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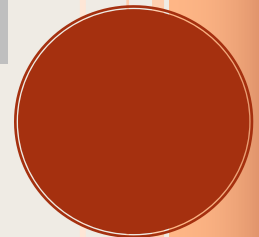
Canadian Labour Economics Forum

WORKING PAPER SERIES

**Is There a Tradeoff Between
Ethnic Diversity and
Redistribution? The Case of
Income Assistance in Canada**

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Is There a Tradeoff Between Ethnic Diversity and Redistribution? The Case of Income Assistance in Canada *

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March 24, 2017

1 Introduction

Does ethnic, cultural and religious diversity make it harder for democracies to function well? Does diversity lead to less interpersonal trust and other dimensions of social capital that are characteristic of healthy societies? Does growing ethnic and cultural heterogeneity make it more difficult to maintain progressive social programs - what Keith Banting refers to in his Presidential Address to the Canadian Political Science Association as the 'Progressive's Dilemma' (Banting, 2010)? These questions have been a central concern of research and writing by Keith Banting and various co-authors (e.g. Banting 2010; Banting and Kymlicka 2004, 2010; Banting, Johnston and Soroka 2006; Banting, Johnston, Kymlicka and Soroka 2006; Banting, Soroka and Koning, 2013; Johnston, Banting, Kymlicka and Soroka, 2010; Soroka, Banting, Johnston and Kymlicka 2016).¹ They have also received attention from policy

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¹We have benefited greatly from conversations with John Myles about these papers and from his comments on this chapter more broadly

analysts and researchers in developed and developing countries (e.g. Easterly and Levine, 1997; Alesina and LaFerrara, 2000, 2002; Luttmer (2001), Alesina and Glaeser, 2004; Putnam, 2007; Dahlberg, Edmark and Lundqvist, 2012; Algan, Héméte and Laitin, 2016) and are intensely debated in Europe at the present time. Our understanding of the Canadian experience – and the extent to which it differs from that of other countries – has been substantially advanced by Banting and his co-authors. Much of their Canadian research uses measures of interpersonal trust and survey-based opinion data on support for various social programs. In addition, their and other researchers' cross-country analyses use measures of a country's support for the welfare state such as the fraction of GDP devoted to social programs.

Research findings that interpersonal trust and other forms of social capital are lower in neighbourhoods that are more racially or ethnically diverse, as well as findings that greater diversity is associated with more negative attitudes towards redistribution are troubling. However, whether such consequences - when and where they occur - are large enough to influence the design of social programs remains an open question. In this paper we examine this question for the case of income assistance or social assistance policies (sometimes called welfare) in Canada. We take advantage of two salient features of recent Canadian experience. One is that Canada has experienced dramatic growth in the ethnic and cultural diversity of its immigrant inflows in recent decades, but the extent of this growth has varied substantially across regions. The second is that income and social assistance policies (hereafter IA/SA) vary across provinces, and the ability of the provinces to employ different approaches to these programs has increased since the mid-1990s. Our research thus asks the following question: Is there evidence that provinces that received substantial numbers of immigrants over our sample period (and became ethnically and culturally more diverse as a consequence) reduced the generosity of their welfare programs, relative to provinces that experienced little change in the heterogeneity of their populations?

We use data from the Canadian Census over the period 1986 to 2006 and from the National Household Survey in 2011. The Census, which is carried out every 5 years (except in 2011 when the NHS temporarily replaced the Census), provides a rich source of information for our purposes. We match our Census data with information on provincial IA/SA benefit levels over the same time period. We prefer measures such as benefit rates that are chosen by governments and thus the outcome of a political decision process to measures such as the proportion of provincial GDP devoted to

social programs that are subject to potentially confounding influences. For example, a country with established integration programs that has a surge in in-migration will experience an increase in the fraction of GDP spent on social programs even if qualification requirements and benefit levels remain constant. Unless properly controlled for, this positive correlation could be interpreted as an increase in diversity leading to greater public support for the welfare state. We focus on benefit levels for four recipient types: single employables; single individuals with a disability; a lone parent with a child aged 2; and a couple with two children, aged 10 and 15.

The paper is organized as follows. The next section briefly surveys the previous literature on the relationship between ethnic, religious and cultural diversity and support for redistributive social programs. We then provide some background on the Canadian immigration experience and on the evolution of social assistance programs over our sample period. Section four presents the empirical implications of a political economy model of benefits setting, section five describes our data, and the sixth section presents our empirical results. The final section concludes.

2 Ethnic and Racial Diversity and its Consequences

A salient feature of the twentieth century was the development of the ‘welfare state’ - especially in Europe, North America and Australia and New Zealand - with the accompanying substantial expansion in the role of government. Many observers argue that this achievement required a common bond among citizens - a feeling that ‘we’re all in this together.’ Marshall (1950), for example, stated that ‘Citizenship requires a bond of a different kind, a direct sense of community membership based on loyalty to a civilization that is a common possession.’ But a growing concern is that increasing ethnic and cultural diversity in many developed countries challenges this bond and represents a threat to maintaining their welfare states. Progressive taxation and social programs require a willingness of the fortunate to help support the less fortunate, and this willingness may decline when those in need of support differ from the fortunate majority on ethnic, cultural or racial dimensions. There are both theoretical and empirical reasons for taking seriously this concern.

Banting (2010) succinctly summarizes theoretical reasons from several disciplines. Social psychologists emphasize the role of group identities and point out that people are more comfortable supporting and trusting members of their own group and less so for ‘outsiders.’ From an evolutionary biology perspective individuals have a natural tendency to be less altruistic towards those with whom they share fewer genes. Models of rational choice focus on the reciprocal nature of altruism, and predict that people will be more willing to assist those who have assisted them previously or are more likely to help in the future. In this perspective, perceptions that ethnic or racial minorities are ‘free loaders’ who do little to help others may reduce support for social programs that support these minority groups.

Much empirical evidence is broadly supportive of this perspective. In the U.S. most research has focused on the racial dimension. Across US cities, various dimensions of social capital (interpersonal trust, participation in social activities and provision of public goods) as well as the extent of redistribution policies are lower in cities that are more racially diverse (Alesina and LaFerrara, 2000, 2002; Putnam, 2007). Similarly, states with lower proportions of African Americans provide more generous welfare benefits (Alesina and Glaeser, 2004). Across countries (including developed and developing countries), greater diversity is associated with low economic growth and poor governance and public institutions (Easterly and Levine, 1997; Alesina et. al. 2003). Alesina and Glaeser (2004) find significant negative correlations between their fractionalization measures of racial and linguistic diversity and social welfare spending across a broad range of developed and developing countries.

