

*Dominion or Republic? Migrants to North America from the United Kingdom, 1870–1910*¹

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Between 1876 and 1900, almost 2 million adult male emigrants left the United Kingdom for North America. Of these, about 16 per cent headed initially for Canada.² Estimates of Canadian per caput income indicate a gap of over 30 per cent relative to the United States around 1900.³ At first glance, it would seem that the typical immigrant to Canada was choosing to forgo a very substantial proportion of potential lifetime income. Why, then, did a large number of emigrants from the British Isles to North America not choose to go to the United States initially, and why did they remain in Canada even though onward movement to the United States was an inexpensive option?⁴

This article uses evidence from the manuscript censuses of 1900 and 1901 for the United States and Canada to consider these questions. Official statistics on emigrant flows from the UK, and immigrant flows into the US and Canada, are sparse.⁵ Much research on immigrants to the US has focused on information derived from the ship lists compiled by the captains of ships carrying immigrants.⁶ One of the shortcomings both of the official migration statistics and of the ship lists is that a substantial, but unknown, proportion of those landing in Canada were immediately bound for the United States, and vice versa, and another unknown proportion moved from one country to the other some time

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² Thomas, *Migration and economic growth*, p. 60. Baines, *Migration in a mature economy*, p. 279 estimates that about 40% of the emigrants from England and Wales in this period did not remain abroad.

³ Maddison, *Dynamic forces*, pp. 198, 229–31. Comparing Canada's four original provinces with northern and eastern US states for 1890, average Canadian income per caput is less than 60% of the US level: K. Inwood and J. Irwin, 'Emigration and the Canadian economy, 1870–1900: a regional perspective' (mimeo, 2000), p. 24.

⁴ A similar question in American economic history has been the subject of recent research: why did the settlement of the American Midwest proceed rapidly between 1820 and 1860 despite evidence of higher per caput incomes in north-eastern states?: Margo, 'Regional wage gaps', p. 128.

⁵ Berthoff, *British immigrants*, pp. 5–11.

⁶ Erickson, *Leaving England*, pp. 94–7.

after arrival. The vast majority of the UK immigrants at work at the turn of the century had been in North America long enough to have moved across the border if they thought it was in their interest to do so. This article compares the characteristics of those who settled in urban Canada with those who settled in urban areas of the US.⁷

The ethnic origins of immigrants who came to, or at least remained in, Canada were very different from those of immigrants to the US. Most immigrants living in Canada at the beginning of the twentieth century came from the UK.⁸ In 1900, only 27 per cent of the foreign-born residents of the US had come from the UK, over half of these from Ireland. Because of their high literacy rates and ability to speak English, Britons in the US may have seen themselves, and been seen by employers, as the most able immigrants. In Canada in 1901, British immigrants were in the majority, with 57 per cent of residents born outside Canada coming from the UK, and only 26 per cent of that figure from Ireland.⁹

At the end of the nineteenth century, the Canadian west was only just starting to be ready for profitable agricultural settlement. Good agricultural land in central and eastern Canada had been taken up at least a generation earlier. This meant that UK immigrants settling in Canada after about 1870 were unlikely to become farmers.¹⁰ The share of agriculture in national income fell from the 1870s onwards. The manufacturing sector underwent considerable expansion, mainly in central Canada. The United States experienced more wide-ranging and vigorous economic growth for most of this period.¹¹ Following the American Civil War, settlers moved in large numbers to the west of the Mississippi river, settling the prairie regions. With high tariffs on secondary manufactured goods, demand from this settlement process spilled over into the north-eastern cities, creating a dynamic period of expansion. Opportunities for UK immigrants in the US were more widely distributed across the northern, central, and western states.¹²

By 1900, Canada had experienced three decades of large-scale net emigration, with most emigrants moving to the US. In per caput terms, this exodus ranked with rates of emigration observed in many European

⁷ Baines, *Migration in a mature economy*, p. 279, concludes that most emigrants from England and Wales in the later nineteenth century came from urban areas. It is reasonable to expect that these migrants would typically move to urban areas in North America.

⁸ The UK is defined as Great Britain plus Ireland. 'British immigrants' denotes immigrants from the UK, except those from Ireland.

⁹ Berthoff, *British immigrants*, p. 7; *Fourth Census of Canada*, vol. 1, tabs. XIII, XVIII. In 1891, 74% of residents born outside Canada came from the UK.

¹⁰ In 1901, only 28% of the UK-born men aged 16–65 resident in Ontario, Quebec, or the Maritimes who reported a recognized occupation were farmers or farm labourers. Of the adult male non-francophone native Canadian population in the same regions, 45% were working in agriculture: Canadian Families Project 5% sample of the 1901 census.

¹¹ For surveys of Canadian economic growth in the later nineteenth century, see McInnis, 'Economy of Canada in the nineteenth century'; Norrie and O'ram, *Canadian economy*, chs. 11–13.

¹² The US had a population of 74.6 million in 1900, with 45.6 million (61% of the total) residing in the central or eastern states included in the sample used in this article. Canada had a population of 5.4 million in 1901, with 92% of its inhabitants residing in provinces as far west as Manitoba. In 1901, the sampled cities of Halifax, Montreal, Toronto, and Winnipeg had populations respectively of 45,858, of 325,175, of 250,244, and of 42,340.

countries at the same time. Canadian-born emigrants were disproportionately drawn from rural areas in the central and eastern provinces.¹³ The movement of Canadians across the border suggests that the US offered distinct economic advantages over the Dominion. This article explores how correct this impression was for UK-born men in urban areas.

I

One view of immigration to Canada is that most migrants from the UK were those who preferred to live under the Union Jack. They expected to raise their standard of living through migration but were prepared to earn less (possibly a lot less) than they would had they migrated to the Stars and Stripes. To a substantial extent, their choice of location was based on emotional rather than strictly pecuniary reasons. For these immigrants there was a positive compensating differential associated with being in Canada. They were prepared to take lower wages and less attractive kinds of jobs than were their counterparts who elected to move to the United States, and to accept reduced opportunities for advancement. Their underlying earnings capacity may have been the same as that of emigrants who chose the US, but their tastes were different.

Some emigrants from the UK, however, were fleeing the Union Jack. For these people, the US meant not only greater chances of prosperity, but also an end to British rule. Irish Roman Catholic emigrants were most likely to be trying to get away from all things British, although the extent to which economic factors took second place to political attitudes even for this group has been questioned.¹⁴ Only if economic opportunities in Canada looked more promising than those in the US would such migrants be prepared to remain British subjects.

If the migration decision was thus influenced by 'empire and kin', there would have been consequences for the operation of the North American labour market. That view suggests that for a given occupation British migrants moving to Canada would have received lower wages—perhaps quite substantially lower wages—than British migrants moving to the US. The reverse situation would have held for Irish Roman Catholic immigrants. Occupational distributions for British immigrants in Canada would also be weighted towards lower paid jobs, as these immigrants would have been willing to accept less skilled, lower status jobs, as well as lower pay for the same job, in exchange for the benefits of remaining in a British country. Compared with Irish Roman Catholics in the United States, their counterparts in Canada would be heavily clustered in fairly

¹³ McInnis, 'Grande émigration', p. 116; *idem*, 'Immigration and emigration', p. 141. Studies of Canadian emigration to the US often rely largely on local records, such as marriage and baptismal records from French Roman Catholic parishes in Quebec and New England: Roby, *Franco-Américains*; Ramirez, *On the move*; Widdis, *With scarcely a ripple*. Using census data, Inwood and Irwin, 'Emigration and the Canadian economy' (above, n. 3), p. 14, finds that urban areas in Ontario and Quebec had lower rates of net emigration than rural areas in this period.

¹⁴ Johnson, *Emigration from the United Kingdom*, pp. 182–3; Miller, *Emigrants and exiles*, pp. 377–8, 380, 494; Ó Gráda, 'Irish emigration', p. 98.

well-paid occupations, probably occupations where Canadian wage rates were high relative to those prevailing south of the border.

The British-born made up a substantially larger share of the Canadian than of the US population, so that those who moved from Britain to Canada were almost certain to be able to find a substantial British community and associated institutions wherever they settled. This seems consistent with the view of the migration decision described above. In 1891, 10 per cent of the population of Canada was UK-born, and this figure rose to 15 per cent or more in the provinces and territories from Ontario west to British Columbia. At the same date, 30 per cent of the population of Canada had a father born in the UK. In the US in 1890, only about 5 per cent of the total population was UK-born, although the figure rose to about 11 per cent for the North Atlantic division (two-thirds of whom were Irish) and 7 per cent for the North Atlantic and North Central divisions combined. About 17 per cent of people living in these two divisions had a father born in the UK.¹⁵ Intending immigrants, especially those from England, Wales, and Scotland, could anticipate that if they wanted to settle among individuals of their own ethnic background, it would be easier to find such communities in almost any part of Canada than in the northern US.

Other systematic Canada-US differences could also have led to the existence of compensating differentials, but these would not have had a differential impact on Irish Roman Catholics compared with all other UK immigrants. Substantially lower mortality rates or higher educational participation rates in Canada could have made it a more desirable country in which to live despite lower income per person. In fact, however, in the late nineteenth century Canadian infant mortality rates were above, and life expectancies at birth below, those for the US white population.¹⁶ The proportion of Canadian children at school was somewhat lower than the figure for white US children.¹⁷

An alternative view of the migration process holds that UK migrants did not systematically view Canadian destinations as being superior or inferior on non-economic grounds. Individuals cared about climate, topography, and location of friends and family, but, collectively, British

¹⁵ 1890 US census, vol. 1, pp. 3, 702 and p. cxxxvi, 1891 Census of Canada, vol. 1, T. 2, pp. 8–37 and T. 5, pp. 332–63. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania made up the North Atlantic division, and Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas were the states of the North Central division. See McCormack, 'Networks among British immigrants', for a discussion of local institutions assisting British immigrants in Canada.

¹⁶ Mortality rates were higher for the francophone population, but McInnis reports infant mortality rates for Ontario in 1891 as being close to those for the US white population at the same time: McInnis, 'Population of Canada in the nineteenth century', pp. 402–4; *idem*, 'Canada's population in the twentieth century', pp. 568, 596.

