canada chose a more activist strategy of providing broader social safety nets and labor regulations and institutions more favorable to trade unionism. U.S. policies generated substantial employment growth but did little to mitigate market forces that redistributed income toward higher-income workers and families. Canadian policies generated comparable employment growth but also mitigated the forces that tended to increase inequality and poverty. The experiences of the decade suggest that policy differences—even small differences—can matter in economic outcomes, albeit with associated costs. With a modestly different set of policies, the United States could have had labor market and income outcomes comparable to those in Canada. With a modestly different set of policies, Canada could have looked more like the United States. The reasons why the two countries chose different strategies for coping with the problems of the 1980s, and the longer-run consequences of these choices, lie beyond the scope of our project, though they are certainly interesting to explore.

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