These findings are either correlations or partial correlations, and do not necessarily imply that diversity causes the observed differences. Nonetheless, the magnitudes of the implied effects are non-trivial. For example, Putnam (2007) finds that the difference between living in a highly homogeneous city (Bismark, North Dakota) and heterogeneous Los Angeles is equivalent to the gap between an area with a poverty rate of 7 percent and one with a poverty rate of 23 percent. The estimates of Alesina et. al. (2003) imply that moving from complete homogeneity to the maximum observed level of heterogeneity is associated with a reduction in a country’s growth rate of 2 percent per year. Perhaps most striking is Alesina and Glaeser’s conclusion that approximately one-half of the difference between the U.S. and continental western Europe in the size of the welfare state can be attributed to the difference in ethnic diversity between the two regions. This research paints a

rather ominous picture for Canada, a country that has become ethnically and culturally very heterogeneous in recent decades. As stated by Banting, Soroka and Koning (2013), ‘If diversity really is the enemy of redistribution, then the Canadian welfare state is in serious trouble.’ It also raises major concerns in numerous western European countries – societies that historically were very homogeneous but increasingly are becoming less so. However, an examination of the Canadian experience and associated research yields a more comforting picture.

Beginning first with cross-country analysis, Banting, Johnston, Kymlicka and Soroka (2006) focus on OECD countries (a subset of those studied by Alesina and Glaeser (2005) and others) and examine the consequences of diversity for changes in (rather than levels of) social spending over the period 1970 to 2005. They find a slight negative but statistically insignificant partial relationship between the change in social welfare expenditure and immigrants’ share of the population, suggesting that countries with a relatively large stock of migrants fared no worse in terms of maintaining social spending than countries with fewer immigrants. An additional result is that there is a much steeper (and statistically significant) association between the change in the share of immigrants in the population and changes in social spending, indicating that the rapidity of change in the ethnic and cultural make-up of society may be more of a threat to established welfare states than the level of diversity.

Canada provides an important case study, as one of the world’s leading immigrant-receiving countries and because of its recent dramatic growth in ethnic and cultural diversity. Most Canadian research has focused on impacts of heterogeneity on measures of interpersonal trust and public attitudes toward minorities and redistribution programs. In both these aspects the Canadian research adds nuances and potentially valuable insights.

Canadian evidence is consistent with US research in finding that interpersonal trust is lower in more ethnically diverse neighbourhoods (Soroka, Helliwell and Johnston, 2007; Soroka, Johnston and Banting, 2007). However, among minorities, levels of trust are highest when the Caucasian majority group is most dominant and their trust in their neighbours increases as ethnic diversity rises. Thus there are offsetting forces at work within the neighbourhood as a whole. In addition, there are noteworthy differences within the majority group. Those who have lived in the area for a long time are least likely to trust their neighbours as heterogeneity increases, while those who recently moved into the area exhibit greater trust, consistent with those most

comfortable with diversity selecting in to those types of neighbourhoods.

In Canada, as in the US, diversity appears to reduce interpersonal trust, but does this translate into less support for redistribution? The answer appears to be No. Soroka, Johnston and Banting (2007) find no evidence that respondents' ethnicity or the ethnic composition of their neighbourhood influences support for social programs. If anything, it is the ethnic minorities, not the Caucasian majority that are less supportive of redistribution.

Johnston, Banting, Kymlicka and Soroka (2010) also explore the role of national identity, and conclude that identification with Canada mitigates opposition to welfare state policies and reduces any negative consequences of immigration. However, these estimated impacts differ across programs. Support for welfare programs and publicly provided health care declines with affluence for both 'low identity' and 'high identity' groups, but the impact of strong identification with Canada is much greater in the case of health care than in the case of welfare.

3 Immigration and Social Assistance: The Canadian Experience

The main focus of our study is the relationship between recent immigration - and the associated increase in ethnic diversity - and the evolution of IA/SA benefits. This brief section provides some background on Canada's experience.

Canada, like Australia and the United States, has long been one of the world's major immigrant receiving countries. Figure 1 shows annual inflows over the period 1860 to 2014, expressed as a percentage of the population. Two points are noteworthy. Immigrant arrivals were very large during certain time periods, especially the early 1900's and the early post-World War Two period. Second, there is substantial variation over time, with in-migration falling to very low levels during recessions (especially during the Great Depression) and during wartime. But the key overall point is the long term consistency of sizeable inflow rates: Canada is indeed a 'country of immigrants' and this long-term historical experience may play a role in current public attitudes toward immigration.

While the magnitudes of immigrant inflows (relative to the size of the population) since the late 1970's are not large by historical standards, the

source country composition has changed dramatically (Figure 2). Prior to the 1960's the focus of immigration policy was on unskilled workers and a key feature was that of 'preferred' and 'non-preferred' source countries. Preferred source countries were the U.S., Great Britain and northern continental Europe. Entry into Canada from non-Caucasian countries was limited. These two key features changed with the adoption of a formal selection system in the late 1960's. Selection of 'economic migrants' was no longer based on source country, but on having skills regarded as suitable for Canada's labour market. A key consequence of these changes in immigration policy was a dramatic increase in the ethnic and cultural diversity of immigrant inflows during the past several decades. As Figure 2 makes clear, this striking development is especially evident since the early 1980's. Importantly for our empirical work, these ethnically diverse inflows were not evenly spread across the country, forming particular concentrations in Ontario and BC. This variation across provinces and over time plays a central role in our empirical analysis.

Despite greater selectivity associated with the selection system and increased emphasis on economic migrants, recent immigrant cohorts have been experiencing worse economic outcomes than those who arrived in the 1970s and earlier. The earnings gap between non-immigrants and otherwise comparable immigrants (i.e. controlling for factors such as gender, education and work experience) has steadily increased from 15% for the 1975-79 arrival cohort to over 40% for the 2000-2004 cohort (Picot, 2008). Unlike earlier cohorts, recent arrivals appear unlikely to ever catch up to otherwise comparable native born. In addition, poverty rates (the incidence of low income) have been on an increasing trend for immigrants since the early 1990's, while poverty among native born Canadians has been declining (Picot and Hou, 2015). As a consequence, there has been a noteworthy shift in use of income assistance between immigrants and natives. In the beginning of our sample period, immigrants were less likely than the native born to receive welfare (Baker and Benjamin, 1995). However, since the late 1990's the fraction of immigrants receiving social assistance has consistently been above that of natives (Banting, Soroka and Koning, 2013). Canadians continue to hold generally favourable views toward immigration, and most Canadians agree with the statement 'immigrants are good for the economy' (Green, Riddell and Worswick, 2016). The combination of worsening labour market outcomes and greater reliance on income assistance may undermine these positive views. Recently, substantial changes have been made to immigration policy with a key objective being to improve the economic outcomes of

entering immigrants. Initial indications are that these changes are having the desired effect, at least to some extent (Ferrer, Picot and Riddell, 2014). However, little is known about the medium to longer-term consequences of these policy changes. The success of these new policies may be important for maintaining Canadians' positive opinions about immigration.

There were also noteworthy changes in provincial IA/SA programs during our sample period. Although social assistance falls under provincial jurisdiction, federal funding played an important role under the Canada Assistance Plan (CAP) that operated from the mid-1960's until the mid-1990's. The federal government contributed 50% of IA/SA benefits provided that the province complied with CAP requirements (which all did). This imposed considerable uniformity on provincial welfare programs. This cost-sharing arrangement continued until 1995 when CAP was replaced with a block transfer under the Canada Health and Social Transfer (CHST) introduced. The CHST provided block funding for all previously cost-shared programs in the areas of education, health and income assistance. For social assistance the only condition that the provinces needed to meet was the absence of provincial residency requirements. Thus, since the mid-1990's the provinces have had more discretion in the design of their welfare programs, and IA/SA has competed for funding with other demands on provincial budgets such as education and health care.