¹⁷ Another possibility is that Canadian-based workers may have been able to enjoy more leisure than those employed in the US. We do not have access to data on work hours that would allow us fully to explore this possibility, but we do note that there appear to be only small differences in reported months worked between Canada and the US, with US-Canada differences of 0.2 to –0.02 months for the occupational groups examined later in the article.

emigrants did not rate Canada as preferable to the US and Irish Roman Catholic emigrants did not do the reverse. UK emigrants did care about matching their occupational skills to the demands for those skills, and they treated 'the whole North American continent as one vast network of labour markets'.¹⁸ Each North American destination offered a particular climate, mix of occupations, and so on. Just as the British are now often more than a little vague about the differences between Americans and Canadians, the typical emigrant in their great-grandparents' generation may have concentrated simply on getting out of the UK. If this view is broadly accurate, UK immigrants would have settled throughout North America according to the possibilities prevailing at the time of their arrival, and then moved as conditions, and their information about various locations, changed.

It is common for immigrants to base their initial choice of location on where friends and relatives live. While the proportion of the Canadian population born in the UK, and the proportion with a UK-born parent, were both much higher than the equivalents in the United States, the total stock of the UK-born in the US far exceeded the stock in Canada. In 1890, there were over 800,000 immigrants from England and Wales in the North Atlantic and North Central divisions, almost four times as many as were living in all of Canada. There were almost twice as many Scots in these parts of the US as in Canada, and over 10 times as many Irish. Thus if the initial choice of country of destination depended on the presence of at least one resident known to the immigrant, both the northern US and Canada would have been feasible destinations for most UK migrants. If chain migration was an important determinant of migration from the UK to Canada, it should also have been an important determinant of migration to the northern US.

In a study of the locational choices of those who migrated to Canada in 1912, Green and Green report a much smaller effect of the size of the stock of UK immigrants in explaining locational choices than was the case for continental European immigrants. They note that the stock of UK immigrants was possibly well above any key threshold level in virtually every Canadian destination.¹⁹ We suspect that the same was true for late nineteenth-century immigrants to both Canada and the northern US.²⁰

Any given migrant may have had relatives and friends in only one or a few places, but given the wide distribution of earlier UK immigrants, a desire by newcomers to live where some earlier migrants were to be found placed virtually no constraint on locational choice. The destination of UK emigrants did in fact change rapidly and sharply: in the 1890s, only about 14 per cent of those bound for North America headed

¹⁸ Thomas, *Migration and economic growth*, p. 135.

¹⁹ Green and Green, 'Balanced growth', p. 54

²⁰ Dunlevy and Gemery, 'Economic opportunity', p. 911, reports a substantial impact of migrant stock on intended location of 1897–8 immigrants to the US for both English and Scottish immigrants. However, the subject considered relates to locational decisions for the entire US.

for Canada, but between 1901 and 1913 the proportion was over 50 per cent.²¹

There was also considerable mobility by the UK-born after they reached North America. One reminder of this is that in 1901, a quarter of the UK-born adults (i.e. those aged 20 or over) living in Vancouver had arrived in Canada by 1882. Almost none of them could have been in Vancouver as early as 1882, as it was then only a small village. Another comes from the records of the US Immigration Bureau, which from the early 1900s made serious efforts to record the movement of migrants across the Canada-US border. A substantial fraction of these migrants—typically young, single adults—had been born in the UK. Many were moving to US destinations where friends or relatives lived.²²

It is hard to pin down the observable outcomes if North America was one connected set of labour markets. If many workers moved readily in response to perceived possibilities, it could happen that only minor differences in wages and occupational distributions would be visible across countries. However, as the Canadian economy grew more slowly than the US economy throughout the late nineteenth century, substantial wage gaps could have persisted despite high mobility of workers. If so, the UK migrants who stayed in the Dominion would generally have been people with relatively low earnings capacity or those with high costs of mobility (probably older and married with several dependents).

It is possible that, whatever the average wage difference between the two countries, patterns of relative wages across occupational groups in Canada and the US would have been quite distinct, despite mobility of the UK-born. Few continental Europeans moved to Canada in the later nineteenth century, at a time when large numbers were going to the US. If the influx of unskilled Europeans was pushing down wage rates in the northern US,²³ unskilled UK emigrants would plausibly have chosen to avoid the US whether or not they liked to sing ‘God save the queen’ and drink tea.

Thus in a situation where UK immigrants were responsive to economic incentives, a substantial average wage gap, and distinct relative returns to specific occupations, could persist. The personal characteristics, and occupations, of immigrants choosing Canada rather than the US would then be expected to differ substantially. British emigration statistics offer some support for this view. Between 1876 and 1900, 55 per cent of all adult male citizens leaving the UK for Canada were listed as labourers (including agricultural labourers) or domestic servants, compared with 47 per cent of those bound for the US.²⁴ However, return migration,

²¹ Thomas, *Migration and economic growth*, p. 57.

²² Ramirez, *Crossing the 49th parallel*, p. 180. Ramirez’s sample is drawn from the years 1906–30. Unfortunately, he does not show the characteristics of UK-born migrants for subperiods.

²³ Hatton and Williamson, *Age of mass migration*, pp. 171–3. Williamson claims that real wages for unskilled workers were almost equal in Canada and in the US around 1900: Williamson, ‘Evolution of global labor markets’, p. 165. Thomas, *Migration and economic growth*, p. 153, argues that after 1900 unskilled UK emigrants avoided the US because of the population inflow from southern and eastern Europe.

²⁴ Thomas, *Migration and economic growth*, p. 60.

movement across the Canada-US border, and skill acquisition in North America by able, but initially poorly trained, immigrants, all limit the usefulness of the available aggregate information in telling us how UK immigrants fitted into North American labour markets in the years following their arrival.

If the compensating differential view is the main explanation for immigration to Canada, earnings for most occupations should have been much higher in the US than in Canada. There should also be substantial differences in the occupational distributions of Irish Roman Catholics compared with those of all other UK immigrants in the US and Canada, with the former clustered in the better-paid jobs in Canada and the latter over-represented in the lower-paid jobs. If earnings were not very different on either side of the border, and UK immigrants had similar personal characteristics and occupational distributions in the two countries, then the fact that Britannia's flag was 'planted firm ... on Canada's fair domain' was not the dominant determinant of settlement patterns.²⁵

If immigrants' preferences for living in the US and in Canada were broadly similar, and most UK immigrants made locational decisions largely on the basis of economic opportunity (or on other criteria not systematically related to being in one or other country) then a much wider variety of outcomes could be observed. To make progress in determining which of these two types of explanation best fits the facts, we need information on relative earnings by occupation in the US and Canada, and on the personal and occupational characteristics of UK immigrants and native-born workers.

II

Migrants' choices were influenced by the immigration policies of the receiving countries, but we consider that the overall effect of these policies in determining which UK immigrants were living in Canada rather than in the United States in 1900 was fairly modest. Unlike the US, Canada actively recruited immigrants from the UK, especially those prepared to work on farms. Both countries restricted the immigration of the indigent and of those likely to become public charges (most often because of their poor health) but few whites were denied admission.²⁶ Travel across the Canada-US border was virtually unregulated at this time so that immigrants could readily move from one country to the other.²⁷

Although the Canadian government had the power to refuse admission to UK immigrants, the Dominion was much more willing to accept UK immigrants whose passage was subsidized by charitable bodies than was the United States. Canadian policies on regulating assisted immigration

²⁵ Alexander Muir, 'The maple leaf forever' (composed 1866), in Morton and Weinfeld, eds., *Who speaks for Canada?*, p. 35.

²⁶ In 1900, for example, of 103,000 British emigrants sailing from the UK to the US, only 100 were deported or refused entry. In the same year, two of the 18,000 coming from the UK were refused entry into Canada: Johnson, *Emigration from the United Kingdom*, pp. 139–57, 346, 353, 354.

²⁷ Ramirez, *Crossing the 49th parallel*, pp. 38–41.

were tightened over time, but charitable bodies were left with a fairly free hand to bring in healthy immigrants who had reasonable prospects of becoming self-supporting. In addition, up to the late 1880s the travel costs of some immigrants (generally agricultural labourers and domestic servants) were subsidized by the Dominion or provincial governments.²⁸

Canadians worried that British emigration societies sent the dissolute and the unemployable to the colonies, but the rhetoric of empire building was also strong. Canada was supposed to be the means of salvation for unlucky and unfortunate Britons. This was particularly the case for child immigrants. Children from orphanages and child paupers, known as Home Children, were sent to Canada, particularly from the 1880s on. Most were placed on farms, with the hope that they would grow up to be farmers or farmers' wives. It would have been very hard for the Canadian government to exclude such immigrants, and there was brisk demand from Canadian families looking for juvenile workers.²⁹ British emigration societies had no reason to try to build up the US, and American immigration authorities faced no political pressure to admit destitute British immigrants simply because they were British.

This 'British factor' in immigration policy is another reason why Canada may have received a larger proportion of unskilled migrants than did the United States. Assisted migrants themselves were too poor to influence the selection of their own destination, and those making the choices for them were motivated much less by possible economic returns than by social and spiritual goals.³⁰ It is doubtful that after their arrival in Canada many Home Children were able to acquire much formal education or job training which would be of use in the urban labour market. Whether those initially brought to Canada ended up staying there remains an open question. Adopting the extreme assumption that every Home Child who came to Canada from the late 1860s to 1901 was still alive and in Canada at the time of the 1901 census, approximately 12 per cent of UK immigrants would have been former Home Children.³¹ Although the Canadian government allowed the entry of some destitute unskilled immigrants, the total volume was not large enough to explain the occupational composition of the UK-born in Canada in 1901.

From the mid-1880s, the United States prohibited the import of contract labour. There is little evidence that many immigrants had previously been recruited in the UK and brought over to work in the US, and there were few deportations of intending immigrants for violation of the law.³² Canada passed a somewhat similar Alien Labour Act in 1897.

²⁸ Johnson, *Emigration from the United Kingdom*, p. 150; Timlin, 'Canada's immigration policy'; Kelley and Trebilcock, *Making of the mosaic*, pp. 86–9. In the early 1880s, the adult steerage fare to Quebec, Halifax, Boston, and New York was £4 4s. Government assisted passage for agricultural labourers and domestic servants coming to Canada cost £3: Pitt & Scott, *Emigrants' guide*, pp. 40–1.

²⁹ Wagner, *Children of the empire*, p. 260, reports ratios of at least six applications per juvenile emigrant in the early 1900s, for the main British organizations sponsoring them.

³⁰ Johnson, *Emigration from the United Kingdom*, pp. 181–2, makes this argument for immigrants to Canada in the early nineteenth century.

