

Population Change and Public Policy

Concept Paper for a SSHRC Strategic Research Cluster

Executive Summary

The proposal is to create a cluster to study the challenges posed by demographic change in advanced industrial societies with a specific focus on Canada. Researchers associated with the cluster will focus on understanding the evolving demographics of Canadian society, and the implications of population change, for economic and social policy.

Virtually all wealthy societies are now experiencing slow population growth while several are already experiencing population decline. Immigration is coming to play an increasingly important role in many of these societies. As a result, populations are both aging and become more ethnically diverse. Moreover, the growing importance of migration means that some regions will continue to grow while others may face significant decline. Among the key questions scholars from the cluster will address are:

- How will the changing age composition of our population affect the labour market, productivity and competitiveness?
- Will an aging population threaten our ability to sustain a high standard of living and an effective social safety net?
- How are patterns of both internal and international migration influencing the demographic make-up of Canadian communities?
- Will increasing ethnic diversity strengthen our ability to compete in a globalized economy?
- Will diversity increase inequality and threaten social cohesion?
- What challenges are presented by the trends and disparities in mortality and health status for current social policies and institutions?
- How will regions and communities with low fertility and limited immigration adapt to aging populations and possible demographic decline?

The proposed cluster will fill a significant void in Canadian social science research. Although demographic questions receive attention from scholars in many disciplines, no agency or research community is responsible for examining the changing nature of our population, the inter-relations among demographic variables, and the implications for the evolving society. These trends are posing challenges for economies and social policies that were developed when populations were growing and the elderly component was modest in size. Besides seeking to explain the nature of the demographic challenges and their consequences for modern societies, the cluster will engage discussions on policy alternatives, with stakeholders and the broader public

The proposed virtual network will establish research priorities with stakeholder involvement, conduct research, and disseminate results to a broader public through face-to-face workshops and conferences, in print and electronic media.

I. The Research

A. Importance of Studying Population Change

Canada's demographic situation presents many similarities to the situation in other advanced industrial societies. Like Canada, all of Europe, Australia, and Japan now experience fertility rates below replacement. Yet Japan, most European societies and now Australia, have been less open to immigration than Canada and the United States. The U.S., on the other hand, has significantly higher fertility than Canada and is now the only advanced society in which fertility is at replacement level. Thus, there is much to be learned by examining the Canadian situation in the appropriate international context, paying due attention to the common forces that are leading to slow growth and population aging while also examining the unique features of the Canadian context. Moreover, a focus on demographic change and its consequences must examine how the impact of demographic change is mediated by other social trends and institutions ranging from family change to the education system and the macro-economy.

As seen at the time of the releases from the 2001 Census, there is a strong public appetite for more knowledge on the evolving demographics and their implications. When the initial population counts were released, there was concern that the population would stop growing, with the *Globe and Mail* using the headline of "Canada's population still growing, but for how long?" The geographic distribution released at the time indicated that growth was largely concentrated in four large urban areas; the provinces that did not include one of these areas either declined or increased by at most one percent over the previous five years. When the age and sex data were released, concerns were immediately raised about labour shortages, and Prime Minister Chrétien called for higher immigration to ensure sufficient labour. The data by immigration status brought concern about the economic integration of recent immigrants, while the language data raised issues concerning the relative strength of the French language compared to third languages in the country.

These scenarios from the 2001 Census are very different from those of the 1961 Census, which was the effective knowledge base for establishing Canada's major social programs. At that time, there was particular concern about the significant pocket of poverty represented by the elderly, and much confidence that, with rising incomes among taxpayers, the anticipated increases in the labour force, and the relatively small population of elderly, the country could well afford pension and health programs that would especially benefit this disadvantaged population. This was also a time when gender models largely assumed breadwinner families, and where marriages were assumed to be stable. The Bilingualism and Biculturalism Commission was reporting that persons with French mother tongue had significant income disadvantages, and it was anticipating a future where other provinces besides New Brunswick would have sufficient numbers of French speakers to justify bilingual status. Recent immigrants, on the other hand, were doing well, and by the time of the 1971 Census almost all of the age-sex cohorts of post-war (1946-60) immigrants had exceeded the average income of the Canadian born population (Richmond and Kalbach, 1980).

