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Demographic Changes in Canada from 1971 to 2001 Across an Urban-to-Rural Gradient

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Symbols

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded.
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements
- E use with caution
- F too unreliable to be published
- d definitive

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Document no. 5: “*A Review of Procedures for Estimating the Net Undercount of Censuses in Canada, the United States, Britain and Australia*” by D. Kerr, 1998, 28 pages.

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by *Éric Caron Malenfant, Anne Milan, Mathieu Charron and Alain Bélanger*

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Demographic Changes in Canada from 1971 to 2001 Across an Urban-to-Rural Gradient

Éric Caron Malenfant, Anne Milan, Mathieu Charron, Alain Bélanger¹

Summary

If low fertility, aging, demographic growth and ethnocultural diversity are phenomena that accurately describe Canada overall, the same patterns may not necessarily hold true for urban and rural areas. The rhythm and sources of demographic growth have often been significantly different from one area to the next, which would suggest that the situation across Canada stems from the aggregation of different demographics, which are variable between types of regions.

The objective of this study is to examine demographic differences between urban and rural areas in Canada by analyzing communities along a gradient ranging from the largest metropolitan regions to the most rural areas. Applying a geographic structure to Census data from 1971 to 2001 that maintains constant borders over time, the authors analyze population growth across eight types of urban and rural regions; as well as the contribution of immigration, fertility and internal migration to growth differentials; and the consequences of these observed demographic differences in terms of aging and ethnocultural diversity.

The study finds that growth is concentrated in the most metropolitan areas in the country and in the rural areas on which they have a strong influence, and diminished as the degree of rurality increases. Internal migration between the different types of areas has largely contributed to this differential growth: the most urbanized areas—with the exception of Montréal, Toronto and Vancouver—underwent significant migratory gains as well as strong growth. This was also the case with the rural regions that had a strong metropolitan influence. The most rural regions experienced a weak demographic growth, in some cases a decline, despite having higher fertility than other regions. The strong growth in the three largest urban areas in Canada—Montréal, Toronto and Vancouver—is largely attributed to the high numbers of international immigrants who decided to settle there. The concentration of newcomers in these regions helped increase the gap between these three areas and the rest of the country in terms of ethnocultural diversity.

1. Demography Division, Statistics Canada.

Introduction

Recent trends in fertility, aging and immigration have not had a uniform impact on the growth and composition of the Canadian population. On the contrary, it would appear that the rhythm and sources of demographic growth have often been significantly different from one area to the next, which would suggest that the situation across Canada stems from the aggregation of different demographics, which are changeable from province to province or from territory to territory, and sometimes even more significantly between urban and rural areas.

Beginning in the post-baby-boom period², fertility fell substantially and has remained below the replacement level for more than 30 years. But fertility continues to show significant variation between regions, with the average number of children per woman remaining above three in Nunavut, while remaining stable at 1.3 in Newfoundland and Labrador for nearly ten years (Statistics Canada, 2006A). We also know that fertility is lower overall in the census metropolitan areas (CMA) than in the rest of the country, even though it varies between CMAs (Statistics Canada, 2003A). To the extent that it plays a significant part in renewing the population and affects the age structure of populations, fertility is a key factor in the growth and dynamics of population aging.

Immigration, which has remained high since the end of the 1980s and has allowed Canada to experience one of the most significant population growths among G-8 countries, is also not uniform across the country. Newcomers are heavily concentrated in the country's most urbanized areas. According to the 2001 Census, 94% of immigrants who came to Canada in the 1990s are living in CMAs, and close to three-quarters (73%) of them live in the Montréal, Toronto and Vancouver CMAs (Statistics Canada, 2003B). According to a recent study, immigrants who arrived in Canada in 2000-2001 most often give presence of family and friends as the explanation for choosing Montréal, Toronto and Vancouver as their place of residence. This is followed by employment opportunities for immigrants who chose Toronto, climate for those who settled in Vancouver and language for the newcomers who selected Montréal (Statistics Canada, 2003C). This uneven distribution of immigration (and, by consequence, of ethnocultural diversity) across Canada is a source of concern to government authorities (Citizenship and Immigration Canada, 2001).

To a large extent, demographic dynamics at the sub-national level are affected by internal migration and differential migration by age. It has been shown that, in general, rural areas with economies that depend on natural resources and with fewer employment opportunities have seen their populations decline as a result of migration to urban areas and other provinces (Beshiri and Bollman, 2001; Moore and Rosenberg, 1997). Internal migration appears to be more significant among young adults than other age groups (Audas and McDonald, 2004; Rothwell, Bollman, Tremblay, and Marshall, 2002; Tremblay, 2001). Pursuing their studies, employment and wanting to experience "city living" are also factors that foster the migration of young people from rural to urban areas.

On the other hand, rural areas that are located within commuting distances from urban employment centres could appear attractive, either because of the lower cost of housing or the quality of life associated with these areas. For instance, Nova Scotia has a strong growth rate in this regard because of the low cost of land, minimum controls on development and the prevalence of a rural culture (Millward, 2005). Areas adjoining the Vancouver and Victoria metropolitan centres are also growing based on the changes affecting their populations (Halseth, 2003). We have also seen retired people moving to rural areas that provide services and infrastructure as well as desirable climates and landscapes.

This document aims to analyze the differences between urban and rural areas that have occurred over Canada's recent demographic history by answering the following three research questions. What have the respective growth patterns been in the different types of urban and rural areas over the past 30 years? How have immigration, fertility and internal migration contributed to differentiating between Canada's urban and rural areas in terms of their demographic growth? What are the consequences of these different population growth patterns with respect to aging and ethnocultural diversity?

In order to answer these questions, we analyzed Census data from 1971, 1981, 1991 and 2001, and applied a typology that classifies place of residence according to a gradient ranging from the largest metropolitan regions to the most rural. In order to allow historical comparisons, the geographic structure was kept constant over time, unless otherwise indicated.

2. The baby boom, a period of high fertility that occurred in most western countries following World War II, took place in Canada between 1946 and 1965.

Section 1 - Methodology

1.1 Urban and rural areas: the geographic gradient used

For some time now, researchers have been trying to understand the differences separating rural and urban areas. Approximately 80 years ago, sociologist Louis Wirth wrote that three characteristics of cities—large populations, cultural diversity and population density—defined what he called “urbanism as a way of life” (Wirth, 1938). The opposite may also be true, which is to say that the combination of a small population, low density and a relatively homogeneous culture, which characterize the rural areas, may lead to a form of “ruralism as a way of life.” Yet, there is actually a whole gradation of cases between these extremes that combine, in varying proportions, urban and rural characteristics. This is partly due to the fact that the urban influence keeps spreading to areas that previously had been exclusively rural (Choay 1994). For Goffette-Nagot and Schmitt (1998), there are two major types of rural space: “traditional rural spaces”, which are relatively autonomous, and “periurban rural spaces”, which surround the urban spaces. The interactions between periurban spaces and urban spaces have increased over the past few years. What was previously limited to commerce in agricultural products and, to a lesser degree, to the rural exodus, is now strongly marked by twice-a-day commutes by people living in rural areas and working in urban areas.

These new realities have encouraged us to move beyond the simple urban-rural dichotomy and to adopt a geographic typology that takes into consideration the continuum between urban and rural areas. In order to achieve this, we applied a geographic gradient to the data³ which, on one hand, classifies metropolitan (or urban, see box below) areas by population size and, on the other hand, classifies non-metropolitan (or rural) areas according to the extent of the metropolitan influence to which it is subjected.

Notes on the terminology used:

In this study, the terms “**metropolitan**” or “**urban**” are used interchangeably to designate areas comprised of census metropolitan areas (CMAs) and census agglomerations (CAs). “**Non-metropolitan**” or “**rural**” will refer to all other regions, that is, those belonging to neither a CMA nor a CA.

In addition, the term “**municipality**” will be used to designate census subdivisions (CSDs).

Urban areas were divided into four types, which were defined according to the census metropolitan area (CMA) and census agglomeration (CA) concepts. CMAs and CAs consist of one or more municipalities concentrated around an urban core. In order to be deemed part of a CMA or CA, a municipality must be strongly integrated into the urban core, in other words, there must be a great deal of commuting between the two areas.⁴ The following types of urban areas were used for this project:

3. In this analysis, 1971, 1981, 1991 and 2001 census sample data (questionnaire 2B) were used. These data do not include institutions starting from 1981. As this population accounts for a very small proportion of the total population, this exclusion does not have any effect on the conclusions.
4. In general, more than 50% of the employed labour force has to work in the urban core or vice versa. Some municipalities that do not meet this criterion may nonetheless be included because of spatial delimitations or historical comparability (2001 Census Dictionary).

- 1) The three CMAs whose populations surpassed 1,100,000 in 2001, i.e., Montréal, Toronto and Vancouver;⁵
- 2) CMAs that had between 500,000 and 1,100,000 inhabitants in 2001, i.e., Québec, Ottawa-Gatineau, Hamilton, Winnipeg, Edmonton and Calgary. We often refer to these types of regions as “large metropolitan or urban areas”;
- 3) CMAs and CAs with 100,000 to 499,999 inhabitants in 2001, i.e., the 18 smaller CMAs as well as larger CAs such as Barrie, Cape Breton, Chatham-Kent, Guelph, Moncton, Peterborough and Kelowna. These are the “medium-sized metropolitan or urban areas”; and
- 4) CAs with 10,000 to 99,999 inhabitants in 2001. There are 106 census agglomerations in this type of metropolitan region, which we will refer to as “small metropolitan or urban areas”.

Rural areas were grouped into four categories based on the concept of census metropolitan area and census agglomeration influenced zone (MIZ). The purpose of the MIZ concept is to classify non-metropolitan areas, that is, municipalities which are not part of a CA or CMA, according to whether they are subjected to a 1) strong; 2) moderate; 3) weak; or 4) no metropolitan influence (McNiven, Puderer and Janes, 2000). The classification is based on commuting volumes. When more than 30% of a non metropolitan municipality’s population works in the urban core of a CMA or a CA, it is categorized as a strong MIZ, whereas when between 5% and 30% do so, it is categorized as a moderate MIZ. Municipalities where this proportion is lower than 5% are categorized as a weak MIZ, and when it has fewer than 40 commuters to CMAs or CAs, it has no MIZ. It should be noted that all of the territories (with the exception of Yellowknife and Whitehorse) are considered as having no MIZ for our purposes.

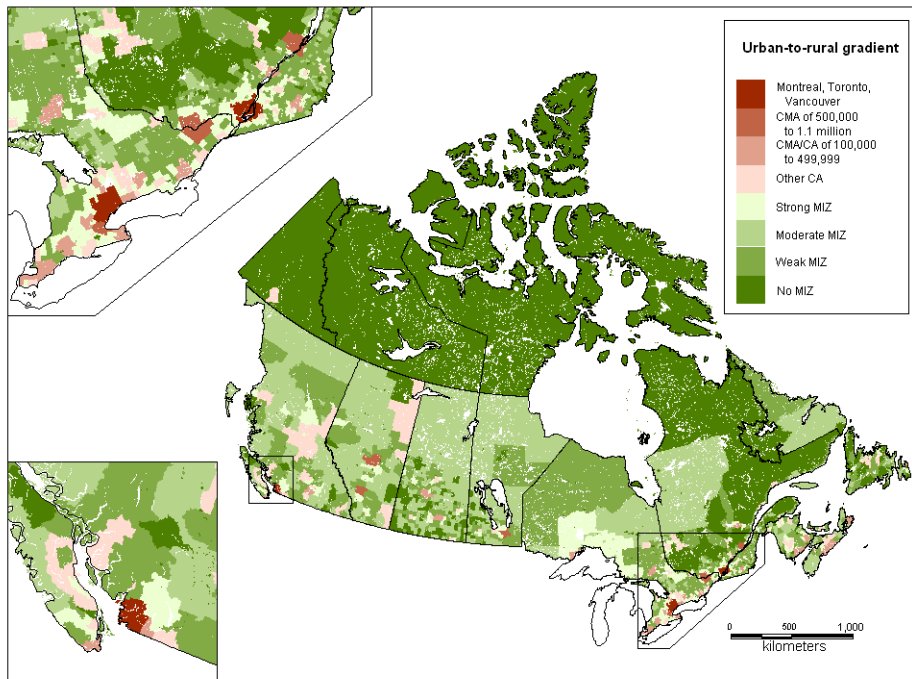


Figure 1.1
Reference map: Urban and rural regions along the gradient, Canada, 2001

Source:
Statistics Canada, 2001 Census.

5. The population thresholds that define the categories are based on 2001 data. For example, Vancouver is classified as a CMA with more than 1.1 million inhabitants for each census year analyzed in this study even though its population was actually less than 1.1 million inhabitants in 1971.