³¹ Parr, *Labouring children*, pp. 33, 40; *eadem*, 'Home Children', p. 67.

³² Erickson, *American industry*, pp. 148–66, 195.

This law was rarely enforced, and in any case did not apply to immigrants from the United Kingdom, who were not aliens.³³ On the one hand, the Canadian government encouraged agricultural labourers to come from the UK, but on the other hand it did not limit the recruitment of skilled workers. Some Canadian firms recruited in Britain, but, as had been the case when the practice was permitted for US firms, workers whose passage was paid across the Atlantic often left their arranged employment almost immediately upon arrival.³⁴ Whether they usually also left the country is not known. Both US and Canadian employers were free to tell their employees that they would hire friends and relatives who immigrated, and this was almost certainly the strategy followed by the vast majority of firms on both sides of the border. Thus it seems doubtful that legal requirements limiting recruiting abroad by US firms had any substantial impact in directing the flow of UK immigrants, or in keeping them in the country where they landed.

III

Throughout the later nineteenth century, there were large stocks of the UK-born in both the US and Canada. Therefore informal sources of information and assistance would have been widely available to many of those considering migration. Emigrants' guides were published frequently, and accounts of life in Canada appeared in British magazines. While it is probable that such sources of information were consulted mainly by potential emigrants of the middle and upper classes, it is quite possible that clergymen, employers, and others in a position to influence decisions taken by their social inferiors read such works. As Erickson noted for 1840, published advice about emigration towards the end of the nineteenth century generally promoted Canada over the United States.³⁵ We have found only one example of a publication strongly advising against the Dominion. Malcolm MacLeod (self-styled 'a Lancashire Artisan') wrote:

I could conscientiously advise no person to emigrate to Canada.... The low price of provisions is not to be denied; but against this must be set the scarcity of employment, especially during the long winter.... The thousands that are passing continually from Canada to the States demonstrates conclusively the superiority of the latter for the labouring classes.... Small capitalists may in many cases do well.... I have purposely laid before the reader all the disadvantages of Canada as a field for emigration, because, whilst I find the

³³ Kelley and Trebilcock, *Making of the mosaic*, p. 140.

³⁴ For example, in 1908 the Canadian Pacific Railway recruited skilled mechanics from London and Glasgow during a major strike. Few of these workers stayed with the company after the strike. Starting in 1907, Penmans knitting mills hired workers, mainly women from the east midlands of England, to come to Paris, Ontario. Most of these women did repay their loans: Parr, *Gender of breadwinners*, pp. 21–3. The Canadian Manufacturers' Association established an office in Britain c. 1907 which assisted member firms in recruiting employees: Reynolds, *British immigrant*, pp. 36–8. Around the turn of the century, skilled workers were recruited in England to work in the Sydney, Nova Scotia, steel mills: Crawley, 'Class conflict'. Cases of firms importing skilled workers from Britain are noted by Heron, 'Factory workers', fn. 113.

³⁵ Erickson, *Leaving England*, pp. 181–4.

advantages put well to the front, I have never found the opposite fairly stated. I am afraid we think more of 'our colonies' than of our countrymen.³⁶

More typically, Canada's strengths were stressed:

the Dominion of Canada has, in my opinion, been vastly *underrated*. In the first place, that which is most dear to the working man (whoever or wherever he be) viz., 'freedom, fraternity, equality', is secured to him in Canada; his labour is appreciated, and the results of sobriety, diligence, and hard work invariably flow into his own pockets rather than into those of others. . . . it is known that the greatest advantages are here offered to capitalists or labourers of the agricultural class; but skilled mechanics are required, and they can command good prices for their hire.³⁷

While encouraging migrants to choose Canada, some commentators acknowledged the strains imposed by the climate:

The country was good for the industrious man, and bad for the 'shirk' or the drinker. The winter is cold, and long and hard, and a great deal of work is stopped in consequence; but, on the other hand, there is a great deal more work going on in the winter than strangers imagine. . . . it is very rough hard labour, clearing streets and tramways of snow, etc., and digging sewers, and the exposure to the cold is trying. . . . If they are thrifty, and their wives careful managers, enough may be saved in summer to enable them to do very little in the winter months. Living, all round, is decidedly cheaper in Montreal than in London, when the emigrant's wife has learned the ways of the country.³⁸

The advantages of remaining in the empire and the drawbacks of living in the United States were painted most starkly in a manual aimed at reasonably prosperous intending emigrants:

In the Dominion, the British settler will have the advantages of living under his own flag, and amongst his own countrymen. Law and order prevail everywhere, and he will enjoy a sense of security, both of life and property, which he may fail to realise in some parts of the United States, where respect for the law is only nominal, men's passions unrestrained, and acts of violence of frequent occurrence. In many of the States he will have to renounce his allegiance in order to purchase and hold property. He will find the judicature of the country, in many instances, in the hands of most unworthy persons elected from the dregs of society by political party influence; and malfeasance in office is of frequent occurrence.³⁹

Although the Canadian government constantly stressed Canada's need for agriculturalists, the authors of most of these guides warned their countrymen that life on a Canadian farm was difficult, although eventually rewarding for those with adequate preparation and resources. An urban worker could not become a capable farm labourer immediately, and only men with capital could expect to establish a farm soon after arrival.

³⁶ MacLeod, *Practical guide*, pp. 31–2.

³⁷ Jones, *Emigrants' guide*, p. 4.

³⁸ Paterson, 'Canadian immigrants', pp. 401–2.

³⁹ Anon., *British colonist*, p. 2.

Where possibilities of work in rural areas for the new arrival were mentioned, the emphasis was often on railway work and lumbering. Men coming from Britain would have to learn how to farm in Canada before they could succeed as either farm labourers or farmers.

Intending farmers with adequate capital, agricultural labourers, the young man 'who has no special knowledge, but who is ambitious, hard-working, and ready to turn his hand to anything which comes his way', and mechanics were encouraged to go to Canada.⁴⁰ Clerical workers, however, were not called for.⁴¹ This seems to have been a general feature of the North American labour market. Berthoff reports that British-trained clerks in the US were considered to be at a disadvantage relative to those who had learned the business in that country.⁴²

Whether or not intending emigrants read or believed the published statements, Canada was receiving a mainly positive press in the later nineteenth century as a destination for UK emigrants. It was not necessarily better than the United States, but the Dominion's many attractions were stressed. Canada was not portrayed as the poor relation, suitable only for those unable to cope with life in the US.

IV

Samples of individual records from the Canadian and US censuses for the early twentieth century are now available. They are used here to compare the characteristics of UK immigrants living in the two countries, something previously prevented by the limitations of the published census volumes. For the US, there is a public use sample for the 1900 census, but unfortunately its sampling density is only 1 in 750.⁴³ For Canada, Green and MacKinnon have completed urban samples for Montreal, Toronto, Winnipeg, and Halifax from the 1901 manuscript census.⁴⁴ The Montreal and Toronto samples are about 8 per cent of each city's population; the Winnipeg and Halifax samples are roughly 15 per cent. The census questions asked in the two countries are very similar. For the US sample, this article uses only observations from urban areas (defined as those with population greater than 25,000) in the northern and eastern states, in an attempt to make the areas studied in the two countries as comparable as possible.⁴⁵ Because of the much higher sampling density for the Canadian census, as well as the higher proportion

⁴⁰ Prior, 'Emigrants for Canada', p. 188.

⁴¹ Jones, *Emigrants' guide*, p. 10; Prior, 'Emigrants for Canada', p. 189.

⁴² Berthoff, *British immigrants*, p. 120.

⁴³ This is the Integrated Public Use Manuscript Sample, usually referred to as IPUMS. A 1% sample is now being compiled, and should be made available in the next few years: Sobek and Ruggles, 'IPUMS project', pp. 102–3.

⁴⁴ Vancouver is the final city in this dataset. For more information on the sampling procedure, see Green and MacKinnon 'Slow assimilation'. Data on other cities are available from the nationwide 5% sample prepared by the University of Victoria Canadian families project: Sager, 'Canadian families project'.

⁴⁵ The states included are Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin.

of UK immigrants in the sampled cities, the Canadian sample of UK immigrants is much larger than the US sample.

We have chosen to study immigrants in cities because that is where they were concentrated. The 1901 census of Canada defined an urban area as any incorporated place, and published tabulations are for electoral districts. An electoral district (which in the central and eastern provinces was usually a county) could be mainly rural, or mainly or entirely urban. In almost all cases, the mainly urban districts consisted of one major town or city plus some outlying regions. Setting 60 per cent of the electoral district population in 'urban' areas as the lower bound for our definition of urban Canada in 1901, we find 36 per cent of UK immigrants living in the mainly urban electoral districts, but only 20 per cent of all other residents of Canada doing so.⁴⁶ Another 6 per cent of the immigrants lived in very recently settled areas with rapidly developing mining industries (in northern Ontario, British Columbia, and the Yukon). Only 20 per cent of the UK immigrants lived in electoral districts that were at most 20 per cent urban, while 36 per cent of other Canadian residents were in these districts. UK immigrants were definitely clustered much more heavily in the largest cities than were others living in Canada. Many of the UK immigrants in the electoral districts that were 20–60 per cent urban were living in medium-sized towns and cities with populations of 9,000 to 12,000—places such as Windsor, Guelph, St Thomas, and Stratford (all in Ontario). The typical UK immigrant in Canada lived in a town, and was not a farmer. Half of the UK immigrants in the US 1900 sample lived in the cities in northern and eastern states; 85 per cent were in the sampled states.⁴⁷

McInnis partially answers the question 'who would want to move to Canada in the late nineteenth century?' by arguing that the official immigration statistics massively overestimate immigration in the 1870s and 1880s. He characterizes Canada in the late nineteenth century as 'purely and simply a country of emigration'.⁴⁸ Our sample shows that this was not true for Canada's larger cities. The proportion of immigrants was far higher in the male, anglophone, urban, working-age population than in the Canadian population as a whole. In 1901, as table 1 shows, about 30 per cent of the anglophone men at work had been born in the UK.⁴⁹ For every two native-born anglophone male workers, there was almost one UK immigrant worker. Despite the Canadian government's emphasis on bringing in workers for the agricultural sector, large

⁴⁶ In addition to the cities we have sampled, Quebec City, Ottawa, Hamilton, St John, London, Victoria, Kingston, Brantford, Sherbrooke, Peterborough, and Belleville were in electoral districts with 60 per cent or more of the population in urban areas: 1901 census, vol. 1, tab. 4, pp. 18–21, tab. 5, p. 22, and tab. 14, pp. 418–46.

