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CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
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Exercise NEW HORIZONS

**IS THE SKY FALLING ON CANADA?
A COMPARATIVE ANALYSIS WITH POLITICAL, MILITARY AND ECONOMIC
IMPLICATIONS OF CANADA'S IMPENDING DEMOGRAPHIC TRANSITION**

By /par

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Abstract

The world's most highly developed nations are experiencing a demographic transition: people are living longer and family sizes are getting smaller. This paper analyzes and compares Canada's demographic status with other Group of Eight (G8) countries and seeks to highlight some of the national security, economic and public policy implications of the impending demographic transition.

Canada is better positioned than most of the world's leading nations to successfully navigate the demographic time-bomb. Canada is performing well economically and its demographic shape is better than most nations. Public policy initiatives are being implemented to increase labour market participation to ensure there are sufficient workers to match growing employment opportunities. Provided recruiting and retention policies adjust to the new demographic and economic realities, Canada is arguably in a better position than most G8 nations to continue fielding forces to meet its defence commitments and maintain its security posture and national influence abroad.

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IS THE SKY FALLING ON CANADA? A COMPARATIVE ANALYSIS WITH POLITICAL, MILITARY AND ECONOMIC IMPLICATIONS OF CANADA'S IMPENDING DEMOGRAPHIC TRANSITION

According to the most recent population projections, the proportion of seniors in the Canadian population could nearly double in the next 25 years, while the proportion of children is expected to continue falling. ***If these demographic changes occur, they will have a major impact*** on the labour force, on public pension and health insurance plans and, in general, on the Canadian economy and society.¹ – Statistics Canada, 2006 Census

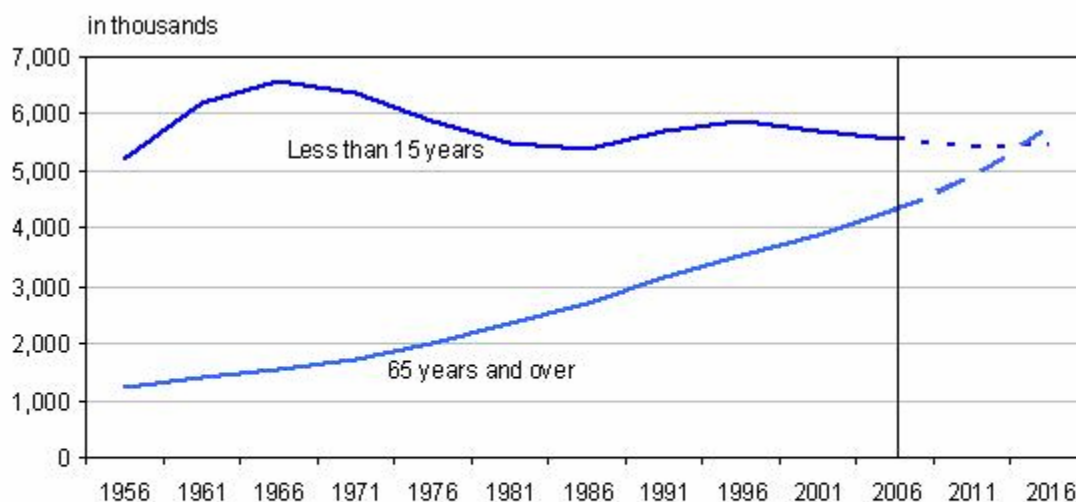
Canada's 2006 Census has highlighted the fact that, by 2016, the number of the population over 65 years of age will surpass the number of the population under 15 years. ***This will have a serious impact*** on recruiting, not only for the CF but also for the private sector labour force. This can also be expected to impact the tax base and government funding priorities.² – Directorate Future Security Analysis, NDHQ, Ottawa, 2007.

Following the release of the 2006 Canadian Census data, the Department of National Defence's Directorate of Future Security Analysis (DFSA) identified the potential lack of available Canadian Forces personnel as a future security threat. This threat is not new, however, the 2006 Census data highlights that the problem is deepening. Two leading demographic indicators of particular concern are: first, the proportion of citizens above 65 years of age has now reached 13.7%, the highest in Canadian history; second, the number of persons 15 years and below has now dropped to 17.7 %, the lowest in Canadian history. Both of these trends are forecast to continue in their respective directions as shown in **Figure 1** below.

¹ Statistics Canada, *Portrait of the Canadian Population in 2006, by Age and Sex, 2006 Census* (Ottawa: Minister of Industry, July 2007), 7.

² Canadian Forces College, "JCSP 34 Research Symposium Topic List" (JSCP 34, 10 September 2007), 29.

Figure 1 – 2006 Canadian Census – Under 15 vs. Over 65 Population



Sources: Statistics Canada, censuses of population, 1956 to 2006; and Alain Bélanger, Laurent Martel and Éric Caron-Malenfant. 2005. *Population Projections for Canada, Provinces and Territories 2005-2031*, Statistics Canada Catalogue no. 91-520, scenario 3.

Most highly developed nations, including Canada, are in the midst of a “demographic transition”³ which is largely due to the combination of decreased fertility rates and increased life expectancy, as well as the impacts of “demographic bulges” from the Baby Boom.

