

Paper presented at the John Deutsch Institute Conference, “Retirement Policy Issues in Canada”, October 26-27, 2007 at Queen’s University. The final version is published in a book entitled *Retirement Policy Issues in Canada*, edited by Michael G. Abbott, Charles M. Beach, Robin W. Boadway and James G. MacKinnon, 2009 (Kingston: John Deutsch Institute, Queen’s University). Published in cooperation with McGill-Queen’s University Press and available at: <http://mqup.mcgill.ca> .

**THE EMERGENCE OF PHASED RETIREMENT: ECONOMIC
IMPLICATIONS AND POLICY CONCERNS**

**Robert L. Clark
Professor
College of Management
North Carolina State University**

Paper to be presented at

Retirement Policy Issues in Canada

Sponsored by

John Deutsch Institute for the Study of Economic Policy

October 26, 2007

Kingston, Ontario

PATTERNS OF RETIREMENT: OLD AND NEW

In Canada, *“Baby boomers are likely to reach retirement with lower and less stable pensions than in the past. The need to supplement these pensions will certainly be another reason for some people to continue to work.”* (Stone, 2006)

In the past, retirement has often been a discrete event – a person, typically in their 60s, was working full-time one day and the next day, the worker retired from their career job, left the labor force entirely and became a full-time retiree. Economists, social observers, and policy-makers have long questioned whether this abrupt and complete separation from the labor force was optimal for the individual and in the interest of society. For example, most lifecycle models developed by economists predict a gradual decline in hours under most circumstances. However, rigidities in the labor market, differences in full-time and part-time wage rates, and pension rules can produce an environment in which abrupt, complete retirement is the highest value choice for an older worker. The removal of these constraints might spark a new trend toward gradual or phased retirement among older Canadians and Americans.

In a reversal of the long term trend toward earlier and earlier retirement that characterized the twentieth century, there has been a small increase in the proportion of older persons in North America over the past decade that have chosen to remain in the labor force. Part of this reversal in the trend toward early retirement is that many older individuals have been choosing to work part-time for a few years as a prelude to complete retirement. Part-time employment can occur through a change from one’s career employer to a new or bridge job where the person works few hours or through a more formal program that allows the transition from full-time to part-time work with a

career employer. This paper examines the evolution of alternative transitions into retirement with a specific emphasis on formal phased retirement programs offered by companies to their career employees. Phased retirement programs with one's own employer can involve either a pre-retirement reduction in hours or a post-retirement return to work for the career employer at reduced hours. Phased retirement programs are influenced by employer policies and demand for workers, employee preferences, and government tax and retirement policies.

Phased retirement programs and the postponement of complete retirement are now an important component of public debates on national economic policy in both Canada and the United States. Older persons in North America are living longer than their parents and they are also healthier. However, until recently, 50 and 60 years olds had been retiring earlier than previous generations. With fewer working years and a longer life span, the life stage of retirement lengthened to approximately 20 years in both countries. The continued aging of the national populations has also resulted in a reevaluation of the need to postpone retirement or increase the labor force participation rates of older Canadians and Americans. For example, persons aged 45 to 64 composed 27.8 percent of the working age population of Canada in 1981 but had reached almost 39 percent by 2006 (van Sluys, 2005). In the coming years, retention of older workers in the labor force will be important to maintaining the rate of economic growth, providing an adequate tax base to support general public expenditures, and more specifically helping to maintain the financial stability of national and company retirement plans.

How will employers find the workers needed to produce the desired level of output in the coming years? As the baby boom cohort ages, a larger proportion of the

labor force nears and enters retirement. Given past fertility patterns, the rate of growth of the labor force will slow making it more difficult to hire younger workers. Companies must reconsider their employment and compensation policies and perhaps reorganize production technologies to provide greater and more desirable work opportunities for older workers. Phased retirement plans should be one option that managers consider.