As would be expected of a key component of the 'safety net', receipt of social assistance benefits increased substantially during the 1981-82 recession – by most measures Canada's worst of the post-War period. However, the proportion of the population receiving welfare did not return to its pre-recession level during the subsequent strong economic expansion. In the early 1990's Canada was again hit with a major downturn. During the 1990-92 recession and its long-lasting aftermath IA/SA receipt rose to unprecedented levels. By 1994 welfare receipt had increased to 12.5% of the non-elderly adult population. The combination of this 'ratcheting up' of social assistance participation and large budget deficits led to major reforms to income security programs, including social assistance and unemployment insurance. The replacement of the federal-provincial cost-sharing arrangement by block funding under the CHST was a central component of these reforms, as were major changes introduced in 1996 to the unemployment insurance program, renamed Employment Insurance. In addition, most provinces made significant changes to their IA/SA programs in the latter half of the 1990's and/or the early 2000's, changes that play an important role in our empirical anal-

ysis.

The experience with rising welfare reciprocity in the 1980's and early 1990's resulted in considerable interest in policies that encourage the movement from welfare to work. One such policy that is relevant for our analysis occurred in 1998 with the federal government's implementation of the National Child Benefit program that was integrated with provincial IA/SA benefits. Provinces were encouraged to reduce IA/SA benefits for families with children by the amount of the child tax credit, thus leaving these families no better (or worse) off than prior to the introduction of the NCB, but lowering the 'welfare wall' and providing a financial incentive for these families to enter the workforce. Five provinces (PEI, Nova Scotia, Ontario, Manitoba and Alberta) did 'claw back' IA/SA benefits by the amount of the NCB and a further three provinces (Quebec, Saskatchewan and BC) reduced their provincial child benefits to account for the federal child tax credit. Newfoundland and New Brunswick did not claw back the NCB or reduce their provincial child benefits. These changes (or lack of changes) to provincial welfare benefits paid to families with children play a role in our empirical analysis.

4 Model Implications

In an appendix available from the authors, we set out a simple model of politicians deciding on levels of social assistance benefits and taxes. The model is not intended as a complete characterization of the related issues but rather as a way to guide our thinking about our empirical specification. To that end, we set up the model to capture what we take to be real world elements of transfer benefit setting: the potential roles of ideology, the state of the economy, and the presence of deficits, among other features.

The model generates a list of empirical implications but the ones of most interest to us here relate to the direct effect of added immigration. Added immigration can affect benefit rates in several ways. First, immigrants can have direct effects on the fiscal situation even if there is no discrimination. To see this, note that new immigrants earn below average wages and have lower than average employment rates. As a result, new immigrants add less tax revenue and take more benefits per capita than prior arrivals and the native born. Thus, increased immigration inflows will put the budget out of balance, requiring reductions in benefits to re-establish balance. Second,

immigrants could affect the wages and employment rates of other workers. There is much debate on the extent of such immigrant impacts on the labour markets of receiving countries but our reading of the economics literature on the subject is that such impacts tend to be small. The third channel is through discrimination - the extent to which voters dislike their tax dollars going to benefits for "other" group members. This effect will be larger when immigrant employment rates are lower (or, more generally, when immigrant benefit usage is higher).

To the extent we find any effects from immigration on benefit setting, we are interested in which of these channels is most important. It is the third channel, in particular, that has been emphasized as a potential challenge to the ability of countries to maintain a generous welfare state in the face of substantial immigration. Holding median earnings and the employment rate constant will effectively eliminate the first two channels. To the extent that our measures of earnings and employment are somewhat blunt (since, for example, the fiscal situation depends on more than just median income), controlling for the size of the deficit can provide an extra means of holding the first channel constant. Any remaining impact of immigration shifts would then reflect the third channel. Channels 1 and 2 both imply larger expected effects if immigrants are more likely to receive benefits. We will examine that implication by checking whether any estimated effects are larger if the proportion of immigrants who are low income or low educated is larger.

5 Data

Our data comes from a combination of sources. We use the 1986, 1991, 1996, and 2001 Canadian Censuses and the 2011 NHS to form our measures of the proportion of the population who are immigrants, our employment rates, and our income measures. We form these separately by province and year. Our income measure is median market income (i.e., income before taxes and transfers) for the head of the household in real (2001) dollars.² We also obtain the mean market income and, following the earlier literature (in particular, Meltzer and Richards(1981) and the papers that follow it), include the ratio of the mean to the median income in some specifications as a measure of inequality in the income distribution. Our employment rate

²We used the Bank of Canada's core version of the CPI to deflate our series)

measure is taken from the information on labour force status in the Census survey week.

Our measure of diversity is immigrant status. It would be potentially possible to define measures of diversity based on country of birth but the country of birth definitions changed substantially in the public use Census over our sample years and are partially masked in the Atlantic provinces in some years, making implementing consistent versions of such variables impossible. Given the substantial shifts in the source country distribution of immigrants shown earlier, increases in immigration go hand in hand with increases in ethnic diversity in this period. As discussed in the model section, we are interested in identifying not just the proportion of people who are immigrants but, further, the proportion who are immigrants who are more likely to use benefits. To this end, in each year, we also obtain the proportion of immigrants who are high school drop-outs.

Figure 3 contains plots of the proportion immigrant for each province for our sample period. Perhaps the most striking feature of the figure is the very different levels of the different provincial curves. By 2011, the proportion of the provincial population who were immigrants ranged from a low of 0.02 in Newfoundland to a high of 0.35 in Ontario. In our main empirical specification, however, we will include province specific effects which will remove the persistent cross-provincial variation. The remaining identifying variation is the changes in proportions within each province over time. While the lowest proportion provinces show only mild variation in these proportions, the rest experienced both rises and falls in the proportion, implying that there is good variation to seek to identify effects of immigration on benefit setting.

We also used the Census data to construct measures of the proportion of the population in a province and Census year who are visible minority (along with low income and low education visible minority proportions). However, these measures should be treated with caution. Prior to 1996, visible minorities were identified by Statistics Canada using combinations of self-reported ethnicity and immigrant status. After that, respondents were asked to self-identify their visible minority status and a non-response category became more prominent. The result is a visible minority variable that is not easily comparable over time. For that reason, we present immigration based definitions of diversity as our main results and show the visible minority results as additional evidence.

For our ideological variables, we define all provincial New Democratic Parties (NDP) as left wing along with the Parti Quebecois, which has a

history as both a separatist and a social democratic party, in Quebec. The right wing parties are more difficult to identify. The Social Credit in the western provinces, the recent Liberal Party in British Columbia (BC) and the recent Conservatives in Alberta are all clearly right wing. However, other Conservative parties, particularly earlier in our period, seem more centrist than purely right wing. We considered different definitions of right wing but settled on declaring all Liberal governments (apart from the most recent BC government) to be Centrist and all Conservative governments to be right wing. This is the most straightforward definition and, thus, less prone to the accusation that the definitions of left and right are being chosen to obtain a particular result.

Finally, we obtained our measure of the ratio of the provincial government deficit to provincial GDP in each year from the RBC on-line posting "Canadian Federal and Provincial Fiscal Tables", September 1, 2016.