Modernization has brought smaller family sizes as a result of birth control, increased standards of living, and more concentrated investment in fewer children. Canada’s current fertility rate of 1.5 births per woman is far from the value of 2.1 needed to replace its dying population.⁴

³ Elizabeth Leahy, “The Shape of Things to Come,” *Population Action International*, (March 2007); available from http://www.populationaction.org/publications/Reports/The_Shape_of_Things_to_Come/SOTC.pdf; Internet; accessed 7 January 2008, 81. Demographic Transition is defined as “the transformation of a population characterized by large families and short lives into a population of small families and long lives.”

⁴ Robert Engelman and Elizabeth Leahy. “Replacement Fertility: Not Constant, Not 2.1, but Varying with the Survival of Girls and Young Women,” *Population Action International Research Commentary*, Volume 1, Issue 4 (April 3, 2006); available from http://www.populationaction.org/Publications/Research_Commentaries/Replacement_Fertility_Not_Constant/Summary.shtml Internet; accessed 7 April 2008. The authors note that replacement fertility rate varies greatly from developed to non-developed countries. For Canada, the rate is about 2.1.

Statistics Canada's (StatsCan) concern stemming from the 2006 Census is that a large elderly population implies a smaller percentage of working taxpayers to fund burgeoning health care budgets. Meanwhile, a smaller youth population will render fewer available workers to satisfy labour market demands. Understandably, the DFSA has applied these concerns to the CF and concluded that "serious impacts" may lie ahead. There will be less tax revenues available for federal departments, such as defence, and increased competition with the Canadian labour force for the CF to recruit skilled workers.

The concerns suggested by StatsCan and DFSA may be alarming. However, demographers frequently caution that conclusions based on their projections should not be hastily reached.⁵ The complex mix of economics, demography, and national security render a large number of variables where the outcome cannot be predicted with simplistic generalisations. Demographers can be guilty of quickly offering hypotheses without fully appreciating other political processes which affect those dynamics. Similarly, experts in international relations can naively make assertions about the impacts of population changes without being aware of the inconclusive debate in economics and demography concerning the relationship between population growth and economic development.⁶

⁵ Op. cit., 81. See also Ronald R. Krebs, and Jack S. Levy, "Demographic Change and the Sources of International Conflict," in *Demography and National Security*, ed. Myron Weiner and Sharon Stanton Russell, 62-105 (New York: Berghahn Books, 2001), 88. Both of these works offer cautions about how strongly inferences may or may not be taken based upon demographic data alone.

⁶ Ronald R. Krebs, and Jack S. Levy, "Demographic Change and the Sources of International Conflict," in *Demography and National Security*, ed. Myron Weiner and Sharon Stanton Russell, 62-105 (New York: Berghahn Books, 2001), 88.

Rather than simply accepting the StatsCan implication that Canada will suffer “major [economic and societal] impacts,” the purpose of this paper is to freshly assess Canada’s demographic status in comparison with the world’s leading nations of the Group of Eight (G8).⁷ Based upon the comparative demographic analysis, the specific implications for Canada will be assessed separately in terms of international influence, national security and the economy.

The thesis of this paper is that the impending demographic transition will not necessarily result in “major impacts” upon Canada’s economy or national security objectives. This multifaceted analysis of Canada’s particular situation indicates that the country is quite healthy demographically relative to the other G8 nations. Consequently, Canada should be able to continue meeting its collective defence commitments with relative ease. Wise government policies concerning labour, employment and taxation should serve to mitigate the demographic impacts on Canada’s economy; effective recruiting and retention policies should allow the Canadian Forces to maintain vital personnel levels.

A Demographic Comparison of Canada with other G8 Countries

Since the end of the Cold War, the influence of demography has been routinely considered in many disciplines, including national security, international conflict, economics, and international relations.⁸ Although academics are well aware that demographic influences

⁷ Wikipedia, “G8,” <http://en.wikipedia.org/wiki/G8>; Internet; accessed 5 April 2008. The G8 was formed in 1975, consisting of USA, UK, France, Germany, Japan, and Italy. Canada joined in 1976 and Russia in 1997.

⁸ Mark J. Miller, “Demography and Security (MIT Center for International Studies, December 11-12, 1998),” *International Migration Review*, Vol 33, No. 1 (Spring 1999): 193-198; <http://www.jstor.org>; Internet; accessed 8 January 2008, 193.

figure prominently in international politics, national security, and economics, “specifying the precise paths through which they might impair national security and contribute to international conflict is another matter.”⁹ Since generalization cannot be confidently asserted, it is proposed that Canada’s demographic situation can be better understood by a comparative analysis against the world’s leading nations of the G8.

Viewing Canada’s demographic situation in the context of the G8 nations is highly valuable for two reasons: the G8 is the vital economic power of the world and represents 65% of the world’s economy;¹⁰ and, the G8 countries constitute the vital military power of the world with seven of them among the world’s top eight military spenders.¹¹ If Canada’s demographic statistics are good, relative to the world’s leading military and economic powers, then this is highly indicative of Canada’s prospects for diplomatic, military, and economic success.¹²

In order to assess Canada’s demographic situation against the G8 countries, raw data was extracted from the US Census Bureau’s International Database (IDB) as well as the UN Population Database. Both these sources are accessible on-line and permit user-queries in order

⁹ Krebs and Levy, *Demographic Change...*, 88.