Municipalities differ in size and surface area as the laws that define them vary from province to province or from territory to territory. These differences mean that some more heavily populated and urbanized provinces (like Ontario) have fewer municipalities than others (like Saskatchewan). As well, it would appear that close to 30% of municipalities (1,635 out of 5,600) fall into the no MIZ category and more than 80% are classified as rural (4,605 out of 5,600). Finally, it should be noted that some categories are not represented in certain provinces. For instance, because Prince Edward Island does not have any census agglomerations with more than 100,000 inhabitants, three of the urban categories are not represented there. Also, all municipalities in Nunavut are classified as no MIZ. These differences reflect significant provincial features related to their degree of urbanity/rurality. If we analyze the proportion of the provincial population that is part of each of the eight categories included here (Table 1.1), we see that Newfoundland and Labrador is the most rural province (53% of its population lives in a rural municipality), whereas Ontario is the most urban (87% of its population lives in a metropolitan region).

Table 1.1
Number of municipalities (census subdivisions) and percentage distribution by province, territory and type of region, Canada, 2001

Provinces and territories	Montréal, Toronto, Vancouver	CMA of 500,000 to 1.1 million	CMA/CA of 100,000 to 499,999	Other CA	Strong MIZ	Moderate MIZ	Weak MIZ	No MIZ	Total
Number of municipalities									
Newfoundland and Labrador	...	...	13	19	19	153	73	104	381
Prince Edward Island	...	...	...	24	29	44	12	4	113
Nova Scotia	...	...	7	15	2	19	40	15	98
New Brunswick	...	...	30	27	31	94	65	28	275
Quebec	109	55	35	113	256	525	168	215	1,476
Ontario	24	6	58	55	96	127	90	130	586
Manitoba	...	11	...	8	18	68	104	89	298
Saskatchewan	...	...	41	20	53	198	226	464	1,002
Alberta	...	44	...	44	38	77	120	129	452
British Columbia	39	...	37	155	24	83	118	360	816
Yukon	...	...	...	5	...	...	...	30	35
Northwest Territories	...	...	...	1	...	...	...	36	37
Nunavut	...	...	...	...	...	...	...	31	31
Canada	172	116	221	486	566	1,388	1,016	1,635	5,600
Percentage of the population									
Newfoundland and Labrador	...	...	33.7	12.8	3.5	24.5	20.8	4.8	100.0
Prince Edward Island	...	...	...	54.8	14.1	21.9	8.7	0.5	100.0
Nova Scotia	...	...	51.7	11.7	2.5	10.8	22.9	0.5	100.0
New Brunswick	...	...	33.0	19.3	6.9	19.9	18.6	2.3	100.0
Quebec	47.4	13.0	6.1	11.9	6.1	10.9	3.8	0.7	100.0
Ontario	41.2	12.9	23.9	9.1	6.1	4.3	2.4	0.2	100.0
Manitoba	...	60.0	...	6.6	4.4	10.4	15.0	3.7	100.0
Saskatchewan	...	...	42.8	14.8	2.7	10.3	19.8	9.6	100.0
Alberta	...	63.6	...	11.9	4.5	6.8	12.0	1.2	100.0
British Columbia	50.9	...	15.5	19.9	1.8	4.8	6.1	1.1	100.0
Yukon	...	...	...	74.6	...	...	...	25.4	100.0
Northwest Territories	...	...	...	44.3	...	...	...	55.7	100.0
Nunavut	...	...	...	...	...	...	...	100.0	100.0
Canada	33.7	16.6	16.9	12.3	5.1	7.6	6.6	1.3	100.0

Source:
Statistics Canada, 2001
Census.

1.2 Historical analysis: choice of a constant rather than variable geography

Many of the analyses presented in this document look at the evolution over time of certain demographic characteristics according to the urban/rural typology that we have just presented. These historical analyses are based on a *constant* geographic breakdown according to the geographic structure of the 2001 Census, which was applied to the 1971, 1981 and 1991 censuses. To create this constant geography for the analysis in this study, we adjusted Enumeration Areas for each Census prior to 2001 to correspond to municipal boundaries in 2001. In total, eight geographic regions along the urban-to-rural gradient were based on these reconstituted municipalities.

It should be noted that this approach does not allow us to measure (as would a geography with variable borders that changed from one Census to the next) the phenomenon of urbanization in its entirety because it does not take into consideration the reclassification of certain rural areas into urban areas over time. A significant number of municipalities that had been classified as rural in 1971 have since been classified as urban, thereby contributing to the country's urbanization. Such reclassification can occur:

- 1) When a municipality near an existing metropolitan area merges with it; or,
- 2) When one or more non-metropolitan municipalities grow to the point that they meet the criteria for a new metropolitan area.

This is why the population in urban areas included in the censuses prior to 2001 seems higher when using a constant geography than with a variable geography and that the difference between these two methods becomes more pronounced the more we recalculate over time.

On the other hand, the use of a variable geography would significantly complicate the historical comparisons. With a variable geography, one cannot determine whether the demographic changes observed are attributable to real demographic changes or to the impact of the many geographic reclassifications that occur from one Census to the next. In this study, however, we want to isolate the regions' demographic component from their growth.

This reason is essentially why, in this document, the historical comparisons will use a geography with constant borders rather than one that is variable over time.

Section 2 - Analysis of the findings

2.1 Population growth since 1971

Population size is unevenly distributed among the eight types of areas under study and their distribution clearly reflects the “urban” use of the territory (Figure 2.1). In 2001, 23.6 million people, representing approximately four Canadians out of five, lived in one of the country’s metropolitan areas. The Montréal, Toronto and Vancouver metropolitan areas alone accounted for ten million inhabitants, even though they only make up one thousandth of Canada’s territory. In contrast, the rural areas had a total population of approximately six million people. Regions with no metropolitan influence (no MIZ) and the non-metropolitan areas in the territories were the least populated of all, with less than 400,000 residents, even though they covered more than half of Canada’s territory.

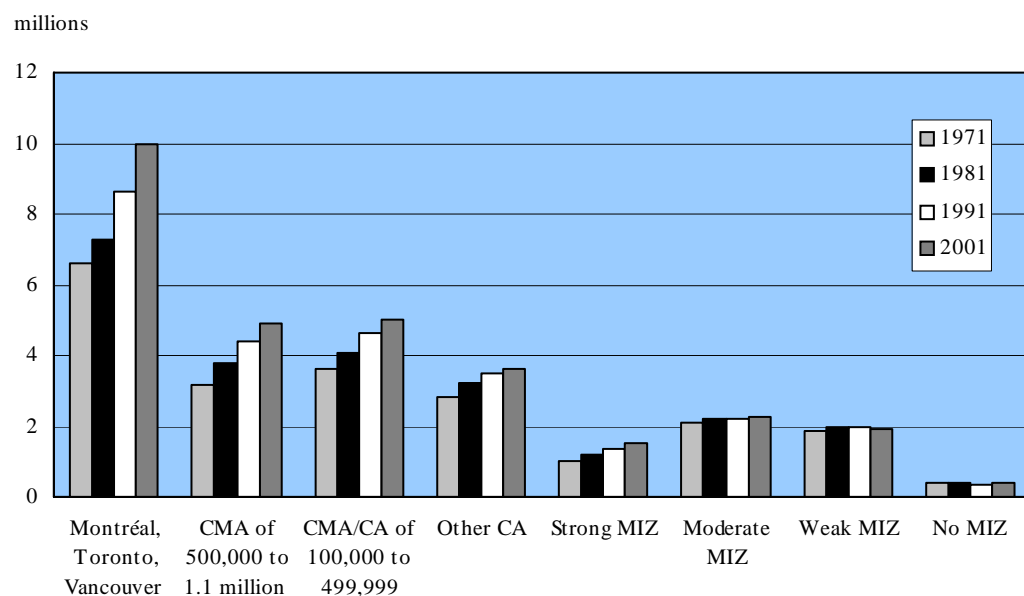


Figure 2.1
Population (in millions)
across an urban-to-
rural gradient, Canada,
1971 to 2001

Sources:
Statistics Canada, 1971,
1981, 1991 and 2001
censuses.

The metropolitan areas also experienced the fastest population growth over the past 30 years (data not shown). Between 1971 and 2001, the population living in a metropolitan area (CMA or CA), as defined in 2001, rose from 16.2 to 23.6 million people, an increase of 45%. In comparison, the population living in a rural area, with 5.4 million inhabitants in 1971, only grew by 13% over these 30 years, resulting in 6.1 million residents in 2001. This differential growth is all the more remarkable because our methodology involves applying a constant geography over time, therefore, it does not take into consideration either the urban growth that stemmed from the gradual expansion of the territories covered by the major cities or the reclassification over time of the rural areas into urban areas.

However, there were significant differences between the rates of population growth for the various types of urban and rural areas identified here, as shown in Figure 2.2. Between the 1971 and 2001 censuses, the areas that had the strongest growth were either the most heavily populated metropolitan areas in the country or the rural areas that were classified in 2001 as having a strong MIZ. With growth rates of 55% and 52%, respectively, during the 30 year period, the six census metropolitan areas with 500,000 to 1.1 million inhabitants in 2001 and Montréal, Toronto and Vancouver were the regions that grew the fastest. In rural strongly influenced metropolitan areas, the population grew by 47% between

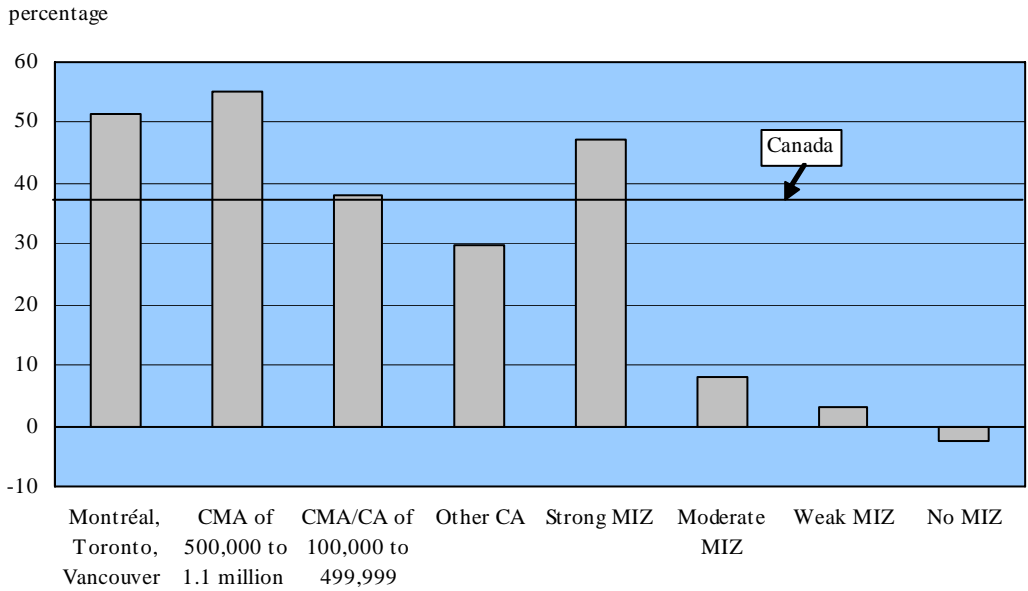


Figure 2.2
Percentage variation of the population between 1971 and 2001 across an urban-to-rural gradient, Canada

Sources:
Statistics Canada, 1971 and 2001 censuses.

1971 and 2001, which is higher than in the medium and small metropolitan areas. However, for the other rural areas, demographic growth was considerably below the national average of 37%. In fact it was negative in the regions without any metropolitan influence.