⁴⁷ In all, 24% of white residents of the US not born in the UK lived in the sampled cities, and 69% lived somewhere in the sampled states.

⁴⁸ McInnis, 'Immigration and emigration', p. 155.

⁴⁹ With few exceptions, native-born non-francophones in 1901 had English as their mother tongue. We concentrate on anglophones, as they would have been close substitutes for immigrants from the UK.

Table 1. *Arrival cohorts of male immigrants working in urban areas, 1900/1901*

<i>Canada 1901</i> <i>Arrival cohorts,</i> <i>% distribution^a</i>	<i>British</i> <i>immigrants</i> <i>(1)</i>	<i>Irish</i> <i>immigrants</i> <i>(2)</i>	<i>Irish RC</i> <i>(3)</i>	<i>Irish non-RC</i> <i>(4)</i>
to 1870	19	27	31	23
1871–5	12	11	8	13
1876–80	9	8	8	7
1881–5	22	26	29	24
1886–90	22	18	13	22
1891–5	10	4	4	4
1896–1901	6	6	7	5
Total observations	1,606	445	216	229
Ratio of immigrants to non-francophone native-born	0.37	0.10		
<i>US 1900</i>				
<i>Arrival cohorts,</i> <i>% distribution</i>				
to 1870	26	26		
1871–5	11	9		
1876–80	10	12		
1881–5	22	17		
1886–90	19	19		
1891–5	8	11		
1896–1900	3	5		
Total observations	273	439		
Ratio of immigrants to native-born	0.08	0.12		

Notes: Totals are rounded and may not add to 100.

a includes only observations for men aged 16–65 reporting a legible occupation. 68 British-born, and 30 Irish-born, men did not report year of immigration to Canada. These 98 immigrants are excluded from the distribution of arrival cohorts, but are part of the reported immigrant population ratios.

Sources: For Canada, the Green and MacKinnon 1901 census sample. For the US, the 1900 IPUMS census sample. See text for further details.

concentrations of immigrants were clustered in the biggest cities. Three-quarters of the immigrant workers had arrived in Canada since 1870.

Among the UK immigrant population as a whole, the proportion of UK-born men at work who had been born in Ireland was far higher in the northern US cities than in Canada. The timing of the immigrant inflows to the two countries was broadly similar. In Canada, a substantial group of the Irish Roman Catholic immigrants had arrived as children or teenagers during or just after the Great Famine.⁵⁰ In urban areas in both countries at the turn of the century, the bulge in immigration rates which had taken place in the 1880s was still evident. In neither country did post-1890 immigrants form a substantial share of the total, but rather more recent Irish immigrants were living in the US, and rather more recent British immigrants were living in Canada.

⁵⁰ See tabs. 1, 6.

V

Most of the immigrants who appear in the turn of the century census samples had come to North America in the 1870s and 1880s, and they would likely have been most willing to relocate in their first few years after arrival. Ideally, we would compare occupational earnings of UK immigrants and of the native-born in the two countries in those years. However, Canadian data on wages, and more so on earnings, are at best patchy before 1900. For 1884, US consuls reported daily or weekly occupational wage rates in several Canadian cities. For Halifax, Montreal, and Toronto, reported daily and weekly rates for construction workers, labourers, and domestic servants match up quite closely with reported annual earnings for 1901, assuming that the typical construction worker or labourer was employed for 40 to 45 weeks and servants for the full year.⁵¹ The rapid settlement of the Canadian prairies after 1896 had a marked positive impact on Canadian economic development. As well as raising relative GDP per caput, the ‘wheat boom’ may have altered occupational earnings, for example as a result of a sharp increase in the demand for construction, manufacturing, and railway workers.⁵² However, the wheat boom had barely begun in 1901. Thus we argue that 1901 earnings patterns were close to the situation of the previous 20 years, but perhaps a less good approximation for conditions over the next decade.

As discussed in section I, occupational earnings in Canadian cities should have been far lower than those in US cities if native-born Canadians and UK immigrants placed a substantial premium on living in the British empire. Were earnings in Canadian cities typically 30 per cent or more below those in US cities, as figures for GDP per caput lead us to expect? Table 2 (columns (1) and (5)) lists median annual earnings in Canada and the United States for white men aged 16 to 65 who reported positive earnings and who could be identified as working in one of seven broad occupational groups in 1900 or 1901. (Those who were not at work, and those who were at work, but whose occupation is illegible or not stated, are excluded.) While US earnings were higher, these differences are far less than 30 to 40 per cent.

The Canadian census asked only employees to report total annual earnings. Some non-employees also responded, and their answers are included here. Francophone men, and all workers living in St Boniface (a mainly francophone town just outside Winnipeg), have been excluded because UK immigrants were more likely to be substitutes for anglophone

⁵¹ Daily average wages paid to construction workers employed by the Dominion government in Ontario have also been calculated. These are similar to the rates the US consuls report for the same occupations in Ontario in 1884, and are virtually constant from 1889 (the first available year) to 1900. Assuming that construction workers were employed for 240 days per year at these rates yields annual earnings for labourers and carpenters very close to the medians shown in table 3: *Historical Statistics of Canada*, D472, 474, 480, 482; US Consular Reports, *Labor in America*, pp. 35–107.

⁵² According to Maddison, *Dynamic forces*, GDP per caput rose from 61% of the US level in 1890 to 74% in 1913. The number of steam railway employees more than trebled between 1901 and 1911, and the number of manufacturing workers rose by over 75%: *Fifth Census of Canada*, vol. VI, pp. 2–9.

than for francophone Canadians. Average earnings of francophones, especially unilingual francophones, were lower than those of anglophones.⁵³ Sample observations are weighted to reflect the greater sampling density in Halifax and Winnipeg.

The 1940 United States census occupational classification has been used to construct the occupational categories for both the Canadian and US samples. In the 1940 US census, workers were asked to state their occupation and their industry, as well as their employment status, and the US occupational classifications were developed assuming that all this information was given.⁵⁴ In certain cases, a worker in a given occupation could be assigned to two different classifications, depending on where he worked. For example, some jobs if performed in a factory (presumably with machinery) were held to be less skilled than if they were performed elsewhere (presumably mainly by hand). Generally, workers who ran their own business (especially if they were employers) were classed as proprietors.

The Canadian census of 1901 asked for occupation, but not for industry, although some respondents did indicate their place of work (e.g. CPR engineer) or industry (e.g. steam railway engineer). Workers in factory trades (e.g. shoemakers) were supposed to say whether they worked at home or in a factory, but this column was often not filled in. Some enumerators entered other locations of work (such as shop, office, or railway) in this column. The census also asked whether workers were employees, employers, or worked on their own account. The 1900 US sample does not include information about self-employment or industry, so that the assignment of US workers to a 1940 occupational group is less refined than the assignment of Canadian workers. In the US sample, all workers have been placed in the occupational group most common for the same occupation in Canada.⁵⁵

Most proprietors were shopkeepers or hotel owners. Managers are also classed with proprietors. Clerical workers include workers in both offices and stores, and most operatives are factory workers. Service is an amalgam of three categories—workers in domestic service, other service (such as waiters and shoe shine boys), and protective service (mainly policemen and soldiers). The labourer category includes most teamsters and carters.

The United States census did not ask for information on earnings until 1940. Thus census information on the earnings of immigrants and the native-born is not available. Many researchers have attempted to use other contemporary sources of information on earnings to infer average earnings by occupation. Chief among these are studies by the US Commissioner of Labor, State Labor Bureaus, US Census of Manufacturing data, and scattered payroll data collected from archival sources. The most recent of these estimates have been used to generate the averages given

⁵³ MacKinnon, 'Unilingues ou bilingues?'.
⁵⁴ Edwards, *Alphabetical index*.

⁵⁵ For example, most carpenters in Canada were craft workers; all carpenters in the US have been placed in the craft group.

Table 2. *Annual earnings of male workers by occupation group, 1900/1901*

Occupational group	Canadian cities				US cities ^a		US/Canada		
	Median, all	Mean ln (earnings), all	Median, UK-born	Mean ln (earnings), UK-born, with average characteristics	Median	Mean ln (earnings)	Col. (6) – col. (2)	US-Canada with US characteristics	US-Canada with US characteristics and price adjusted
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Proprietor or manager	\$1,000	6.85	\$1,000	6.45	\$1,157	6.96	0.11	0.13	0.12
<i>s.e.</i>		0.73				0.25			
N	410		89		579				
Professional	\$790	6.62	\$850	6.35	\$867	6.79	0.17	0.08	0.08
<i>s.e.</i>		0.79				0.47			
N	254		42		259				
Clerical	\$520	6.20	\$600	6.17	\$662	6.44	0.24	0.21	0.20
<i>s.e.</i>		0.64				0.32			
N	1,626		365		1,042				
Craft	\$500	6.16	\$520	6.20	\$584	6.31	0.15	0.13	0.11
<i>s.e.</i>		0.51				0.28			
N	1,688		537		1,617				
Operative	\$400	5.91	\$451	5.89	\$473	6.10	0.19	0.10	0.06
<i>s.e.</i>		0.58				0.35			
N	912		231		1,191				
Service	\$450 ^b	6.02	\$450	6.01	\$465	6.17	0.15	0.17	0.14
<i>s.e.</i>		0.46				0.28			
N	253		110		362				
Labourer	\$350	5.77	\$360	5.79	\$390	5.91	0.14	0.15	0.14
<i>s.e.</i>		0.45				0.38			
N	1,049		374		1,131				

Notes: ^a US earnings given in 1890 \$. Can\$1 = US\$1.

^b Earnings figures are for servants not living with their employer. US earnings estimates for service workers make imputations for in-kind payments to live-in workers (Lebergott, 'Manpower', p. 504), while the Canadian census asked about cash earnings only.