¹⁰ Wikipedia, “G8,” <http://en.wikipedia.org/wiki/G8>; Internet; accessed 5 April 2008.

¹¹ Global Security, “World Wide Military Expenditures,” <http://www.globalsecurity.org/military/world/spending.htm>; Internet; accessed 8 April 2008. China is in the top 8 countries in terms of military expenditure, whereas Canada, although in the G8 is not also a top 8 country militarily.

¹² Some data for China, India, and Australia was also prepared, but not included in Annexes A through F. Although this present survey is limited to the G8 nations, China and India were considered because of their massive global influence demographically. Although not a G8 nation, Australia’s status was considered due to its similarity with Canada in many respects.

to extract combinations of data for different counties and years of interest.¹³ This has enabled demographic data to be gathered and plotted in the form of tables and graphs, showing Canada in comparison with other developed nations in the following areas: overall demographics (2006-2045), working population and dependency ratio¹⁴ (2006-2045), population growth (2006 – 2045), fertility rates (1975-2045), and net migration rates (1995-2045). The results of this work are presented in Annexes A through F.

Ageing Population. What are the demographic issues and trends that are unique to the most developed nations, including Canada? The alarming news highlighted by the 2006 Census is shown in **Figure 1** and concerns the steady decrease in youth population with the simultaneous increase in retirees. An ageing population is one aspect of the demographic transition that has affected most of the developed world as new norms are being established as a result of smaller family sizes and increased lifespan.

Undoubtedly, this ageing population statistic is a genuine cause for concern because of its potential economic impact. However, Canada is not the only highly developed country with an ageing population. While 2015 is when Canada’s “over 65” population will exceed its “under 15,” this transition has already taken place in Italy (1990), Japan (1997), Germany (1998) and Russia (2006). It is forecast to occur in the UK (2010), France (2015), and the USA (2031).¹⁵

¹³ Both databases contain the latest historical demographic data, as well as predictions, based upon the latest information. Frequently the predictions available are as far ahead as 2045 or 2050.

¹⁴ Leahy, *The Shape of Things to Come...*, 81. Dependency Ratio is defined as “the share of those too young and too old to generally be productive workers relative to the age group comprising those likely to be in productive working years ... often given as ages 15-64.”

¹⁵ See Annex A. Table produced by G.H. Alexander using raw data from the US Census Bureau’s International Database.

Among the G8 countries, the USA and Canada have the lowest percentage of their population currently above 65 years, at 12.5% and 13.3%, respectively.¹⁶ Despite the alarm raised by the 2006 StatsCan report, in terms of ageing population, Canada's situation is more favourable than most of its G8 partners.

Two related demographic analyses that are useful when evaluating the economic potential of a nation are Dependency Ratio and Percentage Working Population.¹⁷ Annex C contains plots of this data for the G8 countries along with information on Life Expectancy.¹⁸ Canada's Dependency Ratio is forecast to be lowest among the G8 countries between 2006 and 2045, with the exception of Russia.¹⁹ Similarly, Canada's Percent Working Population is highest among the G8 countries with the exception of Russia. Why does Russia's situation appear better? Unfortunately, Russia's life expectancy is by far the worst among the G8 countries. Therefore, concerning Dependency Ratio, there are many working Russians to support their elderly – the elite few who live beyond sixty-five. Canada's situation is the real success story among the G8 countries because it combines one of the highest life expectancy rates (second only to Japan) with the lowest (next to Russia) dependency ratio. Canada's

¹⁶ See Annex B. Original raw data from the US Census Bureau International Database.

¹⁷ The Dependency ratio divides those statistically considered to be dependant (0-14, plus 65+) by the number of those who are of working age (15-64). The percentage of Working Population is simply a ratio of the working population (all those between 15 & 64) by the total population. Both dependency ration and percent working population do not take account of the 'actual' number of workers, rather only the 'potential' workers by assuming 100% participation rate.

¹⁸ See Annex C. The calculations and graphs were produced by G.H. Alexander using raw data from the US Census Bureau's International Database.

¹⁹ There are a few years over the next 40 where Canada's Dependency Ratio and Percent Working are slightly worse than the UK's. See graph in Annex C.

demographic situation shows that Canadians live long, and have relatively more people to help support them in retirement.

Population Growth. Leading in population growth over the next forty years is the USA (36%), followed by Canada (24%), France (11%) and the UK (6%).²⁰ The other half of the G8 countries are steadily losing population, with Japan in the worst shape (-23%), followed by Russia (-21%), Italy (-11%), and Germany (-9%). In terms of population growth, Canada's situation is quite favourable relative to the G8 nations.