Figure 2.3 shows the percentage variation of the population in the municipalities that give their name to the CMA (here called the “central municipalities”) and the population in the remaining municipalities of these CMAs (“peripheral municipalities”) for the nine CMAs with populations that surpassed 500,000 residents in 2001. The strong growth in the most heavily urbanized areas in the country between 1971 and 2001 conceals the fact that the growth was not constant across all time periods, and furthermore, there were two patterns of growth. Whereas the population in the peripheral municipalities grew by

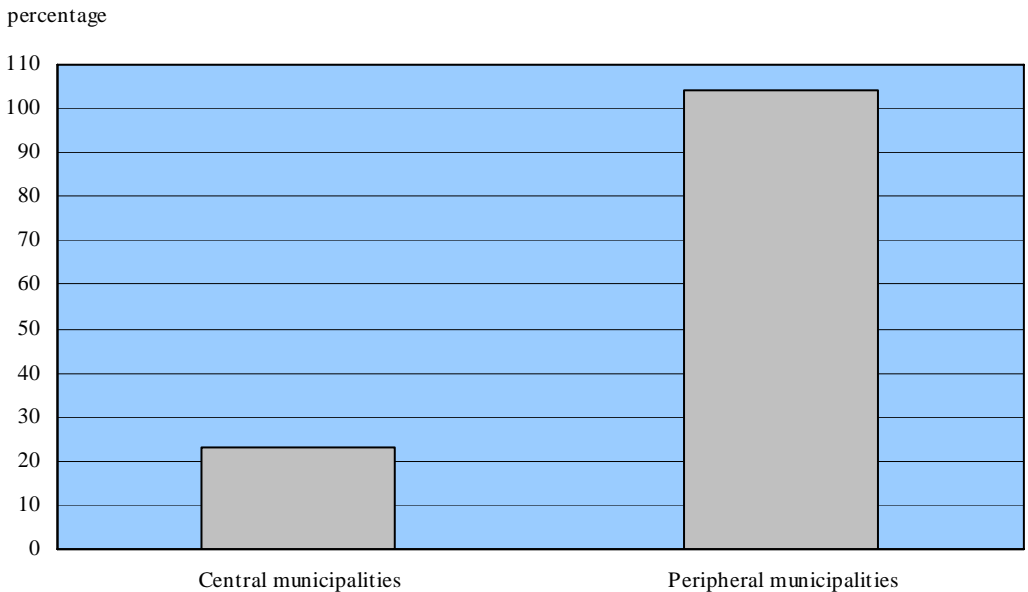


Figure 2.3
Percentage variation of the population in the central municipalities¹ and the peripheral municipalities² between 1971 and 2001 for CMAs of 500,000 or more in 2001³, Canada

1. The central municipalities are municipalities that use the CMA name.
2. The peripheral municipalities are other municipalities that compose the CMA.
3. Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary, Edmonton, Québec, Winnipeg and Hamilton.

Sources:
Statistics Canada, 1971 and 2001 censuses.

more than 100% between 1971 and 2001, it grew by only 23% in the central municipalities during that time, which is below the national average. In other words, the strong growth in the largest CMAs seems to be dependent on growth in their suburbs. This phenomenon may be due to the “saturation”⁶ of the central municipalities which, by slowly exhausting the capacity for demographic growth, ended up spreading outwards, thereby contributing to the growth of these surrounding areas.

The urban spread could also reach beyond the borders of the metropolitan areas and contribute to the growth of the rural areas to which they are strongly connected. This is probably the way to interpret the data from Figure 2.4, which shows the growth in the different types of metropolitan areas and the strong MIZ areas associated with them. We can see that the growth in rural areas with strong MIZ areas seems to be very closely tied to the growth in the areas whose influence they are under. Thus, the strong MIZ areas with the highest growth between 1971 and 2001 are associated with metropolitan

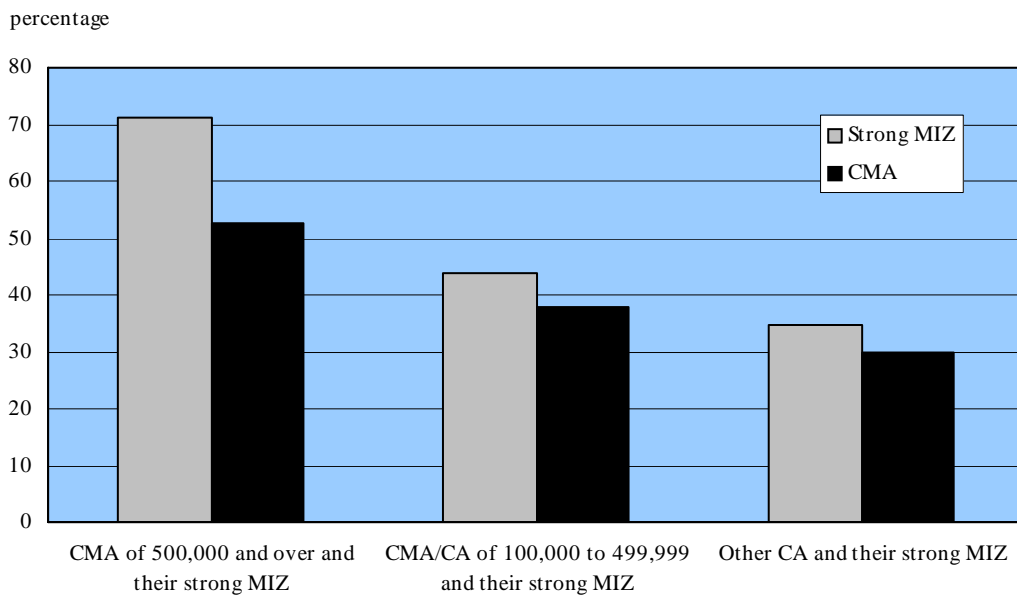


Figure 2.4
Percentage variation of the population for three types of metropolitan regions and the strong MIZ areas associated with them between 1971 and 2001

Sources:
Statistics Canada, 1971 and 2001 censuses.

areas that also had the highest growth (500,000 or more), whereas the strong MIZ areas with the lowest growth are located next to urban areas with the lowest population growth over the past 30 years.

These results show that there is some variability in terms of population growth within certain types of areas used for this study. Naturally, it is not only the larger CMAs and strong MIZ areas that are subject to internal variability; this is also evident in the other types of regions. Thus, among medium and small metropolitan areas, we find areas whose populations more than doubled between 1971 and 2001—Barrie (Ontario), Lloydminster (Alberta), Wood Buffalo (Alberta) and Abbotsford (British Columbia)—as well as some whose populations declined during that time: Cape Breton (Nova Scotia), Sudbury (Ontario), Shawinigan (Quebec) and Port Alberni (British Columbia). Similarly, the different rural communities making up the moderate, weak and no MIZ categories did not all have the

6. Population density might be a valid indicator of “saturation” in the central municipalities. In 1971, the population density in the central municipalities of the largest metropolitan areas was nine times higher than in their peripheral municipalities (900 compared to 104 inhabitants per square kilometre).

low population growth that we observed at the more aggregate level. This is evident from the fact that approximately 15% of municipalities in the moderate, weak or no MIZ categories⁷ saw their populations grow faster than the national average.

It would have been interesting to assess the extent to which these observations apply at the provincial and territorial levels. However, the types of areas defined for the purposes of this study are not all represented in every province and territory (see Table 1.1). Prince Edward Island and the territories do not have any metropolitan areas with more than 100,000 inhabitants, leaving them with only one of the four urban types. Two of the urban types, the regions that include urban areas with more than 500,000 inhabitants, are not represented in Newfoundland and Labrador, Nova Scotia, New Brunswick or Saskatchewan. In fact, only Quebec and Ontario have the eight types of areas used in the study. This is why, in Figure 2.5, we aggregated the areas to form only two groups, one with all of the metropolitan regions, the other with all of the rural regions.

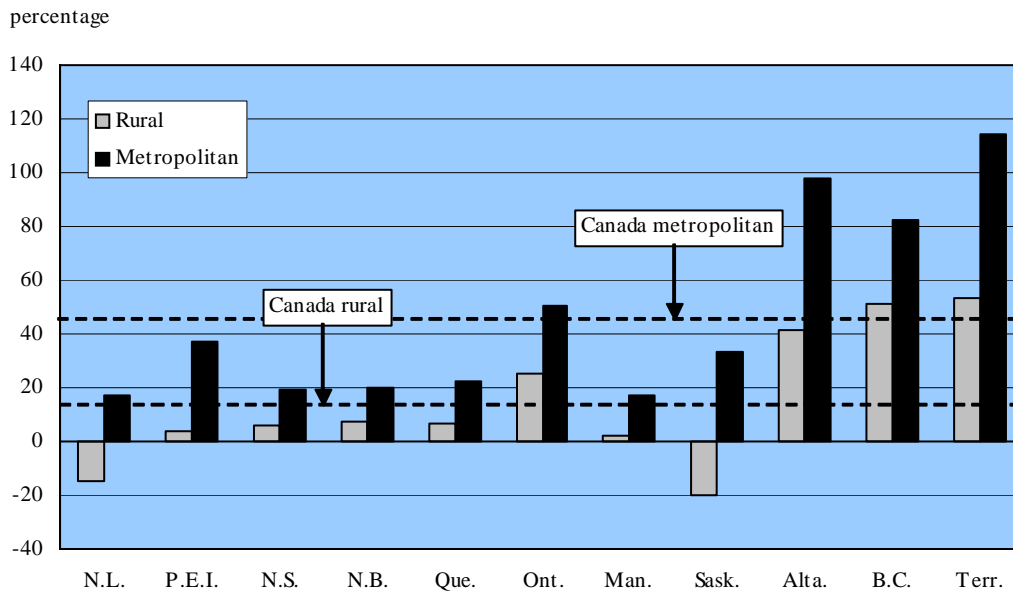


Figure 2.5
Percentage variation of the population of metropolitan and rural regions between 1971 and 2001, Canada, provinces and territories

Sources:
Statistics Canada, 1971 and 2001 censuses.

As seen at the national level, demographic growth was larger in the urban areas than in the rural areas in every province and territory. Moreover, the urban areas in all provinces and territories saw their populations grow, which is also the case with almost all of the rural areas. The two exceptions are Newfoundland and Labrador and Saskatchewan, whose non-metropolitan populations declined between 1971 and 2001.

The magnitude of the increase varied considerably among provinces. Only three provinces (Ontario, Alberta and British Columbia), as well as the territories, saw both their rural and urban areas grow more quickly than the rural and urban areas across Canada. The growth in rural and urban areas in the other provinces was lower than the national average during the period covered. Essentially, these differential increases reflect that Ontario, British Columbia and Alberta are growing faster than the average, mainly because of strong immigration in the first case, strong immigration combined with positive interprovincial migration in the second, and significant increases from interprovincial migration combined with higher fertility rates in the case of Alberta (Statistics Canada, 2006A). Moreover, they show that the trend among metropolitan areas to grow faster than rural areas is independent of provincial dynamics.

7. Among municipalities with populations of at least 500 in 1971.

2.2 Factors associated with demographic growth

We have seen that among metropolitan areas, the regions with more than 500,000 inhabitants had the highest growth between 1971 and 2001. The growth in medium-sized urban areas was similar to that in the rest of Canada and lower in the smallest urban areas. As for rural areas, the population only grew slightly, except in the areas defined in 2001 as having a strong MIZ. The demographic growth in these latter areas was almost as large as in the more populated urban areas.

What could account for these differences? Ideally, we would have annual data for the eight types of areas under study for 1971 to 2001 on each of the main components of demographic growth: birth, death, immigration, emigration and interprovincial migration. But because of the limitations of the data (1971 to 2001 Census), we will focus on estimating the contributions made by three of these components—fertility, immigration and interprovincial migration—to differential growth. Despite the fact that data on mortality and emigration are not taken into account; a certain number of facts can be identified that, together, paint a clear picture of the mechanisms at play in the demographic dynamics in Canada's metropolitan and rural areas over the last three decades of the previous century.

2.2.1 Fertility

Fertility is without question the component that had the strongest impact on growth in Canada between 1971 and 2001. During this period, it contributed to more than 11 million births across the country, or an average of 367,500 births annually. This number is more than double the number of immigrants who came to Canada during that period. However, fertility declined significantly, dropping from slightly over 2.1 children per woman in 1971 to approximately 1.5 in the early part of 2000. In fact, 1971 was precisely when Canada's fertility last surpassed the replacement level (which is approximately 2.1 children per woman).

Despite the importance of this component in Canada's population growth, it would appear that fertility cannot explain the previously noted differences. The data in Figure 2.6⁸ gives a picture of fertility that is in many regards the opposite of that provided earlier by the data on population growth (Figure 2.2). This shows that fertility is lowest in the largest metropolitan areas⁹ and tends to rise steadily with the level of rurality¹⁰. This was equally true in 1971, 1981, 1991 and 2001, given that the decline in fertility across Canada had affected each of the eight types of areas covered in this study. Yet, the biggest increases occurred in the CMAs with more than 500,000 inhabitants, whereas the rural areas saw their growth rates fall as the metropolitan influence declined. Thus, we can confirm that, overall, fertility does not explain why the population growth was more significant in urban areas than in rural areas. In fact, if between 1971 and 2001 the increase had only depended on fertility, the rural areas would have grown faster than the metropolitan areas.