Our dependent variable is full year equivalent social assistance benefits for different recipient types from the National Council of Welfare (NCW) annual reports. The NCW provides calculations of total benefits available to recipients in each province in each year in our sample period, converted to an annualized basis (i.e., the amount a person would receive if they were on benefits for a full year). We use the benefits for four recipient types: single employables; single individuals with a disability; a lone parent with a two year child; and a couple with two children, aged 10 and 15. The earlier economics literature examining the effects of diversity on redistributive policy used the total welfare benefits as their measure of redistributive generosity. Such a measure is problematic because it moves, in part, in response to endogenous choices by immigrants and others on whether to take up benefits. In contrast, our measure captures the actual policy parameters being set by the government. The four different recipient types allows us to examine different features of policy setting. If benefit setting does reflect negative opinions on transferring money to a group of "others" one might expect (or, at least, we expected) that this effect would show up most strongly for single employables - a group who might be perceived as "free loaders". Single with disabilities, in contrast, might be perceived as being more "deserving". A lone parent with a child of age two was considered not employable in most provinces through most of our time period and thus these benefits focus attention on generosity toward children, something that received increased attention over this period. As we will see, a couple with two older children is a particularly interesting case given the changes that occurred in provincial

systems in our time period.

We present the real annualized benefits for each of our family types in figures 4 - 7. The series show a notable shift at the time of the policy changes in the late 1990s. For all four benefit types, the mean fell for the period before versus after 2000, with the decline being over 10% for all types other than Lone Parents. There is also a notable decline in variation before versus after 2000. For the Couples with Children benefits, the variance dropped by two-thirds. Thus, interestingly, after the federal government withdrew its oversight of IA/SA spending, the variation across provinces declined, which, together with the declining averages, might support the notion of a race to the bottom once the provinces were independent agents. Importantly, though, a careful examination of the series shows that there are provinces in all the 5-year periods that are moving against the dominant trend. If this were not true then there would be no variation for us to examine once we take out common time trends.

6 Empirical Specification and Results

Our main empirical specification takes the form:

$$\ln(b_{kjt}) = \beta_{0k} + \beta_{1k} \ln(\text{migp}_{jt}) + x_{jt}\gamma_k + \theta_{jk} + \psi_{tk} + \epsilon_{kjt} \quad (1)$$

where, k indexes our four family types; j indexes province; t indexes year; migp_{jt} is a measure of the proportion of residents in province j in year t who are immigrants (or low educated immigrants or visible minorities in some specifications); x_{jt} is a vector of controls indicated by the model; θ_{jk} is a province time-invariant effect; ψ_{tk} is a common time effect; and ϵ_{kjt} is an error term which our model indicates reflects amenity shifts. The inclusion of the province and time fixed effects implies that we identify the effects of the immigrant proportion and the other covariates using within-province over-time variation. This eliminates variation in levels of benefits and immigration across provinces in order to get closer to causal interpretations of our estimates. Without the province effects, our estimates could pick up persistent differences in other factors across provinces. For example, more prosperous provinces may both attract more immigrants and be able to afford higher benefits, generating a spurious positive estimate of the effect of immigration on benefits.

Table 1 contains our base set of results for Single Employable and Single Disabled benefits. Column 1 shows the effect of the log of the proportion of the population who are immigrants on the log of the annualized income assistance benefits for Single Employables controlling only for province and time effects. The estimated effect is negative but far from statistically significantly different from zero at any conventional significance level. In column 2, we add the controls suggested by our model. The log of median income has a positive effect that is significant at the 5% level, fitting with our model prediction that more prosperous economies can afford to pay higher benefits. None of the other controls are even close to statistical significance, and the proportion immigrant effect becomes much smaller and, again, not statistically significant. Interestingly, even the left versus right wing status of the party in power does not affect the level of benefits. This is in contrast to minimum wage setting, where the ideology of the government has a strong influence (Green and Harrison, 2010). In the third column, we add two additional controls. We add the proportion of the population with a university degree to see if greater education shifts preferences related to redistribution. The coefficient on that variable is large but very poorly defined. We also added the ratio of the mean to the median income. Meltzer and Richards(1981) argue that in a median voter model, government benefits will be higher when this ratio is higher because the decisive median voter gets a typical government benefit but has to pay less taxes for it if there are more well-off fellow citizens to pay for it. Our estimate, in contrast, shows a negative effect which is not significant at the 10% level here but will show up as significant in some of our other specifications. The negative sign may fit with the kinds of models proposed by Joseph Stiglitz in which richer individuals have disproportionate influence on policy making, with that influence rising in their income. Then, as the incomes of the 1% pull away from the incomes of others, they would be increasingly able to shift policy away from taxes and benefits - benefits from which they do not directly benefit. Indeed, the results in Johnston et al(2010) indicate that support for welfare programs declines with the affluence of the survey respondent. Adding these variables does not change the conclusion that the proportion immigrant has a small and not statistically significant effect.

Columns 4 through 6 repeat these exercises with the dependent variable being the log annualized benefits for Singles with Disabilities. Here, the proportion immigrant variable has a statistically significant positive effect whether or not we include other controls. This might fit with an idea that

people who are both supportive of transfers but are socially distant from immigrants in their outlook could increasingly decide to favour transfers to the "deserving poor" - the disabled - when the proportion immigrants rises. In this regard, it is interesting that right wing governments implement higher Disabled benefits than Centrist governments.

In Table 2, we repeat these exercises for Lone Parent and Couples with Children benefits. For both types of benefits, the conclusions are the same as for the Single Employable benefits: the impact of the proportion immigrant is small and statistically insignificant, especially one we include other controls. As in the earlier table, only median income and, in one case, the mean to median ratio enter substantially and statistically significantly.

One possible explanation for our estimated non-existent effects for three of the benefit types is that immigrants are not perceived, as a group, as being likely to make excessive use of income assistance benefits. This might be the case based on immigrants being selected under the point system for market related skills. However, not all immigrants are highly educated or otherwise skilled. As we have seen, immigrant poverty and their propensity to use IA/SA benefits has increased over recent decades, and there could be a negative reaction to immigrants in places where less skilled immigrants tend to concentrate. This fits with our model implication that voters would be more concerned about transfers to immigrants if the immigrants have characteristics that make them more likely to receive benefits. We investigate this possibility by replacing the proportion of the population who are immigrants with the proportion who are low educated (high school drop outs) immigrants. We also estimated specifications in which we used the proportion of immigrants who were in the lowest quintile of the national income distribution. The two approaches produce very similar results and for brevity we only show the education based results here. The results for Single Employable benefits in Table 3 are similar to those when using the total immigrant proportion in Table 1. For Single Disabled, however, the positive relationship with immigration evaporates when we focus just on the low educated. We are not entirely sure what to make of this difference. It suggests that the earlier positive effect does not stem from concerns about immigrant benefit usage. It may, instead, be related to the preferences of immigrant voters to have benefits focused on the 'deserving poor'.