Amidst this presentation of raw population growth data, it is appropriate to step sideways for a moment and recall the original concern raised by DFSA about whether Canada would have a sufficiently large population for recruitment. Despite the over-arching demographic transition and ageing population, it is vital to note that Canada's population of recruitable youth is slowly growing, not shrinking.²¹ Indeed among the G8 countries, only the USA and Canada have an increasing population in the "under 15" category, whereas all other country's "under 15" population is steadily shrinking. Although Canada's youth population is growing, the face of the recruitable population is changing. Whereas Canada's military recruits historically have been rural or small town males, the future population will be urbanized, multi-cultural and mixed gender.²² Clearly, this challenge must be addressed by modified CF recruitment strategies, but suffice it to say that a sufficient population of recruitable persons will be available.

²⁰ See Annex D.

²¹ See Annex B. In the table below the graph, it is evident that the under 15 population is gradually growing. In 2006 there were 5.8 million and this is projected to gradually increase to 6.1 million in 2035.

²² Tracey Wait, *Canadian Demographics and Social Values at a Glance: Impact on Strategic HR Planning* (Ottawa: DSHRC Research Note 2/02, Department of National Defence, 2002), 12.

A full discussion of the impact of overall population growth is beyond the scope of this paper, yet there is another vital comment to be made about total population. Although rapid population growth may often bring economic and social hardship, Professor Morgenthau offers the counter-balance that, “no country can remain or become a first rate power which does not belong to the more populous nations of the earth.”²³ Morgenthau similarly observes that “shifts in the distribution of power within Europe in recent history have been roughly duplicated by the changes in population trends.”²⁴ Whilst economic horsepower is more important than sheer numbers, Morgenthau’s words are a sober reminder to G8 nations with decreasing populations: total population and population growth are vitally important to being a powerful nation. Once again, Canada is doing relatively well in terms of steady population growth.

Fertility Rates & Net Migration. Fertility rate significantly determines the shape of a population.²⁵ The global decline in fertility over the past forty years, particularly among the more developed nations, is one of the primary causes of the demographic transition. In this respect, the data in Annex E shows that over the past 30 years, and projecting ahead for the next 40 years, Canada’s fertility rate is very close to the (unhealthy) average among G8 countries.²⁶ The Canadian government has introduced some mild family-friendly policies to facilitate working parents to manage jobs and child-care, but these have not sufficiently bolstered the

²³ Hans Morgenthau, *Politics Among Nations*, Revised by Kenneth W. Thompson (New York: McGraw Hill, 1993), 64.

²⁴ *Ibid.*, 140-141.

²⁵ Fertility Rate is defined as the number of live births a woman is expected to have in her lifetime.

²⁶ See Annex E. Prepared by G.H. Alexander using raw data from the US Census Bureau International Database.

nation's birth rate.²⁷ France is notable among the G8 nations for its government's proactive measures that have stimulated fertility rates and it is now on track to surpass Germany as Europe's most powerful economy by 2035.²⁸

Canada's mediocre fertility rate among the G8 nations begs the question how its overall demographics are still so much better than the average G8 country. The answer, not surprisingly, is immigration. Immigration is one relatively quick-fix demographic solution that can be used to swell the working population and youth of a country. Therefore, over the next 40 years, immigration policy will continue to be highly topical in government circles with some measure of competition among G8 countries.²⁹ Annex F presents the historical (and projected) net migration data³⁰ for the G8 nations between 1995 and 2045. For example, the net migration projections for 2015 are typical of historical rates, showing Canada (5.8) highest and far ahead of the next country, USA (3.5), followed by Italy (2.5), UK (2.1), Germany (1.8), France (1.6) and at the bottom Russia (0.4) and Japan (0.4).³¹

²⁷ Lianne George, "Can we feed the need to breed?," *Maclean's Magazine*, May 28, 2007, 43. The "mild policies" include government funded child care, increased maternity and parental leave benefits, and enhanced child tax credits.

²⁸ *Ibid.*, 43.

²⁹ Weiner and Russell, *Demography and National Security*..., 8. The editors note that the ageing populations of Europe and Japan will demand net migrants to sustain their working populations. For example Italy is forecasted to decrease from 57 million in 2000 to 41 million in 2050. Italy will require 235,000 immigrants annually to maintain their population and millions to retrain their proportion of working age to retirement (65+).

³⁰ The net migration rate is commonly defined as the ratio of the difference between the number of in-migrants and out-migrants from a country during a specified period to the average population of that area during the period considered. It is normally expressed in terms per 1,000 population.

³¹ See Annex F. Prepared by G.H. Alexander using raw data from the UN Population Division's quinquennial estimates and projections. In the case of net migration rates, the UN database was used, rather than the US Census' IDB because the UN had a broader year span of data.

According to the UN Population Division's database, net migration rates forecast out to 2045 indicate that Canada will continue to lead the G8 nations. With its relatively high standard of living, Canada continues to be an attractive destination for immigrants. However, as highlighted by an April 2008 StatsCan report, where one in six Canadians now identify themselves as "visible minorities," it is evident that most Canadian immigrants now arrive from non-European countries, with about half coming from South Asia and China alone.³² Canada's ethnically diverse society is a particular challenge that its policy makers must address, since it has implications for government priorities and military recruiting.