Rural areas with a strong MIZ are a noteworthy exception, because they experienced both strong population growth and above-average fertility throughout the period. This coincidence may be partly attributable to the migration of young couples from the metropolitan

8. The total fertility rate (TFR) was calculated by applying an indirect technique, which is known as the own-children method, to the data from the 1971, 1981, 1991 and 2001 censuses. See Desplanques (1993) and Cho et al. (1986) for a description of this method and Bélanger and Gilbert (2003) for a discussion of its application to the Canadian data.

9. The lower than average fertility in Montréal, Toronto and Vancouver may seem surprising given that they have the largest proportions of recent immigrants, who have high fertility in Canada (Bélanger and Gilbert, 2003). This is because the fertility of non-immigrants appears to be particularly low, at 1.31 children per woman in 2000 to 2001.

10. Large Aboriginal populations contribute to higher fertility in no MIZ areas and the non-metropolitan areas in the territories. The total fertility rate of Aboriginal people was 2.6 children per woman in the 2001 Census (Ram, 2004).

children per woman

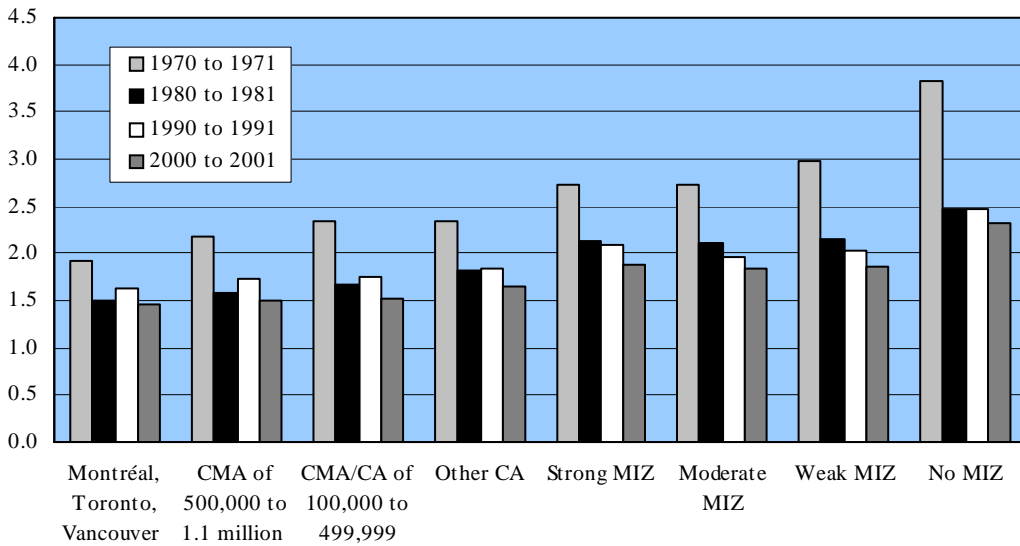


Figure 2.6
Total fertility rate across an urban-to-rural gradient, Canada, 1971 to 2001

Sources:
Statistics Canada, 1971, 1981, 1991 and 2001 censuses.

areas to the peripheral regions in order to house their new families. In so doing, these young couples would contribute to the population growth of strong MIZ areas while also keeping fertility high in these areas.

2.2.2 Internal migration

Internal migration, although it has no real impact on the change in population figures at the national level, does have a significant impact on the demographic dynamics within the country. Between 1996 and 2001, for the population aged 5 or over that had been living in Canada five years before, approximately 4.5 million would have changed their municipality of residence at least once, thereby contributing to the decline or growth, as applicable, in their area of origin or destination.

Figure 2.7 presents the net migration rate for every type of area between 1996 and 2001, or in other words, that which reflects the net migratory balance in every area as a proportion of the population five years before. It shows that, contrary to fertility, the picture of internal migration between 1996 and 2001 shows similarities with that of population growth along the urban-to-rural gradient areas used in this analysis. Thus, the two types of areas that benefit the most from their migratory exchanges with the rest of the country—CMAs of 500,000 to 1.1 million inhabitants and strong MIZ areas—also stand out for their strong population growth. At the same time, weak MIZ and no MIZ areas had both the most significant net migratory losses between 1996 and 2001 and the lowest growth rates of all the areas in this study. Moreover, it should be remembered that the populations in the smaller metropolitan areas and in moderate MIZ areas grew less quickly than in the rest of Canada; overall, both regions faced migratory losses.

The areas comprising Montréal, Toronto and Vancouver are distinct cases in that they are recording migratory losses at the same time as one of the largest population growths in the country. This result should be compared to the findings for strong MIZ areas and medium-sized metropolitan areas. In fact, Montréal, Toronto and Vancouver lost most of their net migratory losses to these two types of areas (respectively -27,155 and -29,620). Migratory losses to strong MIZ areas could certainly be interpreted as being part of the urban spread phenomenon mentioned earlier. The data on population shifts between the three largest CMAs and the medium-sized metropolitan areas also seem to be partly tied

rate per 1,000

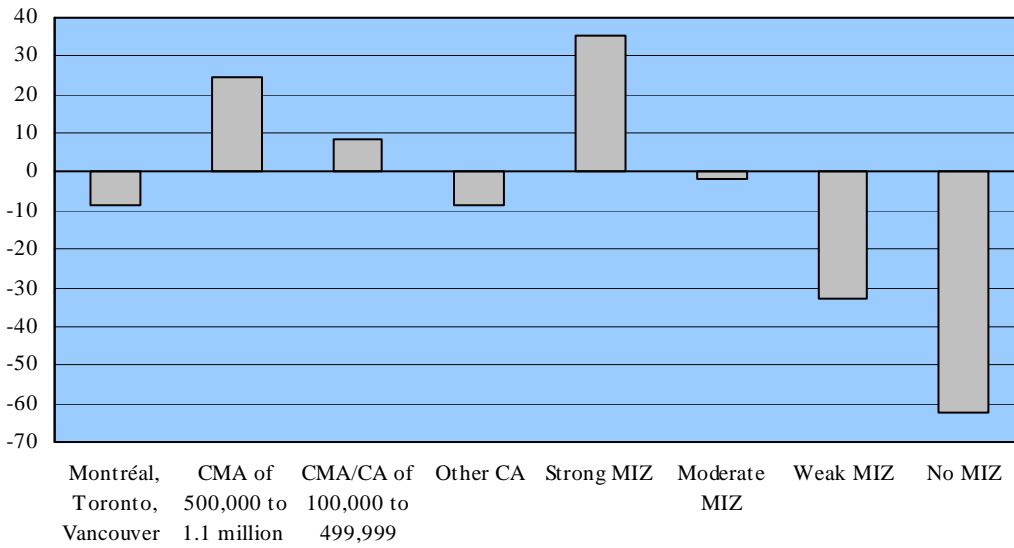


Figure 2.7
Net internal migration rate (per 1,000) between 1996 and 2001 across an urban-to-rural gradient, Canada

Source: Statistics Canada, 2001 Census.

to the phenomenon of urban spread. For example, a large part of the net migratory balance between these two types of areas consists of the losses by Toronto and Vancouver between 1996 and 2001 to their nearest CMAs: Oshawa (net gain of 16,340 residents from Toronto) and Abbotsford (net gain of 5,040 residents in its migratory exchanges with Vancouver).

The net migration profile by age presented in Figure 2.8 provides for a better understanding of the dynamics at play along the urban-to-rural gradient areas used in this study. First, we see that the preceding data on interregional migration conceal significant differences by age. We also see—and this is the point we want to emphasize—that the metropolitan areas have their largest net migratory gains at the ages when the urge to migrate is the strongest, that is, between 15 and 29 years. This means that these are also the ages for which the rural areas record the biggest losses. This movement of young people from rural areas to the metropolitan centres, whether motivated by employment, an interest in

number

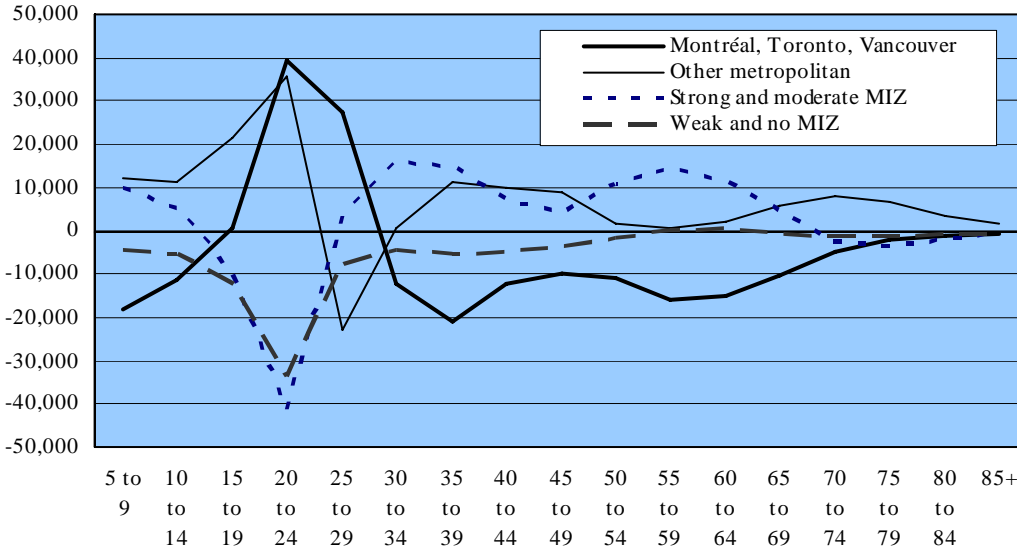


Figure 2.8
Net internal migration by age between 1996 and 2001 across an urban-to-rural gradient, Canada

Source: Statistics Canada, 2001 Census.

studying, becoming independent or getting to experience life in the city, has a significant impact on the age structure of the areas being studied. This will be addressed later (section 2.3.1).

It should be added that the data in Figure 2.8 seem to support the idea that the population in the rural areas around Montréal, Toronto and Vancouver would benefit from an influx of young couples wanting to start a family or raise their children. At the very least, in the 30 to 45 year age category, we see a marked positive migratory balance in the strong and moderate MIZ areas, which seems to be offset in the area formed by the three largest CMAs in Canada.

So far, the analysis of internal migration has been limited to the period between 1996 and 2001. This is because the limitations of our databases did not allow us to apply the geographic structure defined for this project to the data prior to 2001 regarding place of residence five years before the census. However, we could get a reasonable approximation of the migratory balance of the two types of areas containing the CMAs with 500,000 inhabitants or more for every inter-censal period between 1971 and 2001 based on the 1976 to 2001 censuses with their respective geographies (Figure 2.9).¹¹

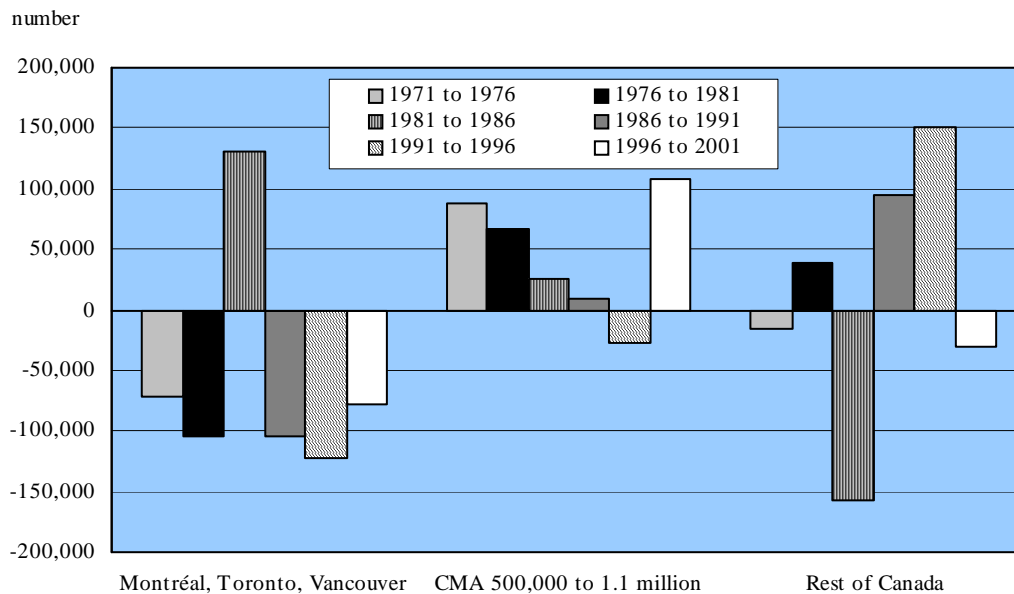


Figure 2.9
Net internal migration for each intercensal period from 1971 to 2001, selected regions of Canada (variable geography)

Sources:
Statistics Canada, 1976, 1981, 1986, 1991, 1996 and 2001 censuses.