In Table 4, we show the results for the low educated immigrant proportion effects for the other two benefit types. For Lone Parent benefits, there continues to be a lack of evidence of any substantial effects. But for Couples

with Children, we now see negative and statistically significant immigrant proportion effects. Recall from the discussion of our model that, given that we get these effects even when controlling for median income, the employment rate, and the size of the deficit implies that the estimated effect reflects the discrimination channel rather than one of the fiscal channels for affecting benefit rates. The effect is not large in magnitude: given our log-log specification, the estimated coefficient of approximately -0.03 implies that a 10% increase in the proportion immigrants is associated with a 0.3% decline in real annual benefits. To put this in perspective, over our time period, the low educated immigrant proportion in Ontario decreased by 50%. From our estimate, this would imply a 1.5% increase in real benefits. Over the same periods, the highest value of real benefits in Ontario was 59% above the lowest value. Thus, shifts in immigrant proportion would appear to be a bit player in the determination of benefit variation over time within a province.

We are interested in examining our results further in light of the changes in income assistance financing and interactions between federal and provincial programmes that occurred in our sample period. Recall from the discussion in section 3 that in 1996 funding moved from including federal government oversight and requirements to having no real strings attached. That could imply that the provinces would have more leeway to set IA policy in ways that reflect the opinions on transfers to immigrants after the funding formula change. Moreover, the CHST block grant had a zero sum feature: since the grant was for expenditures on welfare, health, and education, more spending on welfare meant less on health and education. If immigrants are perceived as higher users of welfare but all citizens benefit from health and education spending then this zero-sum formula could serve to exacerbate concerns about welfare transfers to 'others'. To the extent that is true, we might see larger estimated effects after versus before the change. In addition, the federal National Child Benefit, introduced in 1998, was intended as a federal transfer that would be offset by matching reductions in IA benefits in order to eliminate the "welfare wall". But the provinces were not forced to claw back the benefits and, as we have seen, not all did. Thus, the introduction of the NCB generated a period of extra variability in benefit rates where, again, one might see negative reactions to immigrants reveal themselves. On top of these changes at the federal level, as we discussed earlier, the period beginning in the mid-1990s was one of substantial retrenchment in IA payments, with access to benefits for single employable being particularly targeted. It is interesting to think about our results to this point, which use variation that

spans this period of major cut-backs in benefit rates. Our estimates indicate that the retrenchment for the single employables was not particularly acute in places with larger immigrant inflows.

All three of these changes in the IA systems were initiated in the mid-1990s. We check to see whether they had an impact on the relationship between benefits and diversity by interacting our log of proportion immigrant variable with a dummy variable equalling one for the years after 1996. In Table 5, we present the results from a specification including the covariates indicated by our theory for each of the four benefit types. For all benefit types, the proportion immigrant effects for the for the 1996 and earlier period (the "Proportion Immigrant" variable) are actually positive, though only statistically significantly so for the Single Disabled benefits. For Single Employables, the coefficient on the interaction variable indicates the effect of the immigrant proportion was smaller in the post-1996 period. However, this coefficient is not statistically significantly different from zero at standard significance levels. For Lone Parent and Couples with Children benefits, on the other hand, the estimates of the interaction effects are both sizeable and statistically significant at the 10 and 5% levels, respectively. We should mention that if we include the mean to median income ratio variable the Lone Parent interaction effect falls to insignificance, while the effect for Couples with Children remains much the same.

In Table 6, we repeat this exercise using the proportion of low educated immigrants. With this measure, the 1996 and before effects are very small and statistically insignificant. For Single Employables benefits, the coefficient on the interaction term indicates the effect of the low educated immigrant proportion is much larger and more negative in the post-1996 period. However, this coefficient is roughly the size of its standard error, implying that we cannot reject a zero effect at any standard level of significance. The combination of the large point estimate and the large standard error opens the possibility that there was some emergence of negative reactions to diversity after 1996 but nothing can be said with any certainty. For Couples with Children benefits, the post-1996 effect is significant and larger than what was estimated for the entire sample period. The small effects for 1996 and before plus the larger effects post-1996 indicate that federal strings attached to transfers for IA may have restricted local reactions to diversity from showing up in IA benefit setting. If the post-1996 effects were just about the removal of the financial strings in general, though, we might expect to see effects showing up in all benefit rates. The fact that they are most clearly observed

in the rates related to children suggests that the special features of the NCB clawback allowed provinces to make big changes in benefits at lower cost to their own bottom line in a way that shines a light on preferences about diversity. In essence, when the provinces had the opportunity to give benefit increases to recipients funded by the federal government, this happened to a greater degree in provinces with lower immigration. This fits with the notion of trade-offs between redistribution and diversity. It is noteworthy, that the two main provinces that did not claw back benefits (Newfoundland and New Brunswick) are the two lowest proportion immigrant provinces (.02 and .045 in 2011, respectively). Once again, though, the effect, even post-1996, is not large. For Couples with Children benefits, the observed decline in the proportion of low educated immigrants in Ontario would imply a 2.5% increase in the benefit level across our period.

In Table 7, we switch our measure of diversity to the proportion Visible Minority. We split visible minorities into Aboriginals and other visible minorities because we the two groups have different legal interactions with the transfer system. Because of the change in the visible minority definition with the 1996 Census, we use only the 1996 and subsequent Censuses. For the proportion other Visible Minority, the estimated effects are small and not statistically significantly different from zero for all benefit types. Being forced to use fewer observations inflates our standard errors but the point estimates are also small. The conclusion is that the negative estimated effects we find in places for immigrant proportion are not reflecting visible minority diversity per se but, rather, something about newcomers, possibly interacting with other diversity elements. This raises the interesting possibility that in an ethnically diverse, immigrant country such as Canada, the notion of ‘outsiders’ emphasized in the social psychology literature is associated with the most recent arrivals (people who may not have learned the local social norms yet) rather than with ethnicity or skin colour. Soroka et al(2016) find exactly this in an experimental setting with subjects from Canada and the US. For the proportion Aboriginal, there is a negative, sizeable and significant effect on Single Disabled benefits but, in general, the estimates are very badly defined and we can say little about them.

Our overall conclusion from our empirical exercises is that there is some evidence that provinces that experienced with higher inflows of low educated immigrants had reduced benefits but only for Couples with Children benefits and, even then, the effects are not large. These effects show up most in benefits for families with children because of the post-1996 IA/SA policy

changes that made this the easiest place for large benefit changes to occur. It is interesting to consider these results in light of the earlier literature. As we have seen, Soroka, Helliwell and Johnston(2007) and Soroka, Johnston and Banting(2007) find that higher ethnic diversity lowers trust in a location but does not lower support for redistributive policies. We find that the lower trust translates into lower benefits in situations where the provincial governments had more leeway and where interactions with the federal government made relative large changes feasible (i.e., in families with children benefits after 1996). However, even here the effects are not substantial. Thus, we reach an overall conclusion that the results in the earlier papers on opinions largely carries over to actual benefit setting.