This analysis of Canada's overall demographic situation in comparison with the similarly affected nations of the G8 is quite revealing. In terms of ageing, population growth, life expectancy, fertility, and immigration, the negative impacts of the demographic transition will not be as acutely felt in Canada, as they will in the other G8 nations. However, in order to fully understand the implications of demographic transition, it is necessary to also consider Canada's particular political, economic and military dimensions.

Demographic Implications for Canada's National Influence Abroad

Having compared Canada's demographic situation with those of the G8 nations, it is now appropriate to further probe the implications for Canada in terms of national influence, the economy, national security and their associated policies. The following facts are worth recalling before we consider the national influence, military, and economic impacts to Canada: of the G8

³² CBC News Wednesday, April 2, 2008, "1 in 6 Canadians is a visible minority: StatsCan." <http://www.cbc.ca/canada/story/2008/04/02/stats-immigration.html?ref=rss>; Internet; accessed 4 Apr 2008.

countries, all are members of the UN; all except Russia are members of the Organisation for Economic Co-operation and Development (OECD); and, all except Russia and Japan are members of NATO. The G8 clearly hold the balance of the world's economic and military power. Accordingly, Canada's relative strength among the G8 is a revealing indicator of Canada's international influence.

The political clout and national influence of a nation, or more eloquently, its aspirations for international diplomatic influence, are predicated upon a combination of economic strength, ideological capital, and military might. Considering only the military contribution to national influence, it should be observed that Canada's national security posture is one of collective defence, through participation in NATO, NORAD³³ and the United Nations (UN). For Canada to maintain or increase its influence as a nation among the world's powers it must pull its weight and match or exceed the demands of its defence partners.

One purpose of the foregoing G8 demographic comparison was to establish that Canada is very well positioned, relative to the global powers of the G8, to maintain or improve its participation in collective defence and its level of international influence. If the impending demographic transition is going to cause Canada to struggle in terms of the economic impacts of an ageing population, and shortages of military personnel due to stiffer labour market competition, based upon demographics alone it is evident that most G8 nations will struggle even more. Canada's coalition partners will not be as quick to utilize military power to achieve international security objectives – and call upon Canada to do so also – if such partners are having significant domestic difficulty themselves providing sufficient personnel and funding.

³³ NATO (North American Treaty Organization) and NORAD (North American Aerospace Defence)

Based upon the foregoing demographic comparison, Canada's ability to field forces and exert influence is likely to be better than most of its collective defence partners, regardless of the international demands and the tempo of operations.

Although Canada's strength relative to the existing G8 powers is a sound line of reasoning, it may well be countered: what about emerging powers? It may be that the demographic transition will usher in and define a new regime of global power brokers. Will Italy, Japan and Germany sink into insignificance and be replaced by China, India and Brazil? How then will Canada fare? Yes, a shift in global power and influence is quite possible, and to some extent likely; nevertheless, a fuller examination of this question is outside the scope of this paper.

Overall, in terms of diplomatic involvement and international military influence, it is unlikely that the impending demographic transition will negatively impact Canada's stature as a middle power. If opportunities are exploited, Canada may stand to increase its relative prominence.

Demographic Implications for Canada's National Security

Although Canada will be in a good position relative to other G8 nations to field forces and exert international influence, the question remains whether such forces will be sufficient to meet the actual security threat. A full security threat analysis is beyond the scope of this paper; however, it is possible to offer some insight about the impacts of Canada's demographic transition upon the security threat, domestically and externally.

Domestic Security Threat. Concerning domestic security threats, there is ample evidence to draw the correlation between demographics and political stability. In Population International's report, "The Shape of Things to Come – Why Age Structure Matters to a Safer, More Equitable World," nations are categorized into four major types of age structures that are present in today's world populations: very young, youthful, transitional, and mature.³⁴ This report cautiously articulates the general trends between demographic structure and a nation's economic performance, government stability, and risk of civil conflict. Countries with "very young" and "youthful" age structures are at greater risk of negative economic development and security. "Transitional" countries are well poised for economic growth, due to their large working population, while countries with relatively "mature" age structures, such as Canada and its G8 partners, are characterized by political stability, democratic governments and are highly developed – though at the expense of economic growth.³⁵

Other studies have also reached similar conclusions, showing that the "youth bulge" caused during the baby boom is linked with a documented increase in youth protest movements around the world.³⁶ Since Canada, along with other G8 countries, is moving even further along the continuum toward a more "mature" age structure, the next 40 years will likely result in an overall decline in crime, violence, radicalism and protest movements.³⁷

³⁴ Leahy, *The Shape of Things to Come...*, 9.

³⁵ Ibid, 10.

³⁶ Weiner and Russell, *Demography and National Security...*, 7. In Paris in 1968, Dacca in 1971, Tehran in the late 1970s, Manila in 1986, in Tiananmen Square in 1989, and in Jakarta in 1998, youth and student protests have challenged regimes.

³⁷ Ibid., 8.