How will individuals finance their desired level of consumption in retirement? Older persons may find that prolonging their working life by including a period of part-time work is necessary if they are to achieve the standard of living that they desire in retirement. Part-time work may allow individuals to continue to amass assets for retirement by delaying the use of retirement savings and continued employment might also result in the further accumulation of pension credits. Phased retirement can also be a useful method of reducing the physical and mental demands of working without totally severing one's link to a career. Of course, the desire to remain on the job will differ widely by industry and occupation and the demands that continued work places on an individual.

How will governments finance their national social security programs with aging populations? Providing economic incentives for older persons to remain in the labor force is one method of addressing the long term funding problems facing national retirement programs. Phased retirees continue to have taxable earnings and thus contribute needed revenues and phased retirees may also postpone the start of their retirement benefits. As governments in all developed countries face the prospect of fundamental changes in the social security programs by raising tax rates or reducing

benefits, a more politically acceptable option may be to raise retirement ages or provide more incentives for older persons to remain in the labor force.

In the first decade of the twenty-first century, we find governments searching for methods to reduce the cost of retirement plans, companies struggling to find sufficient trained workers, and individuals trying to achieve an enjoyable retirement period that is growing longer for each succeeding cohort. The confluence of these events has moved phased retirement plans into the forefront of policy discussions. The Canadian and the U.S. governments have attempted to remove impediments to companies offering phased retirement programs and workers enrolling in them. Employers have been experimenting with different types of programs to determine their impact on labor productivity and production costs. In this new environment, will phased retirement be the wave of the future?

WHAT IS PHASED RETIREMENT?

For the purpose of this paper, phased retirement is defined as a formal program offered by an employer to its workers that allows individual employees to reduce their hours of work in exchange for reduced pay usually at a prorated rate, say half-time work for half-time pay. These programs can take a variety of forms. Some programs require workers to retire, perhaps giving up seniority and tenure status, and in return, the individual is moved seamlessly into the new status of a phased retiree for a fixed period of time. In other programs, workers do not formally retire but remain on the job with reduced hours and prorated pay. Still other programs require workers to retire and then

after a period of formal separation, the worker is reemployed as a part-time worker or phased retiree.

Phased retirement plans normally specify service and age standards that employees must achieve before they are eligible to enter into phased retirement, e.g. age 55 with 20 years of service. Key parameters of these plans that affect their desirability for workers and their cost to employers include: do phased retirees continue to be covered by company-provided health insurance, do phased retirees continue to accrue pension benefits, can phased retirees receive pension benefits while continuing to work, and what is the relationship between reduced hours and reduced pay.

Phased retirement plans offer advantages and disadvantages to both the employer and the employee. Both parties must assess the pros and cons of altering the retirement process from the traditional abrupt and complete retirement to a transitional period of phased retirement. Employers must consider the cost of retaining older employees on a part-time basis and compare this to any gains in productivity achieved by lowering turnover rates, reduced hiring costs, and maintaining the institutional knowledge of older workers. Employees must consider the value of continued earnings and the impact of phased retirement on benefits such as pensions and health insurance. The cost and benefits of phased retirement to both parties is influenced by prevailing government tax policies and employment regulations.

EMPLOYERS' VIEW OF PHASED RETIREMENT: PROS AND CONS

“A 2002 Survey of business, public sector and labour leaders conducted by the Canadian Labour and Business Centre found that phased-in retirement is not prominent on the list of possible solutions cited to growing fears of skill shortages.” (Wortsman, 2003)

If phased retirement plans are currently rare, why aren't more employers interested in establishing phased retirement plans? For most of the second half of the twentieth century, large employers adopted retirement policies that encouraged older workers to retire at age 65 or younger. The adoption of defined benefit pension plans with early retirement incentives, mandatory retirement policies, early retirement windows, and an assortment of other HR policies were used to encourage older workers to leave the firm, thus making room for the hiring of younger employees who were often less expensive and more educated. Population and labor force growth insured a steady stream of young persons seeking employment so that employers could readily replace retirees with younger worker who often could be hired at lower wages and who