7 Conclusion

Keith Banting and a list of co-authors have provided a rich body of research on the relationship between diversity and support for the welfare state in Canada and internationally. In this paper, we investigated the next step in the logical chain: did the lack of effect in stated opinions on redistribution translate into a lack of impact on actual policy setting. We believe this is a useful step since responses to surveys might be coloured by concerns over how respondents are perceived that might not show up when they step into the anonymity of the polling booth. Our examination involves estimations of the effects of the proportion of immigrants on IA/SA benefit rates for four family types: Single Employables; Single Disabled; Lone Parents; and Couples with Children. We implement our specifications using Census and NHS data over the period from 1986 to 2011. Our main finding is that there is limited evidence of effects of the proportion immigrants on any of the benefit types apart from Couples with Children benefits. Importantly, the latter effects arise entirely in the post-1996 period when the federal government had removed strings from transfers for IA/SA and also when the implementation of the NCB allowed provinces a moment in which they could make large changes in the effective benefits received for families with children at no additional cost. The provinces who took the option of increasing benefits were mainly the ones with lower proportions of low educated immigrants. This provides an interesting insight into funding of programmes in a federation and fits with Pierre Trudeau's statements that he worried about more parochial decisions being made at the provincial level. Nonetheless, the estimated

effects are not large and the overall conclusion from the earlier literature that Canada stands as an example in which diversity has not generated reduced redistribution remains.

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Table 1: Benefit Regressions for Single Employable and Single Disabled

	(1)	(2)	(3)	(4)	(5)	(6)
	Single Empl	Single Empl	Single Empl	Single Disabled	Single Disabled	Single Disabled
Proportion Immigrant	-0.42 (0.55)	-0.064 (0.42)	0.024 (0.35)	0.35* (0.13)	0.44* (0.15)	0.46** (0.12)
Median Income		1.30* (0.48)	1.25* (0.39)		0.76** (0.20)	0.81** (0.20)
Employment Rate		-0.027 (0.032)	-0.028 (0.029)		-0.030+ (0.014)	-0.029+ (0.013)
Deficit GDP Ratio		0.035 (0.024)	0.028 (0.022)		0.0071 (0.0062)	0.0039 (0.0056)
Left Govt		0.087 (0.11)	0.053 (0.14)		0.057 (0.043)	0.051 (0.054)
Right Govt		0.12 (0.094)	0.069 (0.098)		0.083* (0.030)	0.068+ (0.033)
Mean Median Ratio			-0.26 (0.15)			-0.15** (0.026)
Proportion University			-3.67 (3.08)			-0.57 (0.88)
Constant	7.13** (2.14)	6.36** (1.92)	7.44** (1.54)	10.7** (0.52)	10.4** (0.67)	10.6** (0.56)
Observations	60	60	60	60	60	60
R^2	0.72	0.77	0.80	0.82	0.86	0.88

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

All specifications include a full set of province and year effects. The dependent variables are the log of annualized benefits for the family type. Proportion Immigrant is in logs. Median income is in thousands of dollars and logs. The Left and Right wing government indicators are lagged by one year. Standard errors are clustered by province.

Table 2: Benefit Regressions for Lone Parents and Couples with Children

	(1)	(2)	(3)	(4)	(5)	(6)
	Lone Parent	Lone Parent	Lone Parent	Couple w chldrn	Couple w chldrn	Couple w chldrn
Proportion Immigrant	-0.10 (0.21)	-0.059 (0.21)	-0.0066 (0.17)	-0.16 (0.21)	-0.079 (0.17)	-0.065 (0.16)
Median Income		0.43** (0.11)	0.36** (0.095)		0.35+ (0.18)	0.36+ (0.20)
Employment Rate		0.0071 (0.0098)	0.0059 (0.0083)		0.013 (0.011)	0.014 (0.0098)
Deficit GDP Ratio		-0.012 (0.0086)	-0.015 (0.0081)		-0.0058 (0.0088)	-0.0073 (0.0089)
Left Govt		-0.017 (0.038)	-0.039 (0.048)		-0.024 (0.031)	-0.028 (0.035)
Right Govt		0.019 (0.030)	-0.0077 (0.035)		0.0093 (0.026)	0.00029 (0.030)
Mean Median Ratio			-0.096+ (0.045)			-0.070 (0.049)
Proportion University			-2.42 (1.32)			-0.46 (0.97)
Constant	9.37** (0.83)	8.04** (1.07)	8.75** (0.93)	9.34** (0.81)	8.10** (0.98)	8.23** (0.96)
Observations	60	60	60	60	60	60
R^2	0.74	0.80	0.83	0.77	0.82	0.83

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

All specifications include a full set of province and year effects. The dependent variables are the log of annualized benefits for the family type. Proportion Immigrant is in logs. Median income is in thousands of dollars and logs. The Left and Right wing government indicators are lagged by one year. Standard errors are clustered by province.

Table 3: Benefit Regressions for Single Employables and Single Disabled Using Proportion Low Education Immigrants

	(1)	(2)	(3)	(4)	(5)	(6)
	Single Empl	Single Empl	Single Empl	Single Disabled	Single Disabled	Single Disabled
Proportion Immigrant	-0.039	-0.024	-0.040	0.0087	0.013	0.0084
HS Drop Outs	(0.041)	(0.024)	(0.026)	(0.014)	(0.017)	(0.015)
Median Income		1.32*	1.24**		0.67**	0.75**
		(0.41)	(0.33)		(0.20)	(0.22)
Employment Rate		-0.030	-0.034		-0.033 ⁺	-0.032*
		(0.029)	(0.025)		(0.015)	(0.014)
Deficit GDP Ratio		0.039	0.032		0.00040	-0.0014
		(0.024)	(0.021)		(0.0092)	(0.0097)
Left Govt		0.065	-0.0058		0.023	0.020
		(0.091)	(0.12)		(0.041)	(0.055)
Right Govt		0.086	-0.0029		0.076*	0.063
		(0.065)	(0.081)		(0.026)	(0.041)
Mean Median Ratio			-0.31 ⁺			-0.12 ⁺
			(0.15)			(0.060)
Proportion University			-4.28			0.40
			(3.72)			(1.86)
Constant	8.59**	6.63**	7.65**	9.38**	9.09**	8.99**
	(0.20)	(1.11)	(0.76)	(0.074)	(0.53)	(0.64)
Observations	60	60	60	60	60	60
R^2	0.72	0.78	0.81	0.79	0.83	0.84

Standard errors in parentheses

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

All specifications include a full set of province and year effects. The dependent variables are the log of annualized benefits for the family type. Proportion Immigrant is in logs. Median income is in thousands of dollars and logs. The Left and Right wing government indicators are lagged by one year. Standard errors are clustered by province.