The data in Figure 2.9 reveal that the net migratory balance for the Montréal, Toronto and Vancouver areas was negative for five of the six five-year periods between 1971 and 2001. Three times in fact, the net losses were greater than 100,000 people. Thus, the strong growth in the country’s three largest metropolitan areas between 1971 and 2001 is not a result of gains from internal migration, and it cannot be attributed to fertility. However, in the other six CMAs with more than 500,000 residents in 2001, internal migration appears

11. These two types of areas are the only two that can be re-built with the help of the place of residence variable and that of place of residence five years before for every census between 1971 and 2001. Clearly, using a variable rather than a constant geography will result in population differences for each of the two types of areas and that they, even if they are smaller, tend to grow as we go farther back in time. In 1971, this difference was approximately 140,000 people for each of these two types of more heavily urbanized areas, representing approximately 2% of the populations of Montréal, Toronto and Vancouver and approximately 4.5% of the populations of the other six CMAs with populations over 500,000 inhabitants in 2001.

to have been a key growth factor. Their migratory exchanges with the rest of the country enabled CMAs to achieve net population gains over five years, which averaged 44,900 people over the period between 1971 and 2001. The only point at which these areas suffered migratory losses during the period under study was immediately before the 1996 Census. As for the data for the rest of Canada, which includes rural regions and smaller and medium urban areas, the results are difficult to interpret due to their heterogeneity.

2.2.3 Immigration

The demographic impact of international immigration in Canada grew over the last three decades of the 20th century. The average annual number of newcomers rose significantly over the period, from 130,000 between 1971 and 1985, to more than 200,000 between 1986 and 2000. When combined with declining natural growth, this increase helped turn international immigration into the main growth engine in the country in the 1990s. The current impact of international migration includes the fact that it enables Canada to maintain the strongest population growth among G-8 countries.

In addition, the origins of newcomers have changed significantly since the late 1960s. Whereas the majority of immigrants once came from Europe and the United States, at this point most immigrants to Canada come from Asia, with Europeans generally accounting for less than 20% of their numbers. Because of this change in the source of immigration, Canada's population has become more diversified from an ethnocultural point of view.

International immigration is very unevenly spread across Canada, as shown by Figure 2.10, which provides the number of immigrants by year of immigration and place of residence in 2001. Most immigrants admitted to Canada choose Montréal, Toronto or Vancouver as their place of residence. These were the choices of approximately 60% of the immigrants who arrived in Canada between 1971 and the early 1980s. This proportion increased during the 1980s, to the point where nearly three quarters of the 1.8 million immigrants admitted in the 1990s, and enumerated on Census day in 2001, lived in one of the three largest CMAs in Canada. Toronto alone had close to 800,000, or 43% of all recent immigrants. Thus, international immigration explains why the country's three largest CMAs had one of the largest population growths since 1971 despite low internal migration and fertility.

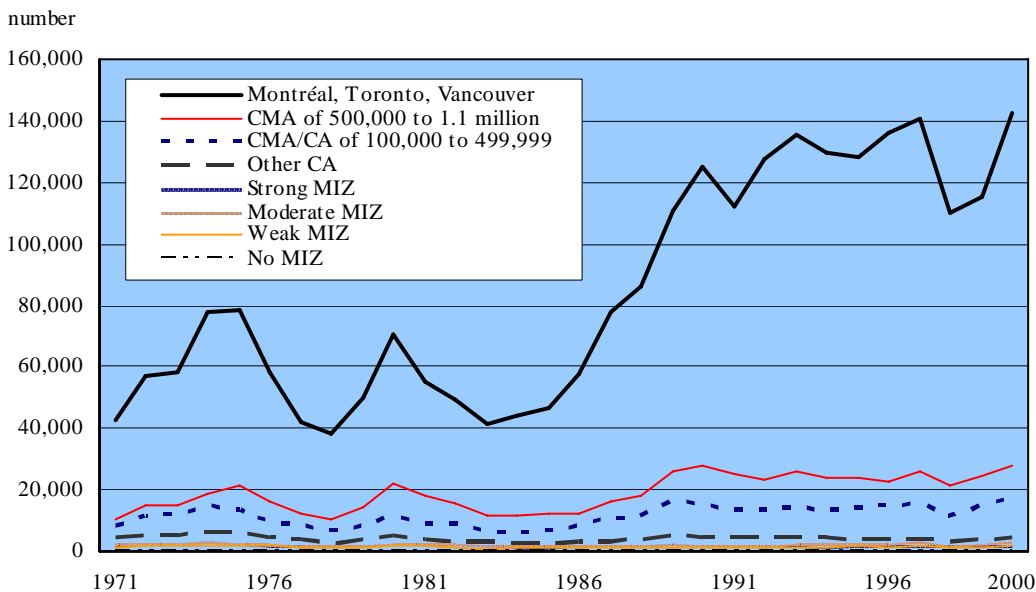


Figure 2.10
Immigrant population by year of immigration and place of residence in 2001 across an urban-to-rural gradient, Canada

Source:
Statistics Canada, 2001
Census.

With regard to the other areas, the larger CMAs were the choice of most immigrants admitted since 1971, followed by medium-sized and then small metropolitan areas. Fewer than 4% of all immigrants chose to live in a rural area, compared to approximately 20% of the entire population. In brief, immigrants to Canada generally prefer to live in an urban area, particularly in the largest metropolitan areas.

Consequently, it is not surprising to see that the proportion of recent immigrants has tended to increase with the degree of urbanity, as measured by every ten-year Census since 1971 (Figure 2.11). In 2001, for instance, approximately one out of eight people in Montréal, Toronto and Vancouver had been granted immigrant status over the previous ten years, compared to fewer than one out of 100 people in all of the rural areas taken as a whole. Such a disparity in the population's composition of immigration translates, as will soon be seen, into significant differences between areas in terms of their residents' ethnocultural diversity.

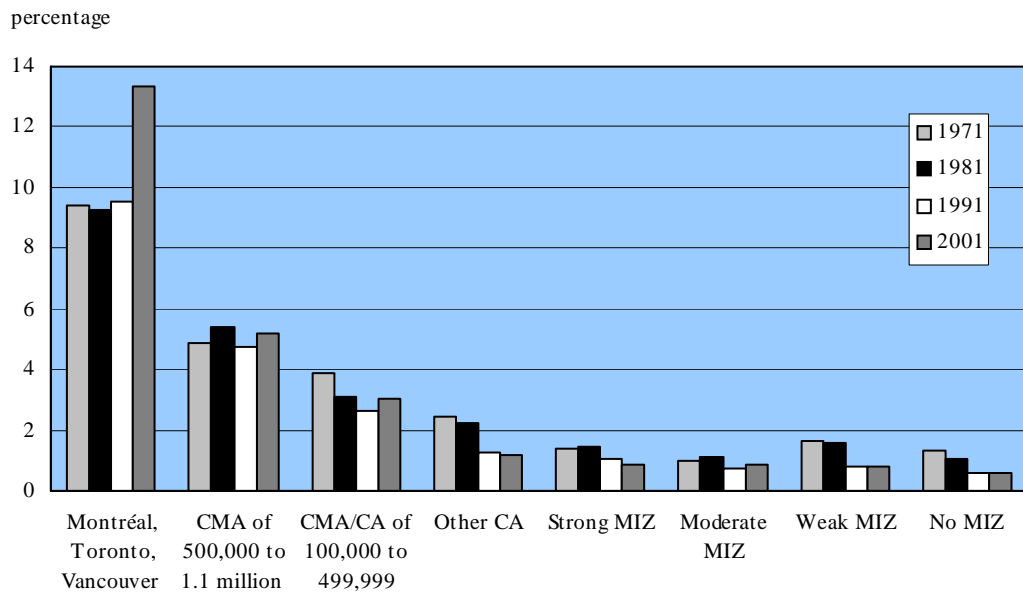


Figure 2.11
Percentage of recent immigrants¹ across an urban-to-rural gradient, Canada, 1971 to 2001

Sources:
Statistics Canada, 1971, 1981, 1991 and 2001 censuses.

1. Immigrants from 1961 to 1971 enumerated in 1971, from 1971 to 1981 enumerated in 1981, from 1981 to 1991 enumerated in 1991 and from 1991 to 2001 enumerated in 2001.

Furthermore, the changes that occurred between 1971 and 2001 regarding sources of immigration were not uniform throughout Canada. For every type of area along the urban-to-rural gradient, Table 2.1 presents the four main countries of birth of immigrants admitted to Canada in the 10 years prior to the 1971 and 2001 censuses. It is evident that in 1971, the primary countries of birth of recent immigrants were the United Kingdom, Italy, the United States and Portugal. What applied at the national level was also true for every type of area: Europe and the United States were the most important sources of immigration across geographic regions.

In 2001, as we indicated, recent immigrants were mainly from Asian countries, principally from China, India, the Philippines and Sri Lanka. Yet this change in the origins of immigrants appears to have mainly affected the most urban areas, that is, populations larger than 100,000 inhabitants in 2001. In other regions, the United States and the United Kingdom are still among the most frequent countries of birth for immigrants who arrived in Canada within the past 10 years. In this regard, it is interesting to observe that in 2001, in every type of rural area we found that three of the four main countries of origin were the same as had

Place of residence	Main places of birth	
	1971	2001
Montréal, Toronto, Vancouver	Italy, Great Britain, Greece, (Portugal and United States)	China ² , India, Philippines, Sri Lanka
CMA of 500,000 to 1.1 million	Great Britain, Italy, United States, Germany	China ² , Philippines, India, Vietnam
CMA/CA of 100,000 to 499,999	Great Britain, United States, Italy, Germany	India, China ² , United States, Yugoslavia
Other CA	Great Britain, United States, Germany, Italy	United States, Great Britain, India, Philippines
Strong MIZ	Great Britain, United States, Germany, Netherlands	Mexico, United States, Great Britain, Netherlands
Moderate MIZ	United States, Great Britain, Germany, (Netherlands, Portugal and France)	United States, Great Britain, Mexico, Germany
Weak MIZ	United States, Great Britain, Germany, India	United States, Great Britain, Germany, Mexico
No MIZ	United States, Great Britain, Germany, India	United States, Great Britain, Mexico, Philippines
Total Canada	Great Britain, Italy, United States, Portugal	China ² , India, Philippines, Sri Lanka

Table 2.1
Principal countries of birth for recent immigrants¹ across an urban-to-rural gradient, Canada, 1971 and 2001

1. Immigrants from 1961 to 1971 enumerated in 1971 and immigrants from 1991 to 2001 enumerated in 2001.

2. Includes Hong Kong.

Note: The countries in parentheses have the same number of immigrants.

Sources:

Statistics Canada, 1971 and 2001 censuses.

been identified in 1971. In other words, the composition of immigration does not appear to have changed very much, contrary to what we observe in the large cities, where there was a complete renewal of the source countries of birth for newcomers.

2.3 Implications of a variable pace of growth

Until now, we have had a chance to observe several demographic differences among the areas that make up the urban-to-rural gradient defined for this project. These include the strong growth in the more urbanized areas and their associated rural areas, the importance of immigration in the Montréal, Toronto and Vancouver areas and the key role of internal migration in the growth of the other regions. At this point, it would be appropriate to ask about the impact of such differences on aging and ethnocultural diversity for these urban and rural areas.

2.3.1 Structure by age

The decline in fertility that occurred almost continuously in Canada between 1971 and 2001 greatly contributed, together with the rise in life expectancy, to population aging. In 2001, the median age¹² of 37.3 years was up 11.1 years compared to what had been observed three decades earlier (26.2 years). As well, the proportion of people aged 65 years or over rose from 8.1% in 1971 to 12.2% in 2001. According to Statistics Canada's latest demographic projections, population aging will be exacerbated as the first baby-boomers reach retirement age in 2011, increasing the proportion of people aged 65 years or over to close to 25% by 2031 (Bélanger, Martel and Caron Malenfant, 2005). Several studies have shown that immigration cannot change this aging trend, mainly because there are very few young immigrants, and these individuals, like other Canadians, also get older (Guillemette and Robson, 2006; Statistics Canada 2006B; Bélanger, Martel and Caron Malenfant, 2005).

None of the eight areas used in this study has escaped the impact of aging, as demonstrated by Table 2.2. In 2001, the proportion of seniors clearly varied between

12. The median age is the exact age that divides the population into two equal-sized groups, one made up of older individuals, the other of younger individuals.