External Security Threat. The demographic transition will actually improve Canada's prospects for domestic security, but what about the external security threat due to global poverty, failed and failing states and terrorism? There can be fear that the "have-nots" of the developing world will rise up in economic frustration to forcefully plunder the "haves" of the developed world. Is this fear justified?

A comprehensive study of past political conflicts within 70 developing nations has shown that the overall extent of political conflict varies directly with poor economic performance.³⁸ Analysts predict that the global economy is expected to rise until 2030 at an average rate of 3 percent. The growth rate in developing countries is forecast at 4.2 percent, while developed countries are a healthy 2.5 percent.³⁹ The developing world's share of the global economy is steadily increasing. The global gap between rich and poor nations is slowly closing. When the poorer nations of the world are experiencing relatively good economic growth, they tend to be more satisfied and stable. Therefore, the risk and likelihood of political conflict in developing nations is expected to decrease over the next 40 years. Consequently, the risk of conflicts and implications for the developed nations of the G8, due to the economic disparities, is actually decreasing.

³⁸ Juha Auvinen, "Political Conflict in Less Developed Countries 1981-89," *Journal of Peace Research*, Vol. 34, No. 2 (May 1997): 177-195; <http://www.jstor.org>; Internet; accessed 7 January 2008.

³⁹ World Bank, "Global Economic Prospects 2007: Managing the Next Wave of Globalization," <http://go.worldbank.org/ULOTDJOE00>; Internet; accessed 27 March 2008.

Despite the general trend described above, there will certainly be exceptions due to poverty, rapid population growth,⁴⁰ or imbalances between population growth and absorption in particular countries.⁴¹ Failing and failed states, regardless of the cause, can quickly become targets as operating bases for global terrorism. As President George W. Bush noted in his address at the National Security Strategy of the United States (NSS), “poverty, weak institutions, and corruption can make weak states vulnerable to terrorist networks and drug cartels within their borders.”⁴² The NSS also proclaimed that “America is now threatened less by conquering states than [they] are by failing ones.”⁴³ These security threats apply to Canada and its G8 partners almost equally.

There is evidence that the demographic transition will positively enhance Canada’s overall domestic security situation; however, the implications for the external security threat are less certain, with speculative generalizations that indicate increased security due to global economics, but unknown threats due to failed states. Although the overall national security threat appears to be decreasing, there is no basis to say that Canada’s situation is either more or

⁴⁰ Krebs and Levy, *Demographic Change...*, 63. Although it has been suggested by some that widespread international conflict may ensue as a result of rapid population growth in the developing world, Krebs and Levy counter that claim.

⁴¹ Jack A Goldstone, “Demography, Environment, and Security: An Overview,” in *Demography and National Security*, ed. Myron Weiner and Sharon Stanton Russell, 38-61 (New York: Berghahn Books, 2001), 52. In this regard, Goldstone noted China and Saudi Arabia as two countries experiencing huge potential for imbalance due to large population shifts.

⁴² United States. The White House. *The National Security Strategy of the United States of America* (17 September 2002); available from <http://www.whitehouse.gov/nsc/nss.pdf>, Internet; accessed 31 March 2008.

⁴³ Ferraro, Vincent, Carol Lancaster, Per Pinstrip-Andersen, Jeffrey D. Sachs, John Sewell, “Should Global Poverty be a U.S. National Security Issue?” *Environmental Change and Security Program (ECSP) Report*, Issue 9, 2003. Accessed 31 March 2008 from http://www.wilsoncenter.org/topics/pubs/commentaries_povsec_12-27.pdf, 14.

less favourable compared to its G8 partners, since the evidence for Canada's situation applies similarly to these other developed nations.

Demographic Implications for Canada's Economy & Labour Market

So far we have considered the status of Canada's demographic transition relative to the G8 countries, and the implications upon Canada's national interests and the evolving security threat. What remains is to consider the implications of the demographic transition for the labour market and economy. It is beyond the scope of this paper to conduct an enhanced economic comparison of Canada among the G8 countries, yet evidence will be presented to show Canada's relatively good economic standing and the additional steps the Canadian government is taking to mitigate the demographic impacts.

While none of the G8 nations has yet been negatively affected economically by the demographic transition,⁴⁴ the economic preparedness of each nation is not necessarily equal. In their "Ageing and Employment" series, the Organisation for Economic Co-operation and Development (OECD) has specifically analyzed the economic impacts of ageing populations among their member countries, including Canada.⁴⁵ It concludes:

Canada is better placed to meet the challenges of population ageing than many other OECD countries. First, Canada's population is not expected to age as rapidly or as extensively as in Japan and many European countries. Second, past reform has strengthened the financial sustainability of public expenditures on old-

⁴⁴ Leahy, *The Shape of Things to Come...*, 65. Leahy concludes her analysis by observing: "Although many [developed] countries have experienced slowdowns in economic growth and upticks in unemployment, there is little evidence that population ageing in countries with a mature age structure has so far caused major economic distress. However, if ...low fertility rates continue and are not offset by immigration the economic effects of further ageing are unknown."