Table 4: Benefit Regressions for Lone Parents and Couples with Children Using Proportion Low Education Immigrants

	(1)	(2)	(3)	(4)	(5)	(6)
	Lone Parent	Lone Parent	Lone Parent	Couple w chldrn	Couple w chldrn	Couple w chldrn
Proportion Immigrant	-0.014	-0.0056	-0.012	-0.028*	-0.025+	-0.031*
HS Drop Outs	(0.012)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Median Income		0.45** (0.10)	0.36** (0.10)		0.37+ (0.17)	0.37* (0.15)
Employment Rate		0.0069 (0.011)	0.0040 (0.0097)		0.010 (0.012)	0.0092 (0.011)
Deficit GDP Ratio		-0.011 (0.0081)	-0.014+ (0.0072)		-0.0017 (0.0064)	-0.0039 (0.0056)
Left Govt		-0.017 (0.028)	-0.055 (0.043)		-0.046 (0.025)	-0.065+ (0.035)
Right Govt		0.014 (0.034)	-0.029 (0.039)		-0.025 (0.024)	-0.051 (0.030)
Mean Median Ratio			-0.11* (0.045)			-0.11* (0.039)
Proportion University			-2.63+ (1.42)			-1.07 (1.09)
Constant	9.71** (0.058)	8.23** (0.57)	8.86** (0.44)	9.83** (0.059)	8.42** (0.54)	8.67** (0.38)
Observations	60	60	60	60	60	60
R^2	0.75	0.80	0.84	0.81	0.85	0.86

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

All specifications include a full set of province and year effects. The dependent variables are the log of annualized benefits for the family type. Proportion Immigrant is in logs. Median income is in thousands of dollars and logs. The Left and Right wing government indicators are lagged by one year. Standard errors are clustered by province.

Table 5: Benefit Regressions Allowing for a Structural Break post-1996

	(1)	(2)	(3)	(4)
	Single Empl	Single Disabled	Lone Parent	Couple w chldrn
Proportion Immigrant	0.32 (0.46)	0.44 ⁺ (0.21)	0.060 (0.23)	0.15 (0.18)
Proportion Immigrant Post 1996	-0.15 (0.083)	0.00086 (0.057)	-0.046 ⁺ (0.023)	-0.089* (0.030)
Median Income	1.10 ⁺ (0.49)	0.76** (0.23)	0.37** (0.063)	0.23 ⁺ (0.12)
Employment Rate	-0.049 ⁺ (0.024)	-0.030* (0.013)	-0.0000086 (0.010)	-0.00033 (0.013)
Deficit GDP Ratio	0.052 (0.030)	0.0070 (0.0071)	-0.0067 (0.0089)	0.0048 (0.0094)
Left Govt	0.078 (0.13)	0.057 (0.043)	-0.019 (0.041)	-0.029 (0.037)
Right Govt	0.092 (0.088)	0.084* (0.032)	0.010 (0.028)	-0.0067 (0.024)
Constant	9.36** (2.05)	10.4** (1.13)	8.97** (1.24)	9.91** (1.15)
Observations	60	60	60	60
R^2	0.79	0.86	0.81	0.87

Standard errors in parentheses

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

All specifications include a full set of province and year effects. The dependent variables are the log of annualized benefits for the family type. Proportion Immigrant is in logs. Median income is in thousands of dollars and logs. The Left and Right wing government indicators are lagged by one year. Standard errors are clustered by province.

Table 6: Benefit Regressions Allowing for a Structural Break post-1996, Low Educated Immigrants

	(1)	(2)	(3)	(4)
	Single Empl	Single Disabled	Lone Parent	Couple w chldrn
Proportion Immigrant	0.0036	-0.012	0.0039	-0.0073
HS Drop Outs	(0.023)	(0.0088)	(0.0090)	(0.010)
Proportion Immigrant HS Drop Outs Post 1996	-0.076	0.067	-0.026	-0.050 ⁺
	(0.072)	(0.048)	(0.020)	(0.022)
Median Income	1.16*	0.82**	0.39**	0.26 ⁺
	(0.49)	(0.20)	(0.095)	(0.13)
Employment Rate	-0.043 ⁺	-0.021 ⁺	0.0024	0.0017
	(0.023)	(0.010)	(0.0093)	(0.012)
Deficit GDP Ratio	0.044	-0.0046	-0.0088	0.0020
	(0.026)	(0.0074)	(0.0080)	(0.0077)
Left Govt	0.068	0.020	-0.016	-0.044
	(0.10)	(0.037)	(0.030)	(0.029)
Right Govt	0.097	0.066*	0.018	-0.017
	(0.072)	(0.023)	(0.034)	(0.026)
Constant	7.70**	8.14**	8.60**	9.13**
	(0.84)	(0.52)	(0.51)	(0.49)
Observations	60	60	60	60
R^2	0.78	0.84	0.80	0.86

Standard errors in parentheses

⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

All specifications include a full set of province and year effects. The dependent variables are the log of annualized benefits for the family type. Proportion Immigrant is in logs. Median income is in thousands of dollars and logs. The Left and Right wing government indicators are lagged by one year. Standard errors are clustered by province.

Table 7: Benefit Regressions Using Visible Minorities (1996 and After)

	(1)	(2)	(3)	(4)
	Single Empl	Single Disabled	Lone Parent	Couple w chdrn
Proportion Visible Minority	-0.028 (0.22)	0.0087 (0.056)	-0.027 (0.042)	-0.0070 (0.039)
Proportion Aboriginal	-0.11 (0.21)	-0.18* (0.068)	-0.018 (0.076)	0.057 (0.060)
Median Income	0.19 (1.51)	1.04 (0.55)	0.34 (0.24)	0.16 (0.30)
Employment Rate	0.045 (0.070)	-0.016 (0.024)	0.012 (0.011)	0.020 (0.0092)
Deficit GDP Ratio	0.034 (0.026)	-0.0030 (0.012)	-0.017* (0.0062)	-0.015* (0.0055)
Left Govt	0.089 (0.22)	-0.022 (0.044)	-0.021 (0.039)	-0.020 (0.043)
Right Govt	0.10 (0.18)	0.030 (0.036)	0.0053 (0.031)	0.016 (0.037)
[1em] Constant	5.39 (3.28)	6.47*** (1.23)	7.96*** (0.75)	8.62*** (0.70)
Observations	40	40	40	40
R^2	0.75	0.91	0.88	0.83

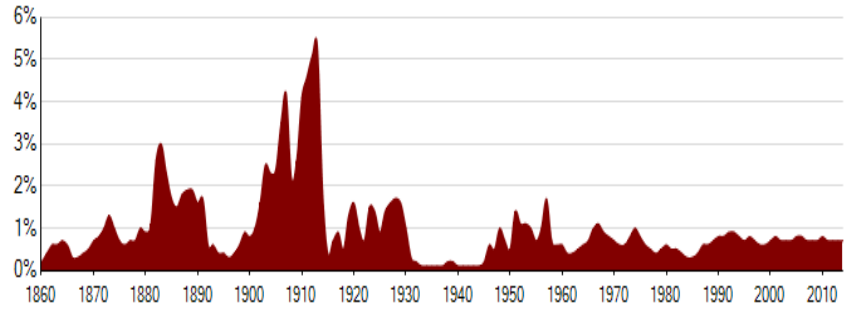
Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All specifications include a full set of province and year effects. The dependent variables are the log of annualized benefits for the family type. Proportion Immigrant is in logs. Median income is in thousands of dollars and logs. The Left and Right wing government indicators are lagged by one year. Standard errors are clustered by province.