Sources: as tab. 1.

in columns (5) and (6) of table 2. Occupational incomes are constructed by matching reported occupation for each worker in the 1900 US sample with average annual income by occupation calculated by Sobek and by Preston and Haines, and then adjusting for months of work reported by the worker.⁵⁶ Sobek's list of occupational incomes is shown in 1890 dollars. Missing occupations were taken from Preston and Haines, after converting these into 1890 US dollars.⁵⁷ The Canadian and American currencies were of equal value in this period, such that Can\$1 = US\$1. The mean and median earnings for each occupational group in the US reflect only the number of workers in each occupation within the group, not age, birthplace, ethnicity, or location of workers in those groups.⁵⁸

Columns (1) and (5) in table 2 show the median reported earnings of individuals in each occupational group and the number of observations.⁵⁹ The median is shown because the Canadian method of data collection resulted in some large outliers. Columns (2) and (6) list the mean (natural) log earnings and the standard error of this mean. Differences in the means of log earnings show the percentage differences across groups. Column (7) gives the difference in mean log earnings by occupational group.⁶⁰

It is possible that comparing averages based on individual-level responses with assigned occupational incomes helps to generate the results seen in column (7). In the late nineteenth century in the US and Canada, across all occupations, men's earnings by age rose sharply up to the early to mid-twenties, and flattened out thereafter.⁶¹ If there were proportionately fewer young Canadian than US workers in a category, the gap in average earnings would appear to be smaller than it actually was. Birthplace, ability to speak English, and literacy, are also expected to affect earnings. We estimated models explaining log earnings in Canada in each

⁵⁶ Sobek, 'Work, status, and income', pp. 195–9; Preston and Haines, *Fatal years*, pp. 211–20.

⁵⁷ Earnings information from *Historical Statistics of the United States* suggests that the nominal earnings of non-farm workers rose by only 0.8–1.6% between 1890 and 1900 (series D735, D780).

⁵⁸ The US income levels are supposed to reflect average incomes over the country as a whole, but most of the underlying data used to derive the averages come from observations on central and north-eastern states. The raw data were drawn principally from observations on workers in urban areas, and for workers in manufacturing generally from relatively large firms: Sobek, 'Work, status, and income', p. 194.

⁵⁹ Information on annual earnings in North America given in table 2 cannot readily be compared with Routh's information on annual earnings in the UK, much of which is based on weekly earnings for men aged 20 and up, and assumes that 52 weeks are worked per year: Routh, *Occupations and pay*, pp. 86–7; *Earnings and Hours of Labour III* (P.P. 1910, LXXIV) and *VI* (P.P. 1911, LXXXVIII).

⁶⁰ Tables 2 and 3 report mean log income and differences in mean log income, as log-linear functional form is considered to be most appropriate for the underlying income regressions used to adjust for differences in characteristics between the Canadian and US samples. Expressing incomes in logarithmic form also reduces the weight assigned to outlier observations present in the Canadian sample. Some care must be taken in interpretation because the figures in col. (6) are much closer to the log of mean earnings, as the only differences between individuals are those attributed to reported spells of unemployment. An alternative approach, which reduces the impact of outliers but is less appropriate for regression-based characteristic adjustments, is to compare trimmed mean incomes, in which the top and bottom 1% or the top and bottom 10% of income observations are excluded. This alternative approach indicates differences in mean income by occupation or occupational group that are smaller than those reported in col. (7) of tables 2 and 3.

⁶¹ Green and MacKinnon, 'Slow assimilation', pp. 324–5; Hatton, 'Immigrant assimilation puzzle', pp. 40–9.

occupational category using age and polynomials of age (up to the fifth power), and dummies for the non-Canadian-born, ability to speak English, and ability to read and write.⁶² We then calculated the implied average earnings in Canada using the mean characteristics of the US workers in the same category.⁶³ The US-Canada differences using these implied average earnings for Canada are shown in column (8). The changes are modest.⁶⁴

For Canada, but not for the US, the earnings of the UK-born are known. Column (3) of table 2 shows the median earnings of these men. Given that the average immigrant worker was substantially older than the average worker, the median earnings of immigrants were usually higher. We calculated the predicted earnings of UK-born workers assuming that they had the same average age and literacy level as did all Canadian residents. Comparing columns (2) and (4) suggests that except for the best-paid occupations, the UK-born workers had earnings very similar to those of the sample as a whole.

The patterns of earnings across occupational groups were broadly similar in the two countries, and in some of the sectors with fairly large gaps, these are largely explained by differences in personal characteristics (especially age). Only in the clerical sector did a substantial gap remain after adjustment. The average Canadian clerical worker was paid less than the average American, but as will be shown in table 5, the clerical sector was relatively large in Canada, which had not proceeded as far along the path of increased scale of merchandizing and business as had the US.

If living costs in Canadian cities were substantially higher than in US cities, then the gaps in real earnings would have been higher than columns (7) and (8) imply. Inter-state (but urban) and inter-urban US price indices, constructed by Haines, are available for 1890.⁶⁵ There is no good reason to think that relative living costs by city changed dramatically between 1890 and 1900. An inter-urban price index for Canadian cities in 1900 has recently been constructed by Emery and Levitt. Relative price levels in 1900 for Chicago and Toronto have been calculated by Allen.⁶⁶ According to Haines, prices in urban Illinois were below the

⁶² Weighted regressions were used to allow for different sampling densities across cities.

⁶³ We do not know to what extent the characteristics of IPUMS respondents are representative of individuals surveyed in the various wage and earnings sources compiled by Preston and Haines, *Fatal years*, and Sobek, 'Comparability of occupations', for whom personal characteristics are unknown. The IPUMS sample is the only source available that includes personal characteristics for a wide range of occupations, and we believe that it is worth pursuing the adjustments made in tables 2 and 3 to get some idea of how differences in incomes may reflect differences in labour force characteristics between Canada and the US.

⁶⁴ We also calculated mean log earnings for all Canadian workers, including francophones. Adjusted wage gaps were 3 to 5 percentage points higher than the results shown here.

⁶⁵ Haines was able to find adequate housing cost data for 22 states, but direct rental costs for only five cities. However, based on the expenditure patterns of tenants in the 1889/90 US Commissioner of Labor cost of living survey, not quite 14% of the budget went for rent, so that differences in rental costs have little impact in determining the high and low cost US cities and states: Haines, 'State and local consumer price index', p. 105.

⁶⁶ Haines, 'State and local consumer price index'; Emery and Levitt, 'Cost of living'; Allen, 'Real incomes'.

average for US states, so the fact that the international comparison is available only for Chicago and Toronto is more likely to bias our estimate of US living costs downward than upward.⁶⁷ We use Allen's Toronto-Chicago comparison (which sets Toronto prices about 7 per cent below Chicago) to link the Canadian estimates of Emery and Levitt to the US.

The US data assign the same nominal wages by occupation to workers in every city, and thus we have not adjusted these data. We have deflated the Canadian data by the inter-urban price index, so that incomes in Winnipeg and Montreal have been reduced, and those in Toronto and Halifax increased. Column (9) shows the differences between US and Canadian log earnings for each occupational group after assigning American average personal characteristics to the Canadian workers, and adjusting for price differences across Canadian cities. The gaps between American and Canadian log wages generally fall slightly when these adjustments are made.

VI

The findings reported in table 2 are quite different from what would be expected from our understanding of GDP per person in the two countries. This section examines several aspects of the US-Canada earnings comparisons more closely, and draws in other evidence on US earnings to assess the reliability of these estimates.

Each occupational group is composed of many individual occupations (more in Canada than in the US, as the IPUMS does not report as fine a degree of occupational classifications as does the Canadian census). A way of measuring the extent to which it is the differences across countries in occupational distributions within an occupational group, rather than differences in earnings by occupation, that drives our results, is to calculate US average earnings using Canadian average earnings but the US distribution of workers. For US workers in the clerical, craft, operative, service, and labourer groups, performing this exercise lowers mean log earnings, but not to the Canadian level. Thus it appears that workers in the US were somewhat more concentrated in the occupations that paid relatively well in Canada.

For workers in the proprietor and professional groups, however, assigning Canadian earnings raises mean log earnings for the group. Mean and median annual earnings in Canada for some of the major occupations in these groups were higher than the levels reported by Sobek or by Preston and Haines.⁶⁸ We do not know whether the Canadians who reported earnings were unusually well paid (over one-third working in these groups did not report earnings), or whether the US earnings estimates need revision. Sobek laments the paucity of observations on

⁶⁷ In only six states (Delaware, Maryland, Mississippi, Ohio, South Carolina, and West Virginia) were there urban areas which had living costs lower than those in Illinois: Haines, 'State and local consumer price index', p. 99.

⁶⁸ Including physicians, and hotel, saloon, and restaurant keepers.

incomes of managerial and professional workers, and states that ‘the figures still amount to a collection of anecdotes for some occupations’, while Preston and Haines report that their earnings figures for several of these occupations were ‘taken from a similar occupation or group average’.⁶⁹ Detailed examination of the US earnings figures for these types of workers is beyond the scope of this article, but it is doubtful that many proprietors and professionals in Canada earned substantially more than their peers in the United States. However, at most 15 per cent of UK immigrants in either Canada or the US worked in these occupational groups. The vast majority of the UK immigrants were in occupational groups where the US occupational composition was modestly tilted towards the jobs that were well paid in Canada, but where the Canadian annual earnings were lower than the American.

The average earnings of workers in specific major occupations are compared in table 3 to see how close earnings were in identical occupations. As over half the workers in each occupation reported 12 months’ work in 1900, the medians reported in table 3 for the US are the full-year values assigned for each occupation by Sobek (or, in the case of merchants, by Preston and Haines).

Only 40 per cent of the Canadian merchants reported earnings, and only a handful of UK immigrant merchants were among these. Those stating earnings had incomes only modestly lower than the American merchants. Table 2 showed that the largest gap was in earnings for clerical workers. The two largest occupations in the clerical sector were clerks and bookkeepers. As table 3 shows, the gap in wages for clerks was substantial, and most of the gap remains after adjusting for differences in personal characteristics. There were probably far more clerks in the Canadian sample working in small shops and offices than in the US sample, and clerks in small enterprises were not very well paid. Average earnings of bookkeepers, by contrast, were only about 10 per cent greater in the US than in Canada.

Among skilled craft workers, there is some suggestion that those employed mainly in large firms (machinists) were relatively better paid in the US than those employed by small firms (carpenters). Most machinists worked in factories and on railways, while most carpenters were employed on building sites. If the US firms in which machinists worked were more capital intensive than their Canadian counterparts, but carpenters used the same tools on both sides of the border, then this is the outcome we would expect, despite considerable geographic mobility of both carpenters and machinists.

On the basis of evidence presented in tables 2 and 3, there seems little reason to pursue explanations of migration choice based on differential returns to particular occupational skills. Across a wide range of occupations, it appears that workers in US cities typically earned 10 to 15 per cent more than their peers in Canadian cities.