⁴⁵ The OECD has 30 members, all from developed nations and includes all countries of the G8 except Russia. For more information, see <http://www.oecd.org/>. Russia is currently engaged with formal membership talks, at the invitation of the OECS.

age pensions. Third, the labour market situation of older Canadians has improved considerably in recent years.⁴⁶

Canada's economic performance in the past decade has been very good and has included balanced or surplus federal budgets, significant economic growth through the natural resource sector, and a reduction of the debt to gross domestic product ratio through national debt repayment. All of these measures have served to position Canada's economy to better withstand the approaching demographic transition.

Excellent past economic performance alone is insufficient to meet the challenges of demographic transition.⁴⁷ Therefore, Canada's 2006 Senate Report, "The Demographic Time Bomb: Mitigating the Effects of Demographic Change in Canada," is devoted to recommending further government policy actions that are urgently needed to mitigate the economic and social impacts of an ageing population. The report is replete with recommendations that include: (i) removing impediments and offering taxation incentives for older Canadians, male and female, to work longer; (ii) improving incentives for employers to invest in productivity-enhancing tools; (iii) improving the settlement and integration of immigrants to Canada, as well as a review of government programmes such as fiscal management, public pensions, and healthcare.⁴⁸

⁴⁶ Steven Tobin, "Ageing and Employment Policies: Canada, Executive Summary for Canada," *OECD's Ageing and Employment Series* (OECD, 2005; [report on-line]; available from <http://www.oecd.org/dataoecd/20/10/35386591.pdf>; Internet; accessed 7 April 2008.

⁴⁷ Leahy, *The Shape of Things to Come...*, 10. Leahy observes that prior to 'demographic transition' countries normally experience good economic progress due to the increased work force caused by the preceding baby boom. Canada and many G8 countries such as Japan have experienced tremendous growth in the 40 years prior to reaching a demographically mature situation.

⁴⁸ Senate, Standing Senate Committee on Banking, Trade and Commerce, *The Demographic Time Bomb: Mitigating the Effects of Demographic Change in Canada*, June 2006, 12-35.

It is perhaps too soon to assess whether all of the Senate Report's recommendations will be effectively implemented, yet it is encouraging to see that mandatory retirement law has now been changed in most Canadian provinces.⁴⁹ The 2006 Senate Report grappled with the challenge of increased visible minorities in Canada and the dire problem of low fertility, which is indeed at the root of the demographic problem. Nevertheless, the Senate failed to make any public policy recommendations to stimulate fertility as a means of bringing long-term economic relief.

Under the overall umbrella of the Canadian economy is Canada's particular labour market situation. It is of utmost importance, particularly in a highly developed nation such as Canada, to ensure there are sufficient workers to match both the current and anticipated labour market demands. The most recent report from Human Resources and Social Development Canada has taken a comprehensive 10-year forward look at the Canadian labour market, examining both labour demand and supply. This report indicates that Canada's labour market has been performing well for several years with continued employment growth.

Significantly, Canada has no widespread labour shortages anticipated to emerge over the next 10 years. There is currently little evidence of any imbalance between skill levels demanded by employers and the availability of qualified labour. It is cautioned that imbalances may occur

⁴⁹ CBC News 21 February 2008, "Retiring Mandatory Retirement," http://www.cbc.ca/news/background/retirement/mandatory_retirement.html; Internet; accessed 7 April 2008.

in the next decade, with most acute pressure in the areas of management and health care workers, and to a lesser extent for home builders and computer engineers.⁵⁰

In 2005, Canada's workforce participation rate was its highest ever at 67.2% while unemployment reached its lowest level on record at 6.8%. Both of these trends are forecast to improve further over the next decade.⁵¹ The demographic transition involves an increase to the dependency ratio. Therefore, the government objective is to introduce policies to maximize workforce participation in order to pay for the increasing cost of health care and public pensions.

Canadian government officials recognize that history cannot be undone and that Canada's demographic situation was created over the past 40 years.⁵² Therefore, the Canadian government is focusing upon how to best manage the coming impacts through a range of policy changes. The good labour market prognosis for the next 10 years should buy sufficient time for the government's proposed changes to employment, labour, and immigration policy to achieve the desired effects.

Canada is commencing the demographic transition with a distinct economic advantage over many other developed nations of the G8. However, the overall economic impacts of the demographic transition upon each nation will vary depending upon the degree of successful public policy implementation to mitigate undesirable economic effects. Except for specifically encouraging fertility rates, the Canadian government appears to be engaged in the full range of

⁵⁰ Human Resources and Social Development Canada, *Looking-Ahead: A 10-Year Outlook for the Canadian Labour Market (2006-2015)* (Gatineau: Publications Centre, October 2006), 2-5.

⁵¹ *Ibid.*, 1.

⁵² Senate, *The Demographic Time Bomb...*, 1.

public policy initiatives necessary to maximize Canada's economy amidst the demographic transition.

Implications for Military Recruiting and Retention

Although Canada's standing relative to the G8 nations appears very good demographically and economically, the question remains: will Canada face a devastating problem of available personnel to join the CF, with its associated threat to national security? The available quantity of military personnel lies at the nexus of national interests, national security, and the economy, since it is under the influence of all three. It is therefore an interesting and challenging specific case for which to consider the implications of demographic change.