10.9% and 14.8% depending on the area, compared to the 7.2% and 9.5% range thirty years before. However, the population aged at different rates from region to region. Four areas saw their populations age less quickly than the Canadian average (increase of 4.1 percentage points in the proportion aged 65 or more in 2001 compared to 1971): the rural areas in the strong MIZ (2.6 percentage points), those in the no MIZ areas (3.3 percentage points), and the two most urbanized types of areas (3.7 percentage points each). These four areas were also the regions that, overall, had the fewest seniors in 2001. The other areas all aged faster than the Canadian average between 1971 and 2001. The proportion of seniors was also higher for these regions than for Canada as a whole in 2001.

Region	Percentage		Difference
	1971	2001	
Canada	8.1	12.2	4.1
Metropolitan regions			
Montréal, Toronto, Vancouver	7.7	11.4	3.7
CMA of 500,000 to 1.1 million	7.2	10.9	3.7
CMA/CA of 100,000 to 499,999	8.3	12.8	4.5
Other CA	7.7	13.4	5.7
Rural regions			
Strong MIZ	9.5	12.1	2.6
Moderate MIZ	9.5	14.8	5.3
Weak MIZ	8.7	13.5	4.8
No MIZ	7.9	11.2	3.3

Table 2.2
Percentage of the population aged 65 and more across an urban-to-rural gradient, Canada, 1971 and 2001

Sources:
Statistics Canada, 1971 and 2001 censuses.

Of the four areas that aged the least, there are, on the one hand, the three types of areas whose populations grew fastest between 1971 and 2001 (the regions that make up the largest CMAs and the strong MIZ areas) and, on the other, the only one of the eight types along the gradient to have seen a decrease over the same period (no MIZ areas). As well, at this point it is useful to revisit the heterogeneous sources of growth for three of the four growing regions: immigration for Montréal, Toronto and Vancouver; internal migration for the other CMAs with more than 500,000 inhabitants; high fertility combined with favourable internal migration for the rural areas with a strong metropolitan influence. What could account for the fact that all of these areas aged less rapidly than the Canadian population overall?

With the lowest fertility in the country and recurrent losses from internal migration, we would expect that immigration would have helped slow the population's aging in the country's three largest CMAs. Yet, the immigrants living in this area are older than the non-immigrants, as is the case at the national level (Figure 2.12). This is because most of the immigrants who arrive in the country are adults, and their children who are born in Canada, naturally, are not considered immigrants. The result is an age structure whereby the youngest are clearly under-represented compared to the population born in Canada. The older age structure of immigrants in Montréal, Toronto and Vancouver results in a higher median age for this group (44.1 years versus 31.6 years among non-immigrants) and a higher proportion of people aged 65 or older (15.8% versus 9.3%). In fact, differential internal migration by age appears to have contributed more than immigration to the slower aging of the populations of Montréal, Toronto and Vancouver.¹³ It should be remembered

13. Indirectly, however, immigration could have had an impact on the age structure to the extent that persons of childbearing age are overrepresented among immigrants. This effect on the aging of immigrants, by means of childbearing is, however, minor.

(see section 2.2.2) that, between 1996 and 2001, the three largest CMAs together had a negative migratory balance for all age groups, with the exception of people aged 15 to 29. In essence, the fact that there are so many young people in these areas could be due to these regions being frequently very appealing to younger people, however those over 30 are more likely to leave these same areas.

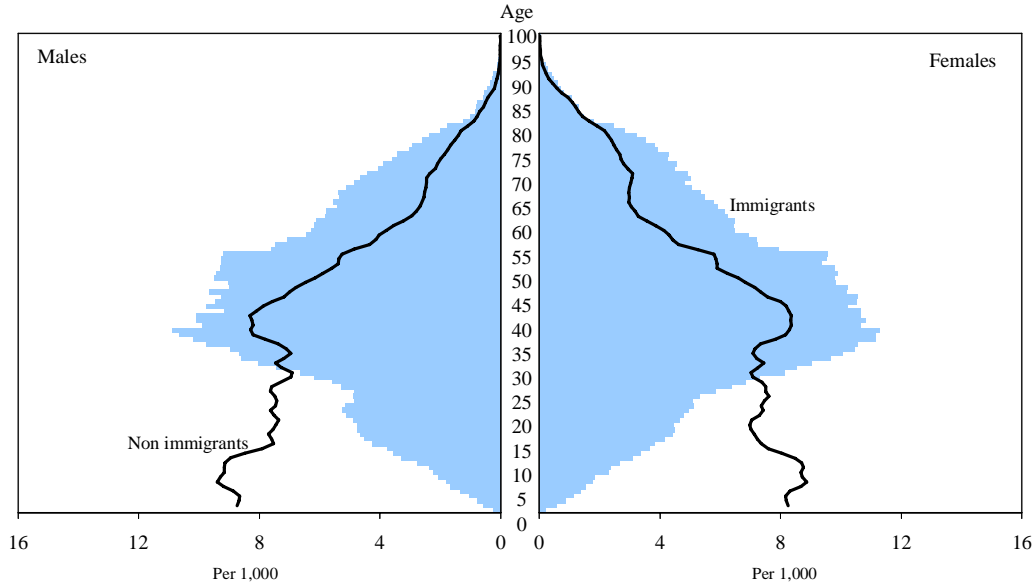


Figure 2.12
Population age pyramid for the CMAs of Montréal, Toronto and Vancouver by immigrant status, 2001

Source:
Statistics Canada, 2001
Census.

The same factor—internal migration by age—also seems to account for the relative youth of the population in the larger metropolitan areas with 500,000 to 1.1 million inhabitants. Between 1996 and 2001, the largest CMAs had the strongest net migration rate of people aged 15 to 29 in the country¹⁴. Even though they also had migratory gains above 30 years of age, these gains were much lower than those for young people. This age breakdown of internal migration has enabled the populations of the larger CMAs to age less quickly than the Canadian average, in spite of low fertility throughout the period under study.

The situation is somewhat different in the strong MIZ areas, which have undergone a net exodus of young people aged 15 to 29 through internal migration. The high fertility in these areas, combined with the fact that in 1971 they had the highest proportion of older people, could in part explain why they aged slowly compared to Canada as a whole. We should remember, furthermore, that the strong MIZ areas had net migratory gains of adults over 30 years of age, suggesting that these areas may be benefiting from young couples wanting to move there to raise their families.

In the no MIZ rural areas, fertility remained above the replacement level (2.1 children per woman) throughout the period between 1971 and 2001, which greatly increased the “youth” of the population’s age structure. However, the “youth” in the country’s more rural areas is largely due to the fact that the 42% of the population living there consists of young people with an Aboriginal identity (Figure 2.13). Among these Aboriginal people, the proportion of people aged 65 or over is only 4.3% and the median age is 21.4 years, whereas these same indicators are respectively 16.2% and 41.1 years among the non-

14. This rate was 7.7%.

Aboriginal people in these same areas. The high proportion of children and the low proportion of seniors in this population are due to their high fertility as well as to a lower life expectancy than that of the rest of the population. The narrowing of the non-Aboriginal pyramid between ages 20 and 40 is the sign of a significant outbound migration among young people in this group.¹⁵

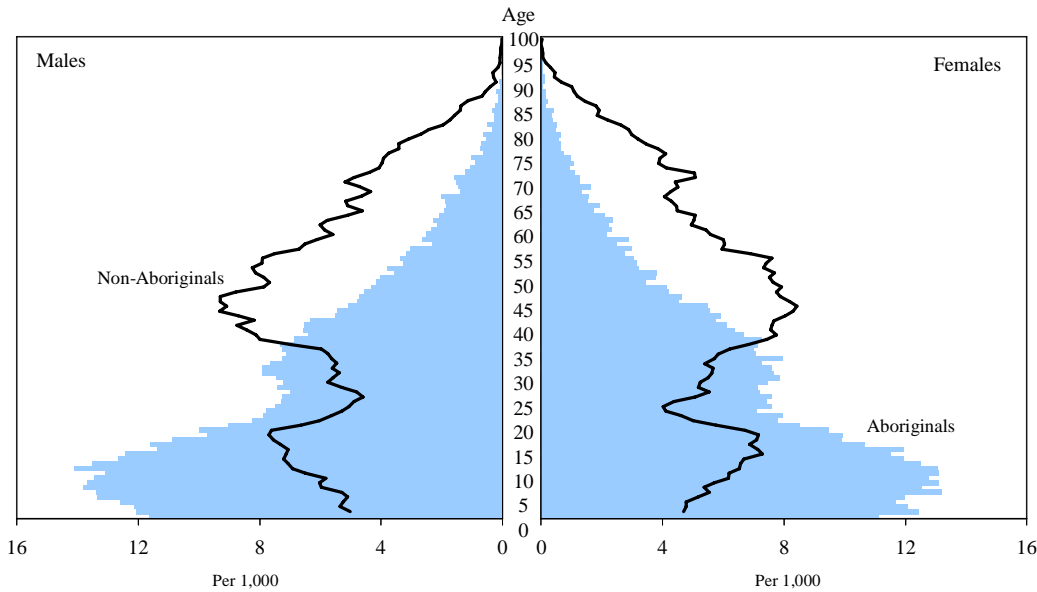


Figure 2.13
Population age pyramid for the rural no MIZ regions by Aboriginal status, 2001

Source:
Statistics Canada, 2001
Census.

The impact on the age structure of the loss of young adults due to internal migration is also evident in all the other types of rural areas and, to a lesser degree, in the smallest of the urban areas along the gradient used here (see the age pyramids in Appendix 1). These observations corroborate those presented earlier with regard to the differential migration by age, which shows significant gains in young adults in the urban areas, at the expense of the rural areas. Internal migration by age seems to have played a key role in the aging of rural areas in the moderate and weak MIZ areas as well as in the country's smaller urban areas. In these three types of regions, it would appear that neither fertility nor return migration were sufficient to stop the aging resulting from the net losses of young people who, in many cases, left for the larger cities. The age structure of medium-sized urban areas does not show this same indentation at the younger ages, suggesting that they do not seem to have had the same trends in migration by young people during the recent past. This largely explains why they aged less quickly than the smaller urban areas, the rural areas in weak MIZ regions and the moderate MIZ regions, even though they aged slightly faster than the national average.

2.3.2 Ethnocultural diversity

The population's growing ethnocultural diversity is one of the main effects of the continuing immigration from non-European countries to Canada in the recent past. This is why the number of people belonging to a visible minority¹⁶ rose from 1.1 million, representing

15. It is interesting to note that, as a whole, the migratory balance between 1996 and 2001 in the no MIZ areas, while overall negative, was 975 for Aboriginal people but -24,475 for non-Aboriginal people.

16. Visible minorities are defined by the Employment Equity Act as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour".

4.7% of the population in 1981, to 4 million people, or 13.4% of Canadians in 2001 (Statistics Canada, 2003B). As well, the number of allophones rose from 2.8 to 5.2 million people between 1971 and 2001, more than twice as fast as the overall population during this period. Ethnocultural diversity is also evident in the population’s religious composition.

To the extent that, as was previously seen, immigration tends to concentrate in urban areas and includes proportionally fewer Europeans in urban than in rural areas, it is not surprising that ethnocultural diversity generally decreases as the degree of rurality increases (Figure 2.14). Thus, the proportion of visible minorities, immigrants, people whose mother tongue is neither French nor English (allophones) and people who do not practice a Christian faith¹⁷ is in every case about twice as high in the three most heavily populated CMA’s in the country as in the next six regions, and tends to fall in the less urbanized regions. The increase in the proportion of allophones and, to a lesser degree, in the proportion of people who do not follow a Christian faith in the weak and no MIZ areas is explained by the greater propensity to report Aboriginal religions and mother tongues.

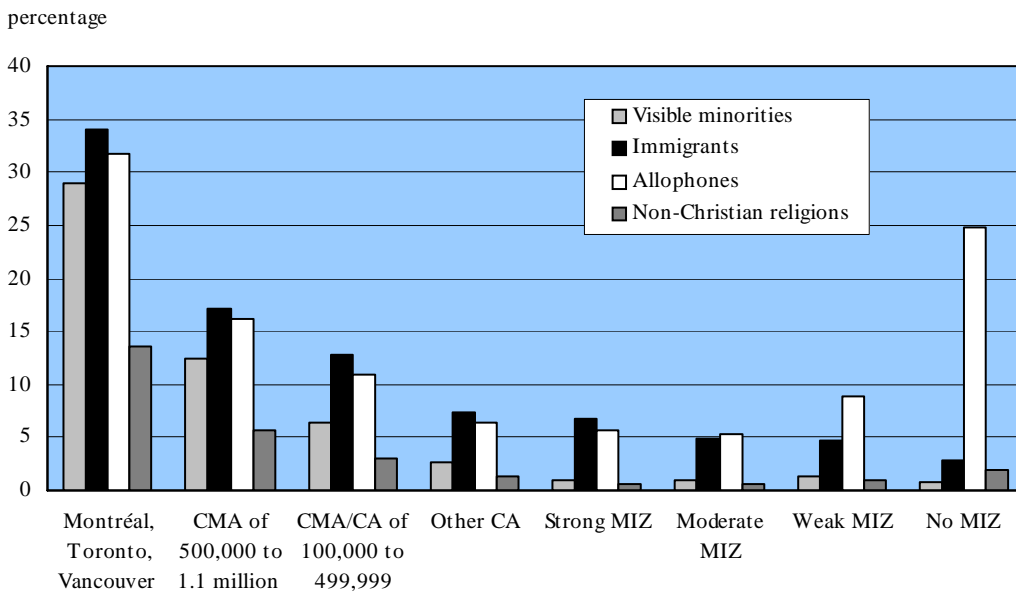


Figure 2.14
Percentage of visible minorities, immigrants, allophones¹ and persons with a non-Christian religious denomination² across an urban-to-rural gradient, Canada, 2001

Source:
Statistics Canada, 2001
Census.