Because of the paucity of US earnings data, it is nearly impossible to

⁶⁹ Sobek, ‘Work, status, and income,’ p. 194; Preston and Haines, *Fatal years*, pp. 213–15, 220.

Table 3. *Annual earnings of male workers for specific occupations, 1900/1901*

Occupation	Canadian cities				US cities ^a		US/Canada		
	Median, all	Mean ln (earnings), all	Median, UK-born	Mean ln (earnings), UK-born, with average characteristics	Median	Mean ln (earnings)	Col. (6) – col. (2)	US-Canada with US characteristics	US-Canada with US characteristics and price adjusted
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Merchant <i>s.e.</i>	\$1,000	6.88 <i>0.70</i>	\$1,000	n/a	\$1,083	6.97 <i>0.05</i>	0.09	0.23	0.24
N	79		8		244				
Clerk <i>s.e.</i>	\$476	6.01 <i>0.61</i>	\$540	6.01	\$583	6.33 <i>0.17</i>	0.32	0.26	0.25
N	804		145		253				
Bookkeeper <i>s.e.</i>	\$600	6.36 <i>0.50</i>	\$600	6.31	\$662	6.44 <i>0.20</i>	0.08	0.09	0.07
N	155		45		133				
Carpenter <i>s.e.</i>	\$500	6.08 <i>0.46</i>	\$520	6.19	\$547	6.17 <i>0.23</i>	0.09	0.08	0.08
N	226		69		212				
Machinist <i>s.e.</i>	\$500	6.17 <i>0.45</i>	\$600	6.17	\$608	6.36 <i>0.20</i>	0.19	0.17	0.16
N	257		77		175				
Labourer <i>s.e.</i>	\$300	5.69 <i>0.45</i>	\$320	5.74	\$390	5.80 <i>0.33</i>	0.11	0.10	0.10
N	689		243		952				

Note: ^a US earnings given in 1890 \$. Can\$1 = US\$1.

Sources: as tab. 1.

Table 4. *Distribution of annual earnings, male heads of family, 1890–1900*

Occupation	Median interval \$	% in position relative to median interval				Sample size
		in median interval	within \$100 of median interval	more than \$100 below median interval	more than \$100 above median interval	
Clerks						
Canada 1901 ^a	600–99	20	27	25	28	180
US 1900 ^b	600–99	23	26	13	27	1,235
Bookkeepers						
Canada 1901 ^a	600–99	23	19	17	41	63
US 1900	800–99	16	38	22	26	128
Carpenters						
Canada 1901 ^a	500–99	23	39	21	17	157
US 1900	600–99	24	41	22	13	1,430
US 1890 ^c	500–99	16	48	25	11	64
Machinists						
Canada 1901 ^a	600–99	30	32	22	15	138
US 1900	700–99	38	35	16	11	1,014
US 1890 ^c	600–99	27	54	22	10	59
Labourers						
Canada 1901 ^a	300–99	41	40	9	10	363
US 1900	400–99	37	42	12	9	2,912
US 1890 ^c	300–99	38	46	9	7	609

Notes: *a* calculated for male household heads, household size at least 2, aged 16 to 65, earnings positive maximum earnings \$1,200, no francophones (median for carpenters, \$500, machinists \$600, labourers \$350)

b includes salesmen, except travelling salesmen

c calculated for household heads with positive earnings, aged 20 to 65 (youngest head is 20) (median for carpenters \$567, machinists \$672, labourers \$378)

Source: US Commissioner of Labor, *Eighteenth Annual Report*.

compare distributions of earnings by occupation. There are two US sources that allow some progress to be made. The US Commissioner of Labor conducted two cost of living surveys, and both included annual earnings data for family heads. The first survey (1888–90) covered workers in seven major manufacturing industries. The second (1900) had a broader coverage of industries and included clerical and professional workers, but did not survey those with incomes above \$1,200. For the earlier survey, the individual returns were printed. For the later, the distribution of earnings by occupation by industry was published in \$100 increments. Table 4 compares the distribution of census earnings (up to \$1,200) of Canadian male, non-francophone, heads of family for the non-proprietor occupations in table 3 with those of the men in the cost of living surveys.

The earnings of blue-collar workers were more tightly centred around the median than were those of white-collar workers. The Canadian census shows that a small proportion of clerks and bookkeepers earned more than \$1,200, so it is likely that the US cost of living survey missed some of the best-paid men in those occupations. Overall, it appears that the

distributions of earnings were fairly similar in the two countries. There is no pronounced upper tail in the US figures that would signify the possibility of much higher earnings for a small fraction of workers.

Average earnings in selected major occupations, as well as in occupational groups, were only modestly lower in Canadian than in US cities, and, adjusting for age, the UK immigrants in these occupations earned roughly the same incomes as the Canadian born. Thus UK emigrants did not have strong financial reasons to avoid Canadian cities.

VII

Average urban Canadian earnings, by occupational group, were only modestly lower than American, and relative earnings by occupational group were similar in the two countries. This evidence weighs strongly against the compensating differential view of UK migration. However, if British immigrants in Canada were much less likely to be working in the better-paid sectors than were immigrants in the US, this could also be an effect of a strong preference for remaining within the empire, or of the payment of passage for indigent migrants to Canada but not to the US. If Irish Roman Catholic immigrants in Canada were relatively highly clustered in better-paid occupations with higher social status, this could be seen as compensation for remaining a British subject.

Table 5 lists the occupational distribution of immigrants and of the native-born in the Canadian 1901 census sample and United States 1900 census sample. The sample includes only the native-born (in Canada, the non-francophone native-born) plus immigrants from Britain and Ireland, and also unlike the sample used for tables 2 and 3, it includes Canadian workers who reported an occupation but did not state their annual earnings.⁷⁰

The first column of table 5 lists the proportions of native-born men in each of the seven occupational groups. The second summarizes the same information for native-born male workers over the age of 30. There were few UK immigrants under 30 in North American cities (see table 6), so for some purposes comparing the native-born over age 30 with the UK immigrants is more reasonable. The third column shows the characteristics of British-born male workers. 'British' includes men who were English, Scottish, or Welsh, and the small number born in the Channel Islands and the Isle of Man. The fourth column lists the same information for Irish-born individuals, and the fifth and sixth separate the Irish Roman Catholics from all other Irish immigrants (virtually all of these were Protestant). The British and Irish immigrants are also subdivided into those arriving before and those arriving after 1880 (columns (7) to (10)). As the US census did not ask for religion, the

⁷⁰ In both countries, the native-born were overwhelmingly of north and west European ethnic origin, and spoke English. In the US in 1900, only 1.5% of native-born workers were children of 'new' immigrants. Of the native-born workers in the US, 99.9% reported that they spoke English, although this was not necessarily their mother tongue.

Table 5. Occupational distributions for native-born and immigrant male workers

Occupational group, % distribution	Native born	Native born aged 30+	British immigrants	Irish immigrants	Irish RC	Irish non-RC	British pre-1881	British post-1881	Irish pre-1881	Irish post-1881
Canada 1901	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Proprietor	10	16	10†	11†	11†	11†	13*	6*†	15*	7†
Professional	6	7	3*†	2*†	3*†	2*†	3*†	3*†	3†	2*†
Clerical	28	22	19*†	13*†	6*†	18*	17*†	20*	12*†	14*†
Craft	25	28	31*†	20*†	18*†	22	34*†	30*	19†	20†
Operative	16	10	14†	12	12	12	13	15†	10*	14
Service	4	4	6*†	10*†	9*†	12*†	7*†	6*†	12*†	9*†
Labourer	12	13	17*†	32*†	42*†	23*†	13	19*†	29*†	35*†
United States 1900										
Proprietor	10	15	8†	5*†			9	7†	6†	3*†
Professional	5	5	5	1*†			7	4	1*†	0*†
Clerical	22	18	13*	10*†			12*	13*	11*†	9*†
Craft	25	27	35*†	22†			33*	37*†	20	23
Operative	18	16	22†	17			19	24†	14	19
Service	5	6	6	8*†			6	6	8	9*
Labourer	14	13	11	38*			14	9	39*†	37*†

Notes: Occupational distributions are rounded and may not add to 100. Men without a legible occupation, men not in the labour force, and farmers and farm labourers are excluded.

*significantly different from native-born men, at 5% level

†significantly different from native-born men aged over 30, at 5% level

Sources: as tab. 1.

Irish in the US cannot be divided into Roman Catholics and Protestants. However, far more Irish immigrants to the US were Roman Catholic than was the case in Canada.⁷¹

We tested whether the estimated proportions of workers in each occupational category, by immigrant group, were equal to the proportions for the native-born, and for the native-born over age 30. Table 5 indicates where the data reject the hypothesis of equality, at the 5 per cent level of significance.

Columns (3) and (4) of table 5 show that the occupational composition of immigrants was quite different from that of the native-born in both countries. There were fewer immigrants in white-collar jobs (the first three categories in table 5), and many more in blue-collar jobs. British immigrants in both countries were concentrated in the skilled blue-collar (craft) jobs, while the Irish in both countries were concentrated in the labourer group. Green and MacKinnon have noted the low level of UK immigrants in white-collar jobs in Canadian cities.⁷² This was not a purely Canadian phenomenon. UK immigrants may more often have had low levels of formal education, and immigrants may not have been thought suitable for positions of trust. Stories about a persistent failure to train local boys and a preference, or need, to hire skilled British immigrants instead, are consistent with the patterns shown in table 5, and apply in both countries.⁷³

Table 5 does not offer much support for the suggestion that the British immigrants with the most marketable talents headed for the US. Almost 40 per cent of the British immigrants were labourers, operatives, or in service occupations in the US. More of the low-skilled British in Canada were labourers than operatives, presumably reflecting in part the relative scarcity of factory jobs. This would have somewhat increased the gap in earnings between the typical lower-skilled British worker in the US and in Canada.

In Canada, Irish Protestants had a more socially prestigious occupational distribution than Irish Catholics. Most Irish Roman Catholics in Canada, and the Irish in the US (most of whom are likely to have been Roman Catholic), were stuck at the very bottom of the occupational ladder. However, in Canada, there was a small group of Irish Roman Catholic proprietors, most of whom owned taverns or hotels.⁷⁴ If Irish immigrants had the idea that they could get ahead far more easily in a

⁷¹ In the later nineteenth century, most emigrants to Canada from Ireland came from the nine counties of Ulster. In 1871, only 49% of the population of Ulster was Roman Catholic, compared with at least 85% for the three other Irish provinces. Fitzpatrick's correlation of emigration rates by county with the proportion of the 1881 population that was Roman Catholic shows strong positive relationships for emigration to the US, and negative rates for emigration to Canada: Vaughan and Fitzpatrick, *Irish historical statistics*, p. 56; Fitzpatrick, 'Irish emigration', pp. 130, 138.