Figure 1

Canada - Permanent residents as a percentage of Canada's population, 1860-2014



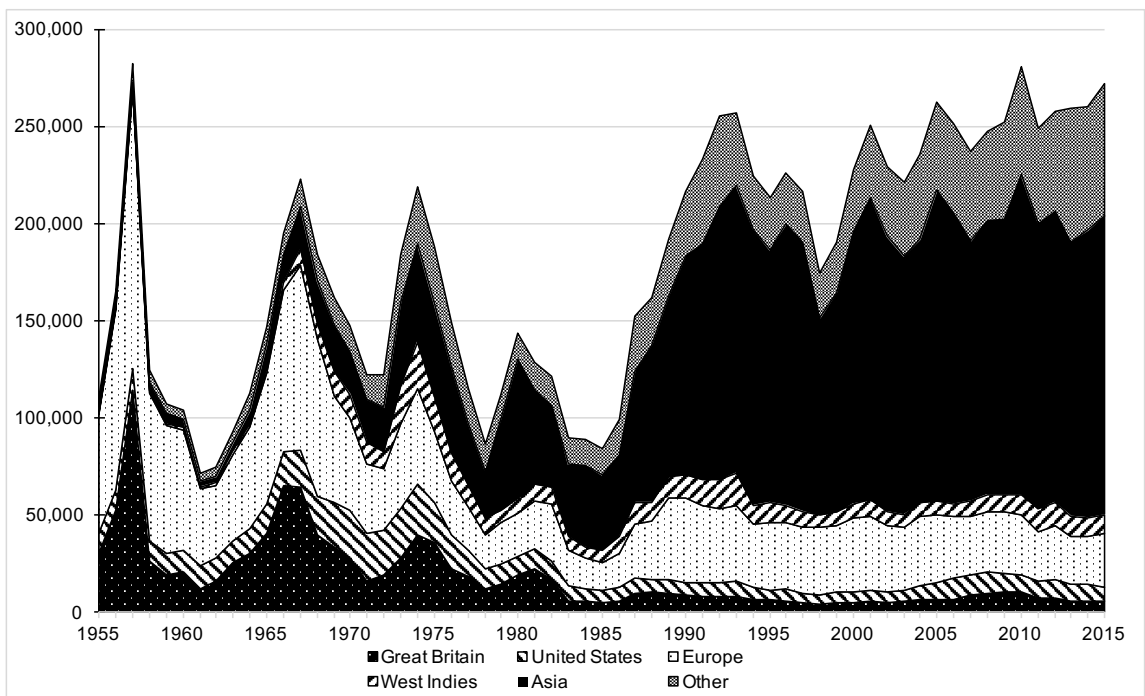


Figure 2

Figure 3: Immigrant Proportions by Province, 1986-2011

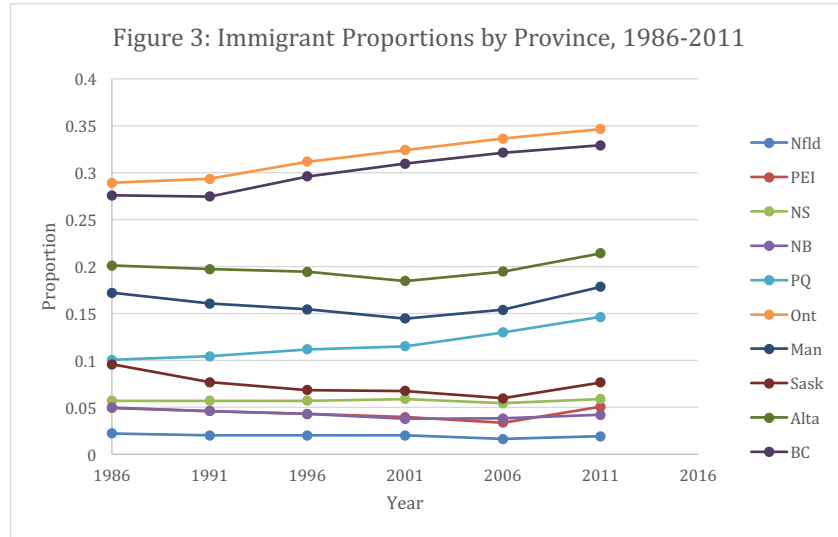


Figure 4: Annualized Real Single Employables Benefits
By Province, 1986-2011

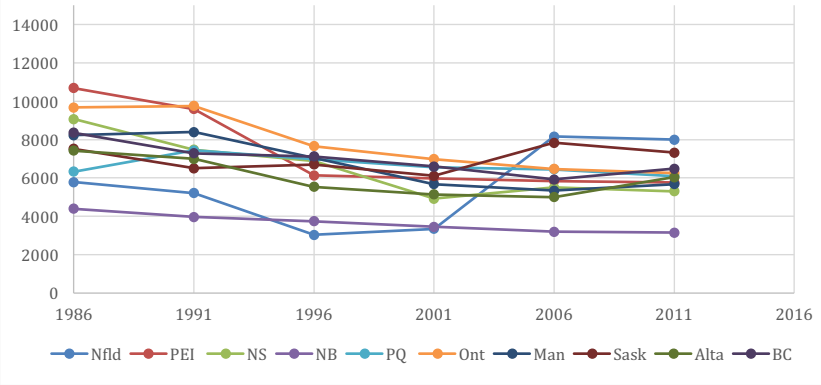


Figure 5: Annualized Real Single With Disability Benefits
By Province, 1986-2011

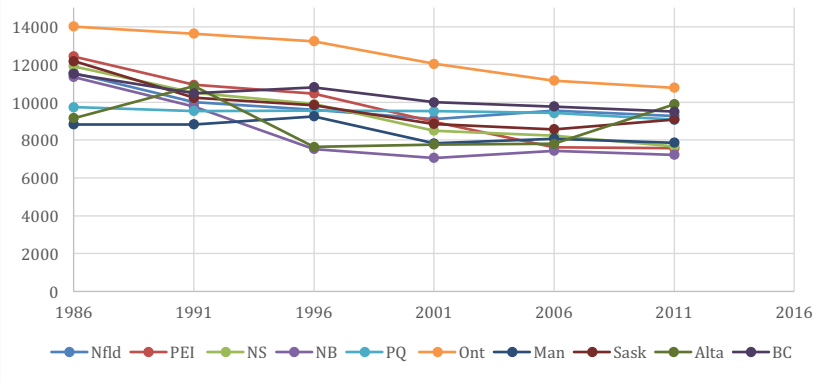


Figure 6: Annualized Real Lone Parent Benefits
By Province, 1986-2011

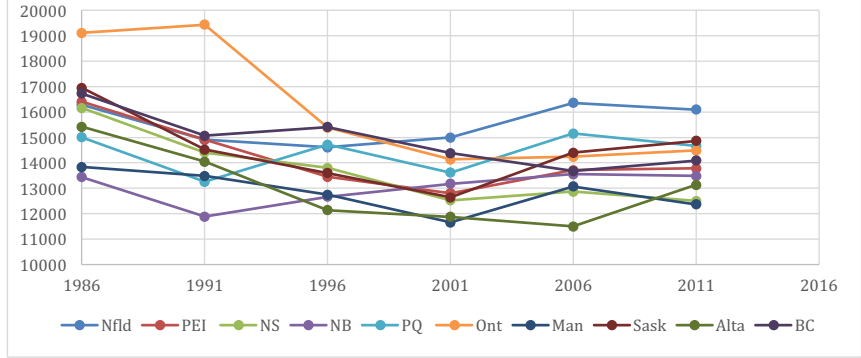


Figure 7: Annualized Real Couple With Children Benefits
By Province, 1986-2011