It has already been argued that Canada will be demographically and economically better placed to field forces and exert influence compared to its G8 partners. Whatever force levels may possibly be required to maintain its collective defence commitments and exert international influence, Canada should have more economic and human resources needed, compared with other G8 countries. Despite this apparent advantage, what follows is a consideration of the unique challenges Canada may face concerning its ability to field military forces as a result of the demographic transition.

Canada's recruitable population will actually be increasing slightly over the coming 40 years and there is no anticipation for substantially increased force levels.⁵³ Therefore, the

⁵³ Department of National Defence, *Military HR Strategy 2020 – Facing the People Challenges of the Future* (Ottawa: ADM(HR-Mil), 2002), 12. The CF HR Strategy attempts to base its projected force requirements

challenge of the demographic transition upon Canada's recruitable military population does not concern the number of recruitable Canadians, but the shift of the recruit population from historic norms. The CF has traditionally obtained its recruits from Caucasian males living in non-urban areas.⁵⁴ Current trends show that Canadians and their youth are continually being urbanized and recent statistics show that one in six Canadians is now a visible minority.⁵⁵

The challenge of recruiting immigrants and visible minorities requires not only special efforts from the CF, which have already begun,⁵⁶ but also huge government efforts to more effectively integrate foreign-born citizens and visible minorities to enable them to become part of the Canadian social fabric, rather than simply residents whose loyalties and interests still rest with their former homelands. Nation-building will be as important as ever to Canada with its increasing ethnic diversity.

Along with the specific challenge of targeting the urbanized and visible minorities among the Canadian population, CF recruiting will also have to contend with a relatively competitive labour market that increasingly demands highly skilled workers. Provided many of the government policy initiatives concerning taxation and labour market participation are effectively

upon four distinct scenarios that range from low to high economic and political activity. Common to all four scenarios is the underlying assumption that the CF Regular Force component will always be between 55,000 and 75,000 members.

⁵⁴ Wait, *Canadian Demographics and Social Values at a Glance...*, 12.

⁵⁵ CBC News, *1 in 6 Canadians is a visible minority...*

⁵⁶ Captain(N) A.F. Rueben, "Recruiting Visible Minorities: A Matter of Survival." (Toronto: Canadian Forces College National Security Studies Course 6 Paper, 31 May 2004). This document presents the array of solutions. Interestingly, the Canadian Forces recruiting web site has an on-line survey for all visitors to its site, asking web visitors are visible minorities. The appear keen to know if that audience is even remotely interested in the CF.

implemented, the CF need not experience an increased recruiting challenge. Since very few labour market employers invest as freely as the CF does to impart training and skills, the CF should not have grave difficulty attracting recruits, particularly among school-leavers who want training and experience that will eventually make them sought after by industry.⁵⁷ The greater problem the CF may face when trying to maintain its force levels is in the area of retention. It is trained CF members that will be the highly sought commodity amidst an increasingly competitive labour market. Therefore, retention strategies must be pursued in earnest to keep trained men and women serving in the CF.

Undoubtedly recruiting and retention will be challenging problems, as they already are. Nevertheless, in the context of Canada's relatively good demographic standing among the G8 nations, the demographic impacts to national security, and Canada's healthy economy and government policy initiatives, there is no evidence of a dramatically increased risk to national security.

Conclusion

This paper has sought to assess the impacts of the impending demographic transition upon Canada through a comparison with the other G8 nations and specific consideration of the implications in the areas of national influence, national security, the economy and labour market. In this context, the complex problem of recruiting and retaining military personnel has been briefly assessed for Canada's circumstances.

⁵⁷ Dr Alan Okros, telephone conversation with author, 17 March 2008. Dr Alan Okros was the former Director of Strategic Human Resource Coordination for the Canadian Forces and off

It has been argued that the demographic transition will not automatically result in economic disaster due to shortages of skilled labourers. Demographics certainly have an influence upon the complex mix of politics, security, and economics. Considering these disciplines individually and in combination, it has been argued that Canada is well placed demographically to successfully compete against the global economic powers of the G8. Canada will be able to more easily field forces than many of its defence partners, assuring Canada of continued international influence. On the security front it has been shown that a mature population increases domestic security and that amidst a wildly unpredictable future, there are indications that the global demographic impact may even reduce Canada's external security threat. Economically, Canada is in a strong position relative to its G8 partners and is pursuing policies to improve labour market participation through a wide array of initiatives. All of these positive indications bode well for the CF being able to recruit and retain sufficient personnel.

Should Canada therefore be complacent about the looming demographic transition? Absolutely not! The concerns are very real and they are indeed potentially serious. The anticipated years of tremendous demographic change will require aggressive government and military policy implementation in order for Canada to mitigate the negative demographic effects. Prudent employment and taxation policies are needed to encourage older workers to work longer. Although Canada is still able to attract skilled immigrants, the Canadian government will need to work hard to integrate visible minorities. The CF will need to effectively target the urbanized and visible minority population, as well as develop wise retention policies to keep skilled CF members in the face of labour force competition.

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