⁷² A.G. Green and M. MacKinnon, 'The assimilation of young English-speaking immigrants in Canada at the turn of the century' (mimeo, 2000).

⁷³ Canada, Royal Commission on Industrial Training, *Report*, Part IV, p. 2088.

⁷⁴ Our evidence is not consistent with Akenson's claim that the economic status of overseas Irish Roman Catholics was only modestly lower than that of Irish Protestants: Akenson, *Small differences*, pp. 94–7.

republic than in a dominion, the evidence of table 5 does not support their belief. Nor does it suggest that many were prepared to stay in Canada only if they could obtain a well-paid job.

UK immigrants who had been in North America for over 20 years (columns (7) and (9)) had probably climbed the occupational ladder as far as they ever would. In 1900/1, the British who had arrived by 1880 had occupational distributions more like those of the native-born over 30 (although the small sample size for the US limits our ability to distinguish differences). Many of the long-settled Irish, however, were still at the bottom of the income scale.

Erickson stresses the increase in the emigration of unskilled labourers as a factor in explaining the upsurge of emigration to the US in the 1880s.⁷⁵ However, either these migrants were no longer working in northern cities by 1900, or else they had worked their way up the occupational ladder. In Canada, by contrast, there was a concentration of unskilled, fairly recent, British workers in the large cities.⁷⁶ Whether this reflects Canadian immigration policy, or a slower-growing Canadian economy, is unknown. Although the regional composition of Irish immigrants changed in the later nineteenth century, no clear impact of such shifts on occupational outcomes of immigrants is evident here.⁷⁷

Table 6 shows age distributions, proportion literate, proportion living in a family with some property ownership, the average population of the cities (in thousands) in which the men resided, and (for Canada) the proportion of Roman Catholics for each group. These personal characteristics help to explain some of the patterns observed in table 5. Self-assessed capacity to read and write is a minimal definition of formal education, but it is the only measure recorded in the 1900 and 1901 censuses. Even by this standard, Irish immigrants were less educated than British immigrants or the native-born, and the Roman Catholic Irish in Canada were less literate than the Protestant Irish.

The low proportions of post-1890 immigrants seen in table 1 are reflected in the high average ages of immigrants in table 6. In keeping with the broadly similar timing of years of arrival in the two countries, the age distributions of the immigrant men were about the same. Immigrants normally crossed the ocean as youths, but at the turn of the century, the typical immigrant in the urban Canadian or northern US labour market was much older than the typical native-born worker. Examination of the impact of the different age distributions is beyond the scope of this article, but we suspect that they may have had a substantial impact on workplace relations and willingness to join institutions such as trade

⁷⁵ Erickson, *Leaving England*, p. 111.

⁷⁶ This evidence on occupational composition of immigrant workers by immigration cohort may explain differences in estimated assimilation rates in Canada and the US: Green and MacKinnon, 'Slow assimilation'; Hatton, 'Immigrant assimilation puzzle'; Minns, 'Income, cohort effects'.

⁷⁷ The Irish moving to the US in the 1880s and 1890s were drawn to a greater degree from the poorest parts of the country, while in our sample rather more of the Irish arriving in Canada after 1880 were Protestants, presumably from Ulster: Ó Gráda, 'Irish emigration', pp. 94–5; Akenson, *Small differences*, pp. 104–5.

Table 6. *Demographic and personal characteristics of native-born and immigrant male workers*

<i>Personal characteristics</i>	<i>Native born</i>	<i>Native born aged 30+</i>	<i>British immigrants</i>	<i>Irish immigrants</i>	<i>Irish RC</i>	<i>Irish non-RC</i>	<i>British pre-1881</i>	<i>British post-1881</i>	<i>Irish pre-1881</i>	<i>Irish post-1881</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Canada 1901										
Mean age	31.5	41.2	39.2*†	42.1*	43.7*†	40.7*	46.4*†	34.5*†	50.0*†	35.7*†
% aged 16–29	51	0	25*†	20*†	17*†	23*†	7*†	36*†	4*†	33*†
% aged 50–64	9	18	24*†	30*†	34*†	27*†	42*†	11*†	53*†	12*†
% literate	98	98	99†	94*	89*†	98	99	99	95*†	93*†
% owner occupiers	28	31	26†	27	19*†	34	31	23*†	34	22*†
Mean city size ('000)	209	208	212†	228*†	247*†	211	213	214	234*†	225*†
% Roman Catholic	23	23	5*†	47*†	100*†	0*	5*†	5*†	49*†	46*†
Observations	4,338	2,138	1,606	445	216	229	577	961	185	230
United States 1900										
Mean age	32.5	41.0	39.3*†	40.0*			45.9*†	33.5†	47.9*†	32.9†
% aged 16–29	47	0	21*†	21*†			5*†	35*†	3*†	37*†
% aged 50–64	9	18	21*	21*†			36*†	6†	41*†	4*†
% literate	99	99	99	94*†			99	98	93*†	95*†
% owner occupiers	25	25	21	20*†			26	15*†	28	13*†
Mean city size ('000)	1,024	951	1,137†	1,547*†			1,151	1,124	1,466*†	1,618*†
Observations	3,637	1,946	273	439			129	144	207	232

Notes: For Canada, calculated for white men with a legible occupation, aged 16–65, not a farmer or farm labourer, not francophone, not in St Boniface, weighted by sample size for each city. For the US, calculated for white men aged 16–65 with an occupation, not a farmer or farm labourer, living in an urban area with a population of at least 25,000

*significantly different from distribution for native-born, at 5% confidence level

†significantly different from distribution for native-born aged 30+, at 5% confidence level

Sources: as tab. 1.

unions. The Irish in Canada were somewhat more likely than the British to be too old for onward migration to the US after 1901 to have been a likely occurrence. Thus one could possibly argue that in effect some Irish immigrants in Canada were trapped there.

Evidence presented in tables 2 and 3 showed that typical workers in urban Canada earned only modestly less than workers in the same kinds of jobs in the US, suggesting that UK immigrants did not have good reason to avoid Canada because they could expect low earnings. Table 5 demonstrated that while all UK immigrants were more heavily concentrated in occupations with lower socio-economic status than the native-born in both countries, occupational outcomes were broadly similar for immigrants whichever country they were in at the time of the census. Table 6 presents one more piece of evidence on immigrant assimilation—the proportion of workers living in a home owned by some member of their family.⁷⁸ Immigrants in both countries were concentrated in the larger cities, but a large Canadian city was only a fraction of the size of a large American city. A larger city is likely to mean a greater range of available jobs, but it also usually means more expensive houses. In the US, 37 per cent of native-born workers in the sample in cities with population below 500,000 lived in their own home while only 23 per cent of those in cities of over 1 million did so. Because they lived in smaller cities, immigrants in Canada were somewhat more likely than those in the US to own, rather than rent, their home. The dream of owning a home may have contributed to a decision to leave the UK, and it seems that this aim was achieved by slightly more of the UK immigrants in Canada than in the US.

VIII

Canadian government policy constantly favoured the immigration of agricultural over industrial workers and immigration agents discouraged urban workers from moving to Canada. Given the concentration of UK-born men at work in Canadian cities at the beginning of the twentieth century, these attempts appear to have been dismal failures.

Earnings data suggest that urban workers in Canada were not much less well-paid, on average, than their peers in the US. UK-born immigrants on both sides of the border had a less skilled occupational distribution than the native-born. Despite the agricultural bias in Canadian immigration policy, and the acceptance of some charity cases by the Canadian authorities, the occupational outcomes of immigrants at the turn of the century were quite similar in the two countries. In both, the British were heavily concentrated in skilled blue-collar jobs, while the Irish were likely to be labourers. Both British and Irish were less likely than the native-

⁷⁸ The definition of this variable is not quite identical in the two censuses. For Canada, in the very small number of cases where some property other than a house (such as farmland) was owned, while the family lived in rented accommodation, we classed the family as owners. For the US, the definition was owner occupation.

born to be in clerical, professional, or managerial positions. It is not clear that the mix of jobs filled by immigrants in Canada was of lower status than that filled by immigrants in the US.

How the inflow of the UK-born to Canadian cities interacted with the outflow of the Canadian-born to the US must, for the present, remain an open question. The Canadian urban labour market was much smaller than was the American. Canadian cities offered a wide range of opportunities, but there may have been few job vacancies at any time either for immigrants or for the Canadian-born. Thus it would be expected, as indeed was the case, that far more immigrants from the UK settled in the US than in Canada.

Given the similarities in earnings by occupation and in occupational distributions in the main cities of the two countries, a large part of the reason for the overall gap in GDP per person must have been a greater extent of rural poverty in Canada. In the 1870s and 1880s, gross value added per worker in Canadian agriculture was at most 70 per cent of the US level.⁷⁹ Lower incomes for urban francophones would also have played a role. Canadian cities grew rapidly after 1880 along with tariff-protected manufacturing. The share of agricultural output in the total of agricultural and manufacturing output dropped from about 60 per cent in 1880 to 50 per cent in 1900.⁸⁰

In light of the evidence presented in this article, there is no need to assume that UK emigrants who chose to live in Canada were deeply committed to British traditions and the British empire. Nor do we need to suppose that immigrants who came to and stayed in Canada were ignorant of opportunities south of the border or lacking in job skills marketable in the United States. Canadian urban labour markets were much smaller than those in the northern US, but UK immigrants in Canada had occupational outcomes similar to those of their peers in the US, and probably only modestly lower annual earnings.

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⁷⁹ McInnis, 'Output and productivity', p. 757.

⁸⁰ Green and Urquhart, 'New estimates', p. 174.

Footnote references

- Akenson, D.H., *Small differences: Irish Catholics and Irish Protestants, 1815–1922. An international perspective* (Kingston and Montreal, 1988).
- Allen, R.C., 'Real incomes in the English-speaking world, 1879–1913', in G. Grantham and M. MacKinnon, eds., *Labour market evolution* (1994), pp. 107–38.
- Anon., *The British colonist in North America: a guide for intending emigrants* (1890).
- Baines, D., *Migration in a mature economy: emigration and internal migration in England and Wales, 1861–1900* (Cambridge, 1985).
- Berthoff, R.T., *British immigrants in industrial America, 1790–1850* (Cambridge, Mass., 1953).
- Crawley, R., 'Class conflict and the establishment of the Sydney steel industry, 1899–1904,' in K. Donovan, ed., *The island: new perspectives on Cape Breton's history, 1713–1990* (Fredericton, NB, 1990), pp. 145–64.
- Dunlevy, J.A. and Gemery, H.A., 'Economic opportunity and the responses of "old" and "new" migrants to the United States', *J. Econ. Hist.*, 38 (1978), pp. 901–17.

- Edwards, A.M., *Alphabetical Index of Occupations and Industries: Occupation and Industry Classifications Based on the Respective Standard Classifications*, 16th Census of the United States (Washington, 1940).
- Emery, J.C.H. and Levitt, C., 'Cost of living, real wages and real incomes in thirteen Canadian cities, 1900–1950', *Can. J. Econ.*, 35 (2002), pp. 115–37.
- Erickson, C., *American industry and the European immigrant, 1860–1885* (New York, 1957).
- Erickson, C., *Leaving England: essays on British emigration in the nineteenth century* (Ithaca, 1994).
- Fitzpatrick, D., 'Irish emigration in the later nineteenth century', *Ir. Hist. Stud.*, 22 (1980–1), pp. 126–41.
- Green, A.G. and Green, D.A., 'Balanced growth and the geographical distribution of European immigrant arrivals to Canada, 1900–1912', *Exp. Econ. Hist.*, 30 (1993), pp. 31–59.
- Green, A.G. and MacKinnon, M., 'The slow assimilation of British immigrants in Canada: evidence from Montreal and Toronto, 1901', *Exp. Econ. Hist.*, 38 (2001), pp. 315–38.
- Green, A.G. and Urquhart, M.C., 'New estimates of output growth in Canada: measurement and interpretation', in D. McCalla and M. Huberman, eds., *Perspectives on Canadian economic history* (Toronto, 1994), pp. 158–75.
- Haines, M., 'A state and local consumer price index for the United States in 1890', *Hist. Methods*, 22 (1989), pp. 97–105.
- Hatton, T.J., 'The immigrant assimilation puzzle in late nineteenth-century America', *J. Econ. Hist.*, 57 (1997), pp. 34–62.
- Hatton, T.J. and Williamson, J.G., *The age of mass migration* (New York, 1998).
- Heron, C., 'Factory workers', in P. Craven, ed., *Labouring lives: work and workers in nineteenth-century Ontario* (Toronto, 1995), pp. 479–594.
- Johnson, J.C., *A history of emigration from the United Kingdom to North America, 1763–1912* (1913).
- Jones, J.J., *The emigrants' guide: being a statement culled from reliable sources, as to the relative merits of the Dominion of Canada, New South Wales, Victoria, South Australia, Queensland, Western Australia, New Zealand, Tasmania, Cape of Good Hope, Natal, United States of America, etc.* (1883?).
- Kelley, N. and Trebilcock, M., *The making of the mosaic: a history of Canadian immigration policy* (Toronto, 1998).
- Lebergott, S., *Manpower in economic growth: the American record since 1800* (New York, 1964).
- McCormack, A.R., 'Networks among British immigrants and accommodation to Canadian society: Winnipeg, 1900–1914', *Histoire Sociale – Social History*, XVII (1984), pp. 357–74.
- McInnis, M., 'Output and productivity in Canadian agriculture, 1870–71 to 1926–27', in S.L. Engerman and R.E. Gallman, eds., *Long-term factors in American economic growth* (Chicago, 1986), pp. 737–70.
- McInnis, M., 'Immigration and emigration: Canada in the late nineteenth century', in T.J. Hatton and J.G. Williamson, eds., *Migration and the international labor market, 1850–1939* (1994), pp. 139–55.
- McInnis, M., 'Canada's population in the twentieth century', in M.R. Haines and R.H. Steckel, eds., *A population history of North America* (New York, 2000), pp. 529–99.
- McInnis, M., 'The economy of Canada in the nineteenth century', in S.L. Engerman and R.E. Gallman, eds., *The Cambridge economic history of the United States*, II (New York, 2000), pp. 57–107.
- McInnis, M., 'La grande émigration canadienne: quelques réflexions exploratoires', *Actualité Économique*, 76 (2000), pp. 113–35.
- McInnis, M., 'The population of Canada in the nineteenth century', in M.R. Haines and R.H. Steckel, eds., *A population history of North America* (New York, 2000), pp. 371–432.
- MacKinnon, M., 'Unilingues ou bilingues? Les Montréalais sur le marché du travail en 1901', *Actualité Économique*, 76 (2000), pp. 137–58.
- MacLeod, M., *Practical guide for emigrants to the United States and Canada* (Manchester, 1870).
- Maddison, A., *Dynamic forces in capitalist development* (New York, 1991).
- Margo, R.A., 'Regional wage gaps and the settlement of the Midwest', *Exp. Econ. Hist.*, 36 (1999), pp. 128–43.
- Miller, K.A., *Emigrants and exiles: Ireland and the Irish exodus to North America* (New York, 1985).
- Minns, C., 'Income, cohort effects, and occupational mobility: a new look at immigration to the United States at the turn of the twentieth century', *Exp. Econ. Hist.*, 37 (2000), pp. 326–50.
- Morton, D. and Weinfield, M., eds., *Who speaks for Canada? Words that shape a country* (Toronto, 1998).
- Norrie, K. and Owsram, D., *A history of the Canadian economy* (Toronto, 1996).
- Ó Gráda, C., 'Irish emigration to the United States in the nineteenth century', in D. Doyle and O. Edwards, eds., *America and Ireland, 1776–1976* (Westport, Conn., 1980), pp. 93–103.
- Parr, G.J., 'The Home Children: British juvenile immigrants to Canada, 1868–1924' (unpub. Ph.D. dissertation, Yale Univ., 1977).
- Parr, J., *Labouring children: British immigrant apprentices to Canada, 1869–1924* (1980).

- Parr, J., *The gender of breadwinners: women, men, and change in two industrial towns 1880–1950* (Toronto, 1990).
- Paterson, A., 'Canadian immigrants', *Nat. Rev.*, 25 (1895), pp. 399–409.
- Pitt & Scott, *Emigrants' Guide for 1883* (1883).
- Preston, S.H. and Haines, M.R., *Fatal years: child mortality in late nineteenth-century America* (Princeton, 1991).
- Prior, E.J., 'Emigrants for Canada', *MacMillan's Mag.*, new ser., II (1907) pp. 185–92.
- Ramirez, B., *On the move: French Canadians and Italian migrants in the North Atlantic economy, 1860–1914* (Toronto, 1991).
- Ramirez, B., *Crossing the 49th parallel* (Ithaca, 2001).
- Reynolds, L.G., *The British immigrant: his social and economic adjustment in Canada* (Toronto, 1935).
- Roby, Y., *Les Franco-Américains de la Nouvelle-Angleterre, 1776–1930* (Sillery, Que., 1990).
- Routh, G., *Occupations and pay in Great Britain, 1906–60* (Cambridge, 1965).
- Ruggles, S. and Sobek, M., *Integrated public use microdata series: version 2.0* (Minneapolis, 1997).
- Sager, E.W., 'The Canadian families project and the 1901 census', *Hist. Methods*, 33 (2000), pp. 179–84.
- Sobek, M., 'The comparability of occupations and the generation of income scores', *Hist. Methods*, 28 (1995) pp. 47–51.
- Sobek, M., 'Work, status, and income: men in the American occupational structure since the late nineteenth century', *Soc. Sci. Hist.*, 20 (1996), pp. 169–99.
- Sobek, M. and Ruggles, S., 'The IPUMS project: an update', *Hist. Methods*, 32 (1999), pp. 102–10.
- Thomas, B., *Migration and economic growth* (Cambridge, 1973).
- Timlin, M., 'Canada's immigration policy, 1896–1910', *Can. J. Econ. & Pol. Sci.*, 26 (1960), pp. 517–32.
- United States Department of Commerce, Bureau of the Census, *Historical statistics of the United States, colonial times to 1970* (Washington, 1975).
- Urquhart, M.C. and Buckley, K.A.H., eds., *Historical statistics of Canada* (Toronto, 1965).
- Vaughan, W.E. and Fitzpatrick, A.J. *Irish historical statistics: population, 1821–1971* (Dublin, 1978).
- Wagner, G., *Children of the empire* (1982).
- Widdis, R.W., *With scarcely a ripple: Anglo-Canadian migration into the United States and western Canada, 1880–1920* (Montreal and Kingston, 1998).
- Williamson, J.G., 'The evolution of global labor markets since 1830: background evidence and hypotheses', *Exp. Econ. Hist.*, 32 (1995), pp. 141–96.

Official publications

- Canada, Department of Agriculture, *Census of Canada, 1890–91*, Vol. 1 (Ottawa, 1893).
- Canada, Department of Agriculture, Census Office. *Fourth Census of Canada 1901*, Vol. 1 (Ottawa, 1902).
- Canada, Department of Trade and Commerce, Census and Statistics Office. *Fifth Census of Canada, 1911*, Vol. VI (Ottawa, 1915).
- Canada, Royal Commission on Industrial Training and Technical Education, *Report of the Commissioners* (Ottawa, 1913).
- Report of an Enquiry by the Board of Trade into the Earnings and Hours of Labour of Workpeople of the United Kingdom, III: Building and Woodworking Trades in 1906* (P.P. 1910, LXXIV).
- Report of an Enquiry by the Board of Trade into the Earnings and Hours of Labour of Workpeople of the United Kingdom, VI: Metal, Engineering and Shipbuilding Trades in 1906* (P.P. 1911, LXXXVIII).
- United States, Consular Reports. *Labor in America, Asia, Africa, Australasia, and Polynesia* (Washington, 1885).
- United States, Commissioner of Labor. *Eighteenth Annual Report of the Commissioner of Labor, 1903. Cost of Living and Retail Prices of Food* (Washington, 1904).
- United States, Department of the Interior, Census Office, *Report on Population of the United States at the Eleventh Census: 1890*, Vol. I, Part I (Washington, 1895).
- United States, Department of Labor. *Cost of Living of Industrial Workers in the United States and Europe, 1888–1890* [Computer File]. 3rd ICPSR ed. Ann Arbor, Mich.: Inter-university Consortium for Political and Social Research [producer and distributor], (1986).