1. People whose mother tongue is neither French nor English.
2. This excludes people who do not practice any religion.

In the 30 years that preceded the 2001 Census, the Montréal, Toronto and Vancouver CMA’s stood out from the rest of the country because of their large immigrant populations. In fact, immigration was the main factor in their growth. These three areas were also different from one another in terms of diversity. Thus, for instance, the proportion of immigrants and people belonging to a visible minority group was much higher in Toronto (44% and 37%, respectively) and Vancouver (38% and 37%) than in Montréal (18% and 14%), which was closer to the national average (18% and 13%).

We calculated some projections to determine what would happen to the proportion of immigrants in these three CMA’s if recent demographic trends continued until 2031¹⁸

17. This excludes people with no religious affiliation.
 18. Special projections done using the microsimulation model developed for Population projections of visible minority groups, Canada, provinces and regions: 2001 to 2017 (Catalogue no. 91-541), updated to include the most recent assumptions about the components of demographic increases developed for Population projections of visible minority groups, Canada, provinces and regions: 2005 to 2031 (Catalogue no. 91-520).

(Figure 2.15). These projections showed that the proportion of immigrants would continue to increase in the Montréal, Toronto and Vancouver CMAs, and would do so more quickly than in the rest of Canada. In the Toronto and Vancouver CMAs, this proportion would reach approximately 50% in 2031, which means that approximately one out of two people in Toronto and Vancouver would have been born abroad. In Montréal, approximately one-quarter of residents was granted immigrant status at some point. In brief, the current immigration trends contributed, and should continue to contribute, to increasing the gap between the largest metropolitan areas and the rest of the country in terms of the population's ethnocultural diversity.

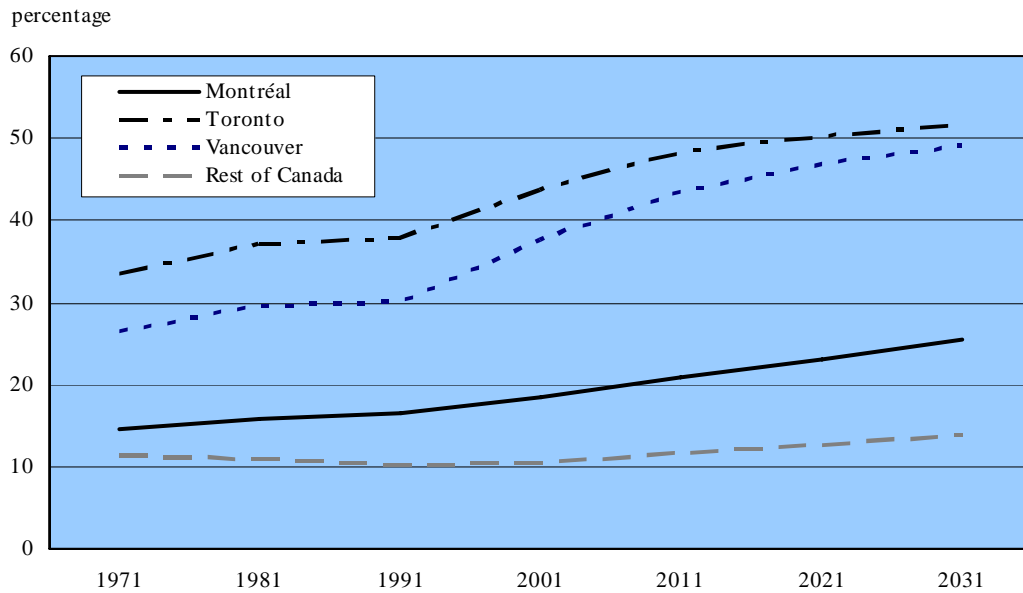


Figure 2.15
Percentage of immigrants in Montréal, Toronto, Vancouver and in the rest of Canada, 1971 to 2031

Sources:
 Statistics Canada, 1971, 1981, 1991 and 2001 censuses and special projections according to a medium growth scenario.

Conclusion

The purpose of this article was to make a contribution to demographic studies of urban and rural Canada. It considers the country's different communities as part of a gradient ranging from the most urban to the most rural areas. This approach stemmed from the desire to go beyond the dichotomous approach that divides the territory by simply contrasting rural and urban areas. By applying a geographic structure that keeps the borders constant between 1971 and 2001, we were able to analyze population growth in the different regions without allowing the border changes during the period to interfere.

It became evident that growth was concentrated in the country's largest metropolitan areas and in the rural areas on which they had a strong influence. Elsewhere, growth diminished as the degree of rurality increases. Migratory movements between the different types of areas have largely contributed to this differential growth: the most urbanized areas—with the exception of Montréal, Toronto and Vancouver—underwent significant migratory gains as well as strong growth. This was also the case with the strong MIZ areas, even though the findings suggest that the most rural communities experienced significant losses over time through migration. The internal migratory component appears to have played a key role in the evolution of population age structure by slowing aging in the areas that appealed most to young people (the largest CMAs) and by contributing to aging in the other areas where fertility was insufficient to offset the trend.

The strong growth in the three largest urban areas—Montréal, Toronto and Vancouver—is largely attributed to the large numbers of international immigrants who decided to settle there. The concentration of newcomers in these metropolises helped increase the gap between these three areas and the rest of the country in terms of ethnocultural diversity.

This study benefited from the richness of the Census data for Canada's population from 1971 to 2001. However, it does have limitations. The variables available for the Census have made it impossible to analyze internal migratory movements for all areas since 1971, even though the impact of their indirect effects appears to be evident in the age structure of the areas compared. Thus, two of the components of growth could not be included in this study: mortality and emigration. These two components may have contributed to the differential growth of the areas to the extent that, for instance, the life expectancy of Aboriginal people, who account for a large proportion of inhabitants in the more rural areas, is not as high as that of the rest of the population and where, secondly, the propensity to emigrate is greater among recent immigrants, who are currently concentrated in a small number of urban areas.

This study provided a better understanding of the overall demographic dynamics that characterize Canada's urban and rural areas. Although reference is made on several occasions to the dynamics within each of the eight types of areas used, this is an entire field of study whose exploration would be both useful and fruitful. For instance, Canada's largest metropolitan areas do not all grow at the same pace, nor do they grow for the same reasons. Moreover, the demographic dynamics in communities with no metropolitan influence is certainly different depending on whether it is a coastal, mining or tourist community. Each of the eight types of areas identified for this study is a result of the aggregation of communities with different histories; the study of this internal variability would enrich our understanding of Canadian demographics.

Of the different trends identified throughout this study, the most important one may well be the determining impact of the migratory component on growth in urban areas and on ethnocultural diversity. To a large extent, the continuation or reversal of trends observed in the past depends on the future evolution of migratory patterns resulting from individual choices about where to live. Past experience has shown us that these patterns may shift, sometimes suddenly, as a result of particular circumstances. Thus, their study over a longer period may prove to be quite useful.

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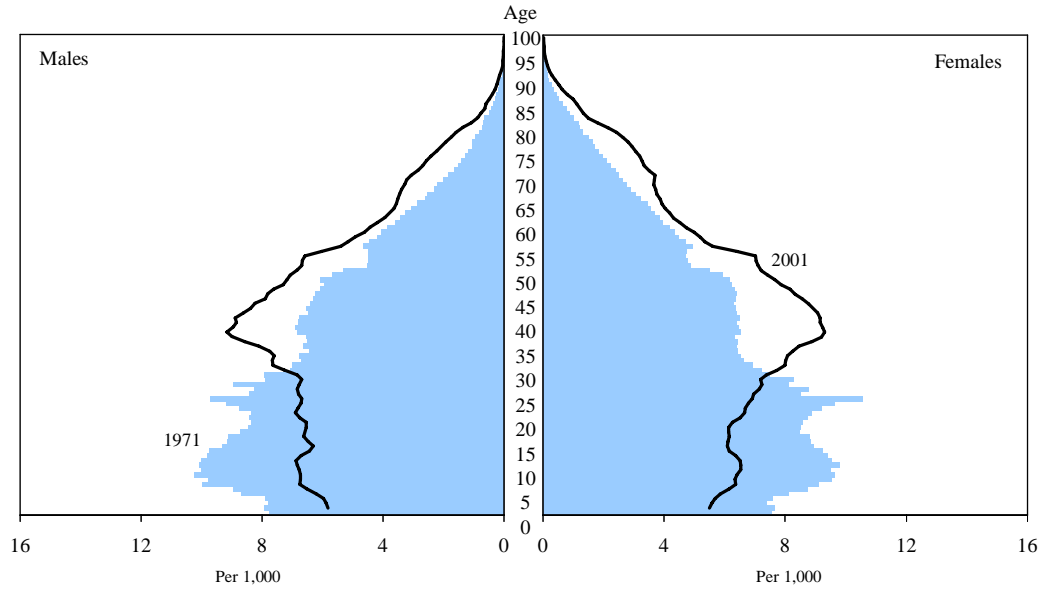
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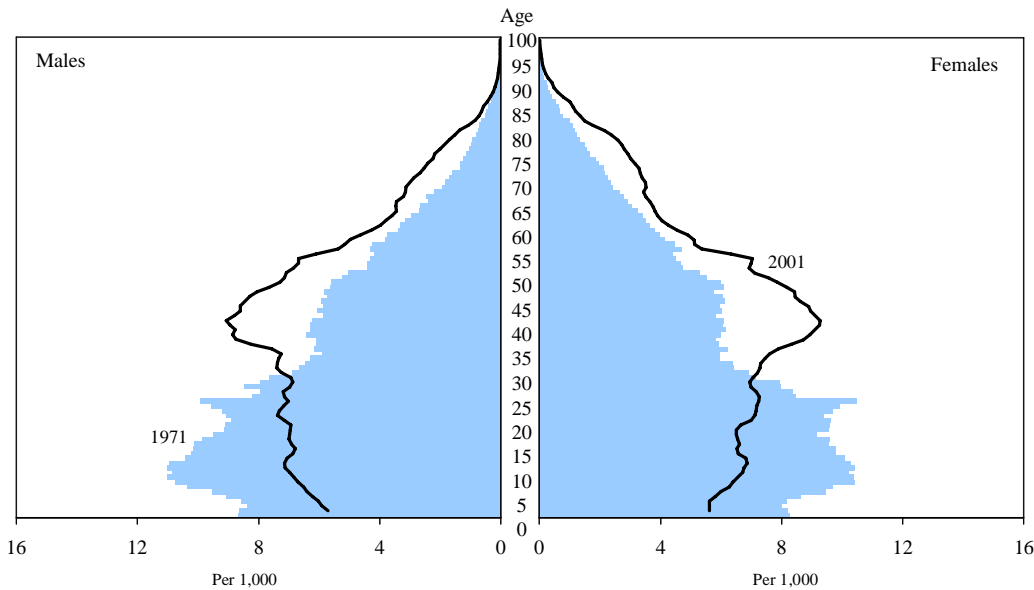
Appendices

Figure A.1

Population age pyramids for each region across the urban-to-rural gradient, Canada, 1971 and 2001