When low fertility started, issues of aging and eventual population decline were not seen to be particularly significant, partly because they were long term questions. In *Population aging in*

Canada, McDaniel (1986) tended to paint a favourable picture to population aging. In part, she observed that the causes of aging are “good” things, like people being able to control their childbearing, more diversified opportunities for women, and people living longer. At first, population aging was occurring “at the bottom” in the sense that there were fewer young people. The smaller number of children made the population older but there was the advantage of fewer young dependents, which was liberating for adults. We have since experienced “aging at the middle” as the baby boom has moved up in ages, but this has been experienced as a “demographic bonus” because it meant a large proportion of the population at labour force ages. Especially after 2011, we will experience “aging at the top” which will mean fewer people at typical ages to be in the labour force, and eventually significant numbers of frail elderly, and persons in their last years of life where medical and dependency costs can be high.

Other long term changes could have different implications in the future compared to the past. In a discussion of changes in mortality, fertility and migration over the century, Livi-Bacci (2000) proposes that past demographic change has benefited human resources, but this is less likely to be the case for the future. Low fertility liberated adults to be in the labour force, but eventually it means fewer persons at ages to enter the labour force. The decline in mortality first affected young persons, and thus reduced the wastage of human resources, while the main beneficiaries of more recent improvements in mortality are beyond labour force ages. Migration re-allocates resources to areas of greater need, but eventually there can be concern about population size and inefficiencies in the largest metropolitan areas.

Writing in *Science* on “Europe’s population at a turning point,” Lutz and his colleagues (2003) see the concerns of aging and population decline as including challenges to social security and health systems, harder productivity gains, strains on relations among generations who are contributors or beneficiaries of public pension programs, and diminished social cohesion if societies have difficulty incorporating larger numbers of immigrants. Consequently, the policy discussions surrounding aging include structural adjustments not only to pension systems, but to labour markets and health and fiscal systems.

B. Policy challenges

The policy challenges that arise in the face of demographic change can be seen as falling in two categories: first, policies that seek to influence the course of demographic events, and second, policy adjustments that are necessary in various areas because of the implications of population change. To date, the first set of issues has received rather little attention. While immigration policies have long been a focus of interest, both academics and policymakers have largely ignored issues of low fertility. There is renewed interest of late, however; sociologists, demographers, and economists have begun to look not only at traditional approaches such as financial assistance to families but questions related to the organization of work, the balance between work and family obligations, and the gendered nature of housework and childcare.

Ultimately, investments in children and parenting provide long-term security for the society. Investments in young families can take a variety of forms, from family-friendly work environments and better funding of parental leave, to opportunities for part-time work with good benefits, publicly funded child care, higher child-tax benefits and more provisions for lone-

parent families. Policy discussions about aging should address structural adjustments to pension systems, as well as to labour markets, and health and fiscal systems. These adjustments will require concerted efforts, especially as aging societies tend to pay particular attention to the aged. Without sustained attention to the issues faced by young families, society's potential for reproduction may be undermined. As the current demographic bonus disappears, it is vital to recognize that investments in the early stages of life help to ensure the long-term welfare of society as a whole.

Canada is in a unique situation with a set of policies for the admission and integration of immigrants. Some observers see Canada on the forefront of a post-modern world in terms of its openness to pluralism and multi-culturalism. Although immigration contributes positively to Canadian society, there may be excessive proneness to thinking of immigration as the solution to demographic and economic questions (Green and Green, 1999). Immigration accentuates the inequality in the geographic distribution of population, and does little to help the areas that are not growing. For a multitude of reasons, including possibly the size of immigrant cohorts and the importance of the service sector in the economy, recent immigrants are having significant difficulties of economic integration. In comparison, the immigrants of the immediate post-war period had the advantage of following a period of lower immigration, and they were coming into a rapidly growing economy (Massey, 1995).

Given that demographic processes are fundamental to societies and their regeneration, a number of issues arise (Demeny, 1988). How many new members are to be added and by what means (through births or immigration)? How are the costs of these additions to be paid, and who receives the benefits? How should the costs and benefits of children be absorbed by the families to which they are born, the larger extended family, the community, and the society as a whole? How are the costs and benefits of immigration to be distributed between, on the one hand, the immigrants themselves and their sponsoring families and, on the other hand, the receiving country, province, city, and community? To what extent are health and safety the responsibility of the individual or the surrounding society? Population aging can bring conflicts of interest between the younger and older segments of the population. How does the society accommodate itself to an aging population, in terms of regenerating the labour force, pensions, and health care, while ensuring that inter-generational transfers do not disadvantage the young?

Compared to the situation in the 1960s when Canada's major social programs were being established, there are major changes in the population groups most subject to disadvantage, and in the potential for dependents to be supported through families. The population groups showing significant disadvantages are less often the elderly and persons of French mother tongue, but more often persons in lone-parent families and recent immigrants. The inequality by gender has declined, though it remains significant, and persons of Aboriginal origins remain significantly disadvantaged.

The situation is also changing considerably with regard to labour market questions. As the baby boom, and women, entered the labour market, there was no shortage of supply. However, these were one-time phenomena that cannot be repeated. With labour supply no longer as abundant, the Canadian Occupational Projection System produces results that expect the situation to change to a situation of shortage in some ten years, with shortages in specific occupations in the short-

term (Halliwell, 2004). The slower growing labour force implies a need to maximize the human resource potential of all elements of the population.

C. Major Areas of Research

The objective is to study the determinants and dynamics of population change and the associated consequences for the collective destiny of Canadian society. The four following broad areas are envisioned as a means to demarcate the research. These major areas leave open diverse links to social and economic forces and outcomes that will arise in specific research. At the same time, many issues cut across areas. For instance, discussions of immigration include not only the economic integration of immigrants, geographic distribution and population composition, but also the composition of the immigrant stream by economic, family and refugee classes, the impact of immigration on the economy and the growth dynamics of the population, where “replacement migration” is often used as a concept. Population aging is another cross-cutting topic, which includes factors associated with youth, the labour force and retirement, including discussions on the relative priority of various policy sectors (health vs. education) but also pension funding and productivity. In terms of frameworks for analysis, the life course perspective provides another unifying dimension.

1. Low fertility in the context of changing family and work obligations

It is important to understand why fertility is lower (or higher) in given societies or settings. Is low fertility inevitable in modern societies? Why are men and women unable to achieve the number of children they desire? Why is a rising proportion of men and women remaining childless? How do the new forms of family life affect fertility and the socialization of children? Fertility needs to be related to determinants at the individual, family and societal levels. Differential fertility is also relevant to the changing population composition, including the relative growth of the Aboriginal population and the visible minority component.

Gender needs to be a significant part of discussions on childbearing. Lapierre-Adamcyk and Lussier (2003: 100) observe succinctly that “la redéfinition du rôle des femmes, qui inclut, en plus de celui d’épouse et de mère, celui de productrice participant au marché du travail, modifie la valeur de l’enfant et la replace dans l’éventail des possibilités de contribution à la vie de la société.” The significant differences in the timing of first births between women in teaching as compared to business or law suggest that occupations provide different amounts of flexibility to accommodate family roles (Ranson, 1998). It may also be that there are different orientations across women: *family-centered* women will have children in any case, *career-centered* women will have few if any children, and *dual-role* women will have children if the circumstances are correct; the latter are more likely to be responsive to the development of “women-friendly” policies (Esping-Anderson, 2001: 52-53; Hakim, 2003).

Several topics regarding reproduction need to be related to questions of economic production and the changing nature of work. To what extent is the postponement of fertility due to difficulty in finding a decent job? To what extent are difficulties in balancing work and family linked to low fertility? Would the creation of more “family-friendly” policies in the work world lead to a rise in fertility? Do traditional family systems based on role specialization lead to lower fertility? Is

greater equality between men and women leading to higher level of fertility? Does a more equitable sharing of household tasks lead to a fertility rate closer to replacement? For instance, McDonald (2000) proposes that fertility is particularly low when there is more gender equity in the broader society than in families. Using data from the United States, Torr and Short (2004) find a u-shaped relationship - both the most modern and the most traditional housework arrangements are positively related to the likelihood of a second birth.

Other topics need further analysis in terms of new conjugal and family forms, besides their influence on the dynamics of fertility at the individual and societal levels. This includes questions relating to how different kinds of families function, make decisions and achieve economic well-being. Family composition and family histories have important repercussions on the organization of day-to-day life and well-being of individuals, including transfers and exchanges within and across households. The de-institutionalization of conjugal and family life raises important legal and social issues in terms of the rights and responsibilities of partners at separation and of parents toward children (Le Bourdais and Lapierre-Adamcyk, 2004). These changing family dynamics have long-term implications regarding support and exchanges across generations, and they pose challenges for welfare state economies and policies. Family functions are changing not only in terms of caring for children, but also caring for elderly, earning and community participation.

Especially when considering the potential effects of policy, comparisons across societies and over time are particularly important (Gauthier, 1996). After considering the policy context of fertility in five countries (France, Germany, Poland, Spain and Sweden), Grant et al. (2004) propose that government policies can slow declines in fertility rates, but that no single policy works, and the effects take place slowly. This Rand publication also proposes that “policies indirectly aimed at fertility which target improvements in broader conditions may have beneficial fertility effects” (idem, p. xiv). In a broad ethical context, Henripin (1989: 123) proposes that true individual freedom occurs when the state both supports contraception and has policies favouring fertility: “en matière de procréation, ne pourrait-on pas définir comme société vraiment libre, celle qui permet à ses membres d’avoir des enfants s’ils le souhaitent et de ne pas en avoir s’ils n’en veulent pas?” A pro-family policy would probably include fiscal structures that take into account the number of dependent children when taxation is used to redistribute across families and individuals.

2. Immigration, internal migration, and distribution of Canada’s population

Both international and internal migrations are accentuating specific places of destination, and consequently there are considerable discrepancies in population growth over space. Visible minorities are particularly concentrated in the three metropolitan areas of Toronto, Vancouver and Montreal. Population growth is concentrated in large urban areas, while provinces or regions outside of these areas have very little population growth, or population decline. The spatial divide includes differences by ethnicity, age and socio-economic status. Areas that involve more departures than arrivals are typically older in age structure, smaller communities, less prosperous, and they may arrive at populations that are not sustainable in terms of jobs and the services needed for aging populations.

The patterns and prospects of international migration need to be placed in the context of historical and ongoing actions of both receiving and sending countries (Massey and Taylor, 2004). Both the pre-WWI and the post-WWII immigration waves are linked to periods of greater globalization. These global patterns are creating world-class urban regions, market penetration in the periphery, mobile populations and need for foreign workers in the global cities (Massey et al., 1993). Following dual labour market theory, capital seeks to use foreign labour to fill the variable portion of demand in the secondary labour market. By calling for the admission of higher numbers of persons in the economic class, capital creates more competition. The non-recognition of credentials can help to maximize profits from the labour of skilled immigrants.

If economic questions are at the origin of migration patterns, social questions play important roles in the perpetuation of the movement (Massey et al., 1993; Boyd, 1989). Migrants are linked by family and other networks, and various institutions including intermediaries and humanitarian organizations play roles in terms of information, assistance and the accumulation of social capital. These forms of social capital may also relate to family strategies associated with home leaving and care of dependents.

These international contexts need to be part of discussions on the dominance of given cities and on the opportunity structures of immigrants. At the same time, we can ask if there are means to attenuate the dominance of Toronto, Montreal and Vancouver. Will Canada see greater growth in its secondary cities as has occurred recently in the United States? What social, economic, and demographic factors determine whether immigrants remain or move away from the large metropolitan areas of Canada in favour of smaller cities (Trovato, 1988)? What happens to immigrants who go to smaller places? Is it possible to maintain the quality of social networks based on smaller sized locations (Bezanson, 2003). More research and public dissemination of research results on these questions could help in decisions both for individual migrants and for host communities.

There are other important issues to discuss. How does population distribution relate to other disparities across regions and the potential for economic segregation, political cohesion, and differential policy needs? To what extent are regional trends in employment shaping and being shaped by immigration and internal migration (Statistics Canada, 2004)? Immigration brings not only differential growth over space but also differences in terms of population composition, especially by visible minority status. To what extent are the opportunity structures of immigrants affected by the relative numbers of arrivals. Can we assess the sustainability of a continuation over the long term of past levels of immigration?

Issues relating to immigration also include multi-culturalism and equal opportunity for visible minorities. It is important to know the extent to which the immigrant class (economic, family, refugee) continues to play roles in opportunities after longer periods of residence. Further studies are needed in regard to the disadvantaged opportunity structures of the more recent cohorts of immigrants (Picot, 2004). The study of second and third generation visible minorities provides other means to analyse the associated opportunity structures (Boyd, 2002).

There are clearly a number of implications of urbanization and population redistribution. For instance, population distribution, redistribution and urbanization also need to consider issues of

climate change and the physical environment. In Quebec, immigration not only plays to the advantage of the one region of Montreal, but immigrants also associate less with the majority language and they are more likely to leave the province. The implications of these demographic trends include the greater growth of Ontario compared to Quebec within the federation.

3. *Labour force, aging, and life-course flexibility*

In summarizing “Europe’s demographic challenge,” the Rand publication on *Low Fertility and Population Ageing* (Grant et al., 2004: xiii) proposes that demographic trends could have the following potentially damaging consequences: the decline of working-age populations brings reductions in human capital “which potentially reduces productivity,” the pension and social insurance systems “can become heavily burdened,” declines in household size can reduce “the ability to care for the growing elderly population,” and the elderly “face sharply increased health care needs and costs.” Others have questioned some of these implications and have suggested that this “crisis orientation” seeks to undermine the political support for social security systems (see Gutman and Gee, 2000, Mullan 2000, Schultz 1999, Townson, 2001). An appraisal by the Applied Research Analysis Directorate at Health Canada (2004) concludes that the age-related increases in expenditure are small relative to other financial pressures on the health system.

In the theme of “Population aging and life-course flexibility,” the Policy Research Initiative (2004a; Hicks, 2003a) has especially emphasized flexibility in labour force involvement as a means to allow for work/life balance, reproduction, caring, and the extension of the work life. The element of “choice” is highlighted in this proposition, including periods of withdrawal or partial withdrawal from the labour force and choice in the retirement decision. From focus group discussions, it appears that people would consider working longer at a job that they enjoy, assuming that their health was adequate and there was possibility of working flexible or part-time hours (Policy Research Initiative, 2004c). It was concluded that encouraging people to remain in the labour force later in life, in exchange for work-family life flexibility earlier in life, was viewed more positively if it was presented as a means of “giving Canadians greater choice and helping them to achieve their career and life goals.” Besides the problem that many people do not seem to like their job, the challenge is seen as making job opportunities available to older workers and to ensure that they continue to have the necessary skills (Hicks, 2003b). Surveys of older workers indicate that the majority want gradual or transitional retirement (Gendron, 1997). Other relevant factors include the retirement incentives associated with benefit programs (Gruber and Wise, 2004). International comparisons indicate that retirement is earlier when the minimum age for entitlement to pension benefits is lower, when the value of pensions is higher, when there are fewer pension benefits from additional years of work, and when disability pensions are available below the normal retirement age (Gruber and Wise, 1997).

Other factors predict an increase in labour force participation at older ages, including rising levels of education and a greater share of workers in professional occupations (see Judy and D’Amico 1997). Sunter (2001) expects the labour market attachment of women to strengthen along with their continued investment in education, as younger cohorts replace older generations with less labour market attachment (see also McDaniel, 2002, OECD, 1996). The portion of the life cycle devoted to paid employment has been decreasing throughout the 20th century, especially in the last quarter (Sunter and Morissette 1994). Demand factors also play an important

role, with the labour force participation rate increasing at ages 55-69, after a long period of decline (Cross, 2005). The change since 1996 is remarkable, bringing the 2004 participation rate at ages 55-69 significantly above the 1976 level, partly because it includes more women.

While we consider the flexibility and choice that would enable a later exit from working life, it is important to also appreciate the difficulties experienced by new entrants to the labour force, including recent immigrants (Morissette, 2005). The lower wages of entry level workers is driving the income inequality. There are many pressures that are affecting the ability of the younger generation to make successful transitions from school to work (Beaujot, 2004). Also there is less lifetime employment at one workplace, less stability in careers and more contract or contingent work (Krahn, 1995). These changes in career patterns, employment patterns and educational requirements have increased the difficulties of the younger generation in making successful transitions to adult status, enduring relationships and reproduction.

Another important question regards the extent to which productivity growth will be influenced by the changing age composition of the labour force. There is need for more research on the variability across individuals in their productivity patterns over the life course. In *Aging and Demographic Change in the Canadian Context*, Prager (2002) proposes that the trend to life-long learning and more variable career patterns, along with higher proportions of white-collar workers, will allow for continued productivity growth. There will also be less inexperienced workers entering the workplace with the associated low productivity. However, at some point, many experience a decline in productivity. In their analysis of the period 1955-85, Lapierre-Adamcyk et al. (1988) found that the productivity gains had been associated with a more educated, younger, and less male-dominant labour force. In comparison to younger workers, older workers are highly paid in relation to their productivity, thus an older labour force increases the costs of labour.

The analysis of income inequality indicates that Canada largely did not experience the rising income inequality that was seen in the United States and the United Kingdom through the 1980s and early 1990s. However, over the period of the 1990s, the “gains associated with economic expansion in Canada went mainly to higher income families” (Picot and Myles, 2005). Earnings inequalities of couples by level of education have increased over the period 1980-2000 (Morissette, 2004). Other differentials have remained stable. The relationship between parental income and post-secondary participation has persisted over the period 1993-2001, but the participation gap has not increased across family income levels (Frenette, 2005)

There is need for more analyses of these questions of the demographics of the labour force, including questions of change in the supply and demand for labour, regional differences, the influence of age structure on the opportunities of given generations, and labour force renewal. These analyses need to include the entire population aged 15 and over, rather than only those who are in the labour force. For instance, the growth of non-standard work should take into account the fact that there has also been an increase in the proportion of the population that is employed. That is, there is an increase in non-standard work among workers, but does this translate into an increase of non-standard work in the population. Morissette (2005) finds little evidence that well paid jobs have been disappearing in Canada over the period 1981-2004. An OECD study considers the variation across countries in the average yearly hours worked per

capita (that is dividing total hours worked by the total population size). There is remarkable variation in these average hours worked, from some 900 hours per year in Canada, Australia and the United States to figures between 600 and 800 in France, Germany, Denmark and Britain (OECD, 2004: 5). It would seem that average hours are somewhat related to levels of unemployment, productivity and average standards of living, but they are especially related to questions of work/life balance.

4. Mortality, morbidity, and the changing nature of the elderly population

The leading trends in mortality and morbidity have seen continued increases in life expectancy, but also considerable inequality, and substantial numbers of people living with disabilities. Although the rate of mortality decline has slowed compared to the earlier part of the 20th century, life expectancy has never stopped increasing (Bourbeau and Smuga, 2003). Along with the decrease in fertility, the decrease in mortality contributes to the aging of the population. The oldest-old are the fastest growing segment of the population, and this trend will continue into the near and more distant future. There are alternate views on the ultimate potential to extend life expectancy. Some see a continued rise to reach 100 years in 2060 (Oeppen and Vaupel, 2002), while others envisage that it would be difficult to go beyond age 85 unless the aging process itself were to be modified (Olshansky et al., 2001). Nonetheless, it is important to appreciate that past projections of mortality improvements in Canada have been under-estimates, and that significant gains beyond those anticipated would have important repercussions on public pension and social security systems (Bourbeau et al., 2005).

Other important trends include the compression of mortality and the rectangularization of the survival curves, as more deaths occur within a shorter age range. These trends, along with the trends in disability and morbidity by age, bring a changed composition of the elderly population over cohorts. In effect, the elderly of tomorrow will be different from the elderly of yesterday.

There remain very significant mortality inequalities associated with sex, socioeconomic status, region and religious or ethnic groups (Trovato and Lalu, 2001; Trovato, 2001, 2000). The difference by sex is declining, but it is clear that social factors play a larger role than biological factors because the elimination of the effects of tobacco and accidents would make the rates equal (Trovato and Lalu, 1995, 1996; Waldron, 1986; 2000). Comparisons over urban regions indicate considerable disparity (Choinière et al., 2003; Wilkins et al., 2002; Gilmour and Gentleman, 1999). The differences over space do not always disappear after controls for individual-level determinants (Ross, 2004). The differences by socio-economic status, and the specific case of the Aboriginal population, are the most alarming, especially in the context of socialized medicine which was to give all persons equal access to the health system. What challenges are presented by the trends and disparities in mortality and health status for current social policies and institutions? What are the health needs of various parts of the population, especially the Aboriginal population and other disadvantaged groups?

Another concern regards the number of years lived with disabilities. In 1996, there was an 11 year difference for women and 8.5 year difference for men between life expectancy and the expected years lived without disabilities. In some cases, this raises questions regarding the pertinence of saving lives at all costs (Légaré and Carrière, 1999). While these questions of

disability clearly affect the costs of health and care, the rising costs of health care are less related to aging and more related to the number of deaths, since a large proportion of health care costs are spent during the last months of life (Légaré et al., forthcoming). The total costs of health, including home care and long-term care services are expected to rise as the baby boom generations enter older ages. The costs of caring and associated social services are expected to rise more than the health costs of curing (Légaré, 2005). This also raises questions of the mix of formal and informal care, along with the possibilities of informal care in the context of family change. While most projections expect increases in life expectancy, there could be unexpected diseases, or conditions that would have an opposite effect. This could relate to obesity, which has increased from 32 to 47 percent of persons aged 15 and over between 1985 and 1998-99 (Statistics Canada, 1999). Other consequences are far from being established, including environmental hazards such as radiation, pollution and the green house effect.

Among the policy issues, the question of “care vs. cure” is an important consideration: should priority be given to home care and palliative, or should the focus be on interventions and treatments? Given the unequal size of generations, and especially the smaller size of current generations, questions can be raised regarding the appropriateness of pay-as-you-go as the only means of funding health and care (Légaré et al., forthcoming). This could be an argument for reducing the public debt over the next ten years when there is a maximum proportion of the population at ages to be in the labour force. But the most significant issue is probably that of health inequalities by gender and socio-economic status, especially if demographic, economic and family trends produce a more stratified society. It would appear, for instance, that, compared to the first demographic transition, the second demographic transition, especially through the diversification across families, is promoting greater inequalities in the population (Lesthaeghe and Neels, 2002).

D. Cross-cutting themes

The life course as a framework of analysis is envisioned for the four above themes. The life course approach, which disentangles the age, cohort and period effects, is at the heart and one of the strengths of the demographic approach. This approach is necessary if we are to understand the determinants of demographic change and to grasp the consequences of these changes, both at the individual and societal levels. For fertility, the determinants are different not only for given stages of the life course, but also by parity. For migration, the immigration cohort, along with period of arrival and age, are key to understanding integration. The differential levels of mortality and morbidity across generations are central to appreciating the changing nature of the elderly population. The Policy Research Initiative (2004b) proposes that, by linking to the various institutions over the life course, this approach provides a particularly useful framework for social policy analysis, including the analysis of the extent to which institutions help in making the transitions. The PRI further proposes that this approach be used for analysing future policy needs, pressures and opportunities in the following areas: “population aging and life course flexibility pressures; skills and human capital pressures and opportunities; the problem of persistent poverty; spatial issues; and precarious work and precarious families” (idem., p. 33).

Each of the four major areas of research will include the cross-cutting themes of equity and cohesion. This includes two themes proposed by the Policy Research Initiative (2004b: 27): an equal society, and a diverse but cohesive society. Population change can affect equity and cohesion, over generations, over space, by gender, and across other population groups. The value added of this cluster is to consider the demographic dimensions of inequality and solidarity, by focussing on micro questions associated with individuals over the life course, and macro questions of population size, growth, distribution and composition. The demographic approach also has the advantage of considering all parts of the population.

Inter-generational equity can be affected by the differential treatment of cohorts in terms of paying the contributions and receiving benefits from the Canada Pension Plan. This inter-generational equity is also affected by the delayed life course transitions, which highlights the importance of post-reproductive productivity. That is, the concept of inter-generational equity needs to include the prospects of a generative culture within an aging society, by considering how persons in the post-reproductive and elderly stages of life support children and reproduction.

The differential growth of various parts of the country, with their differential histories and population compositions, can affect disparity and solidarity over *space*. For instance, in its report on *The Canadian Labour Market at a Glance*, Statistics Canada (2004) observes that regional and sectoral trends in employment are both shaping and being shaped by immigration and internal migration.

Similarly, equity and solidarity across *gender* is affected by the changed understandings regarding intimate relationships and the market work of men and women over the life course. Alternate models of the division of paid and unpaid work are central to these differentials by gender (Beaujot, 2000; Beaujot and Liu, 2005).

Equity over *population groups* is affected by their differential growth, along with their unique features of geographic distribution, opportunity structures and potentials for integration. How are opportunities to be maximized while maintaining cultural differences? How to ensure both cohesion of the whole society and distinctiveness of sub-populations? In the case of the Aboriginal population, questions of equity need to be analyzed in relation to the differential demographics of mortality, fertility and internal migration.

E. The path ahead

In an article focussing on Australia, McNicoll (1995) observes that there are various impediments to population policy in liberal democracies. Besides the lack of a political basis for long-term planning, the emphasis on individual welfare, the lack of attention to scale and the difficulty of considering questions of the environment, there is also a tendency for “government to see its constituency only in terms of organized groups and its role that of arbitrating competing claims.” It would appear that the interests of organized groups relate less to the population as a whole, than to specific concerns like those of family, feminism, environment, health, multiculturalism or refugees. That is, the potential constituents to a discussion of population and policy are often absorbed in distinct political domains and they are consequently responsive to separate rather than common interests (Beaujot, 2005). Yet the collective side of population

cannot be ignored; at stake are the long-term interests of the society, including its very reproduction and the diversity that it manages to incorporate. Such is the challenge of this cluster: *While various agencies have continued interests in various aspects of population, be it in terms of labour, immigration, health, social development, education, pensions, family or citizenship, no agency considers the overall macro situation of population change and its implications.*

Clearly, the associated research needs to take into account micro-level determinants, since it is individuals who give birth, move and die. This research on determinants needs to be based on theoretical models and appropriate data, especially data that permit a life course perspective. The analysis of determinants, at the micro, meso and macro levels, will permit theoretically and empirically based understanding of the potential for policy intervention. Many specific concerns also need to be analysed at both the micro and macro level, such as disparities in fertility, health or migration.

Science is more adapted to the study of determinants than consequences. The study of consequences and implications often involves modelling the change, as well as comparisons over history or across societies. International comparisons based on similar data have been sponsored by various agencies, and the cluster will continue to be involved in this research. Properly constructed historical comparisons can be used to study consequences at the macro-level. There is also the potential for comparisons across the regions of Canada, where common elements but also differential demographic dynamics and policy differences provide elements of a quasi-experimental setting. Some of the modelling can be done with population projections, while other approaches use more detailed simulations based on life course transitions at the micro-level (e.g. LifePaths). Basic demographic projections can further incorporate macro phenomena that are linked to population. For instance, in looking at the future labour force in sixteen countries, McDonald and Kippen (2001) manipulate data not only on fertility and immigration, but on labour force entry and departure, to show that bringing male labour-force participation rates back to the levels of 1970, and bringing women's rates closer to those of Sweden, would increase the total Canadian labour force by 25 percent. As another example, arguing that the anticipated increase in pension expenditures is unsustainable in the seven countries under investigation, Bongaarts (2004) manipulates various demographic rates and ratios to observe that a reduction in pension expenditures can be achieved through one or more of the following: fertility, immigration, employment ratio, mean age at retirement, and pension benefit rates. In Canada, Denton et al. (2001) have included not only projections of population, but also labour force, as well as pension, health and education costs. Romaniuc (2005) uses models of stationary population as a theoretical concept through which we might look at a vision for the future and possible policy options.

The cluster will seek to better understand the determinants or processes of population change, and it will promote research and discussion on the implications that may be linked to population change. By providing a deep contextual look at the determinants and consequences of population change, and through systematic interactions with stakeholders and the broader public, the cluster will help provide the context for important policy discussions on the future of Canada.

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