1 - Census metropolitan areas of Montréal, Toronto and Vancouver

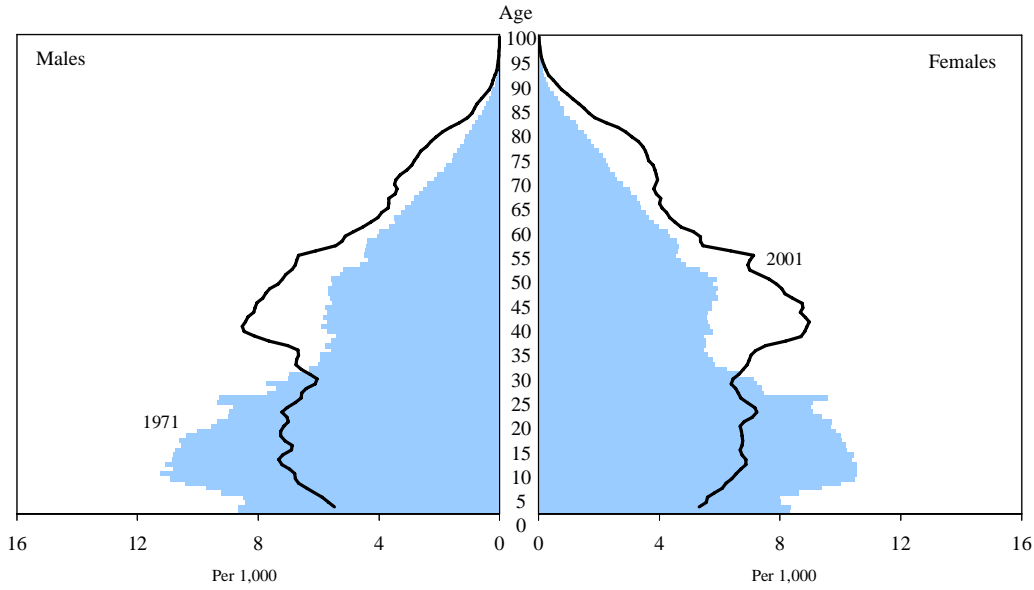


2 - Census metropolitan areas of 500,000 to 1.1 million inhabitants in 2001

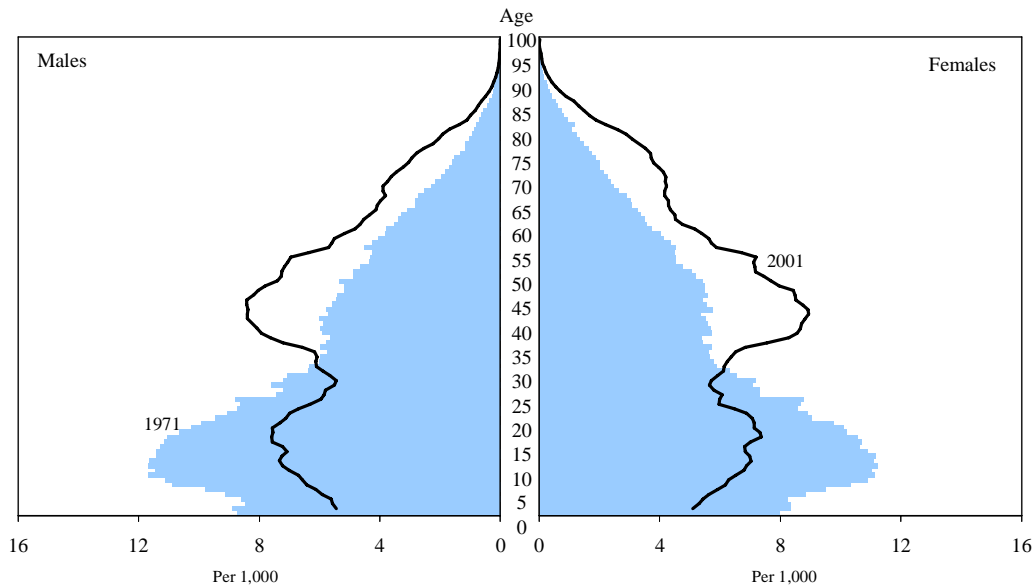
Sources:
Statistics Canada, 1971 and 2001 censuses.

Figure A.1

Population age pyramids for each region across the urban-to-rural gradient, Canada, 1971 and 2001 - continued



3 – Census metropolitan areas and census agglomerations of 100,000 to 499,999 inhabitants in 2001

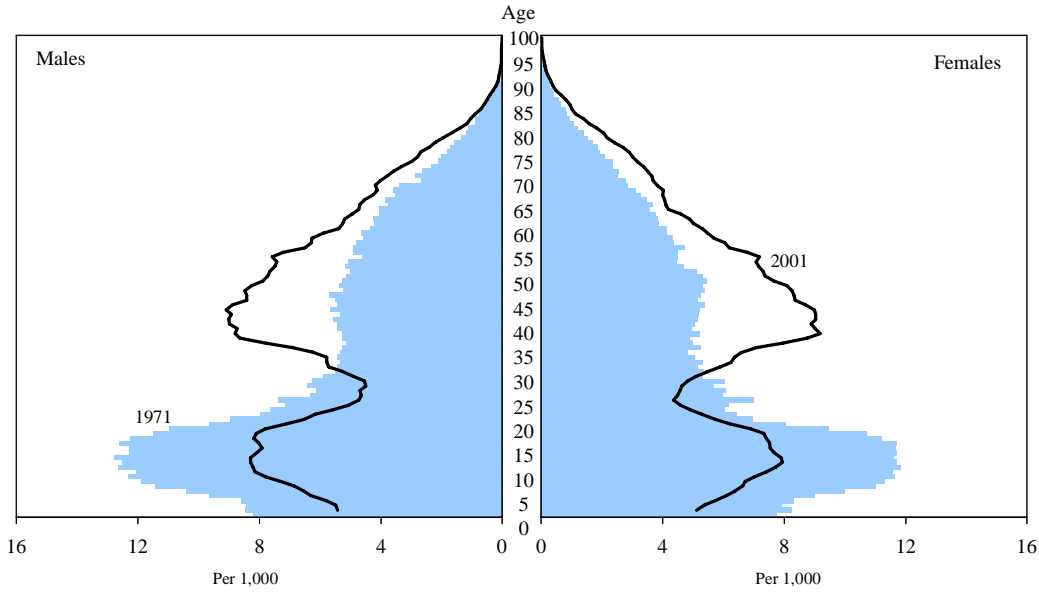


4 – Other census agglomerations

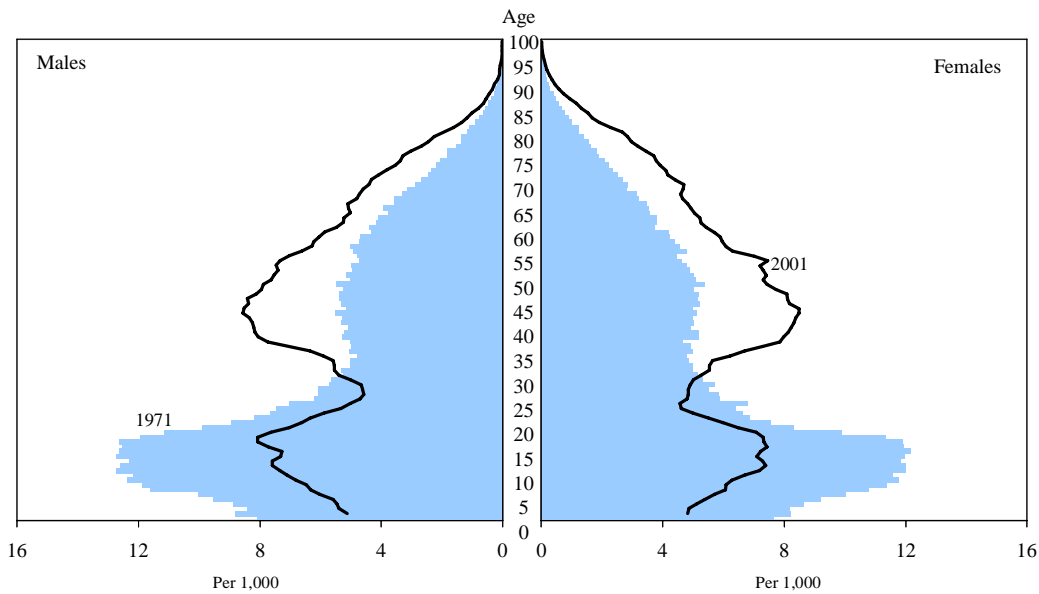
Sources:
Statistics Canada, 1971 and 2001 censuses.

Figure A.1

Population age pyramids for each region across the urban-to-rural gradient, Canada, 1971 and 2001- continued



5 – Rural regions of strong MIZ

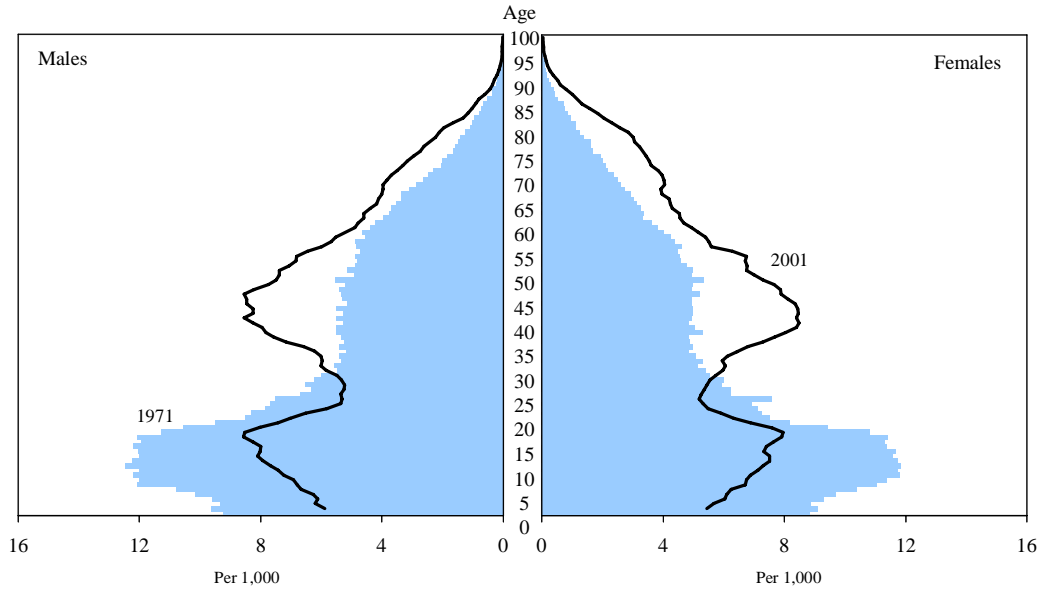


6 – Rural regions of moderate MIZ

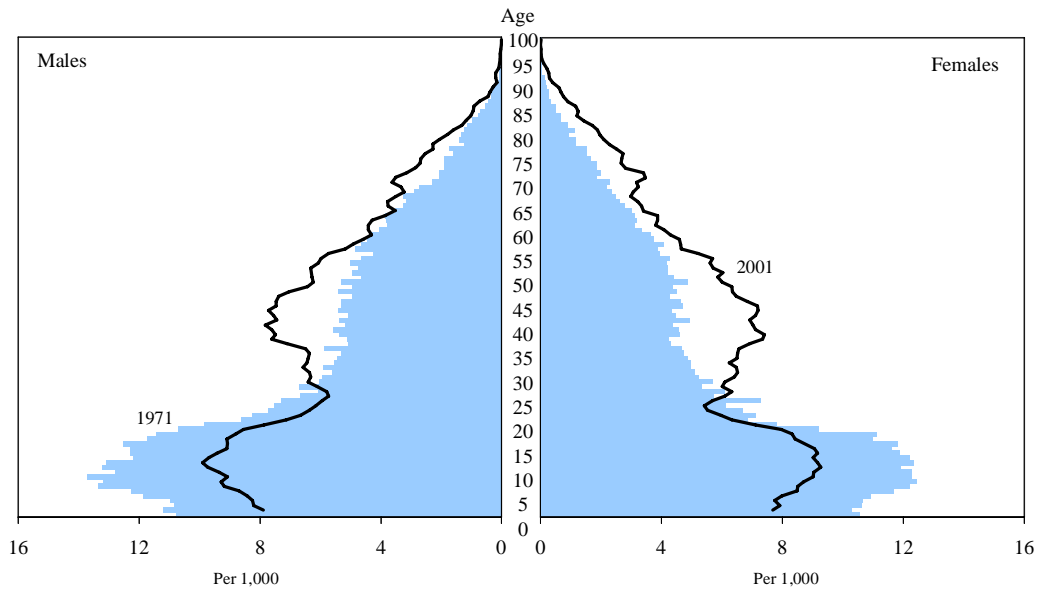
Sources:
Statistics Canada, 1971 and 2001 censuses.

Figure A.1

Population age pyramids for each region across the urban-to-rural gradient, Canada, 1971 and 2001 - end



7 – Rural regions of weak MIZ



8 – Rural regions of no MIZ

Sources:

Statistics Canada, 1971 and 2001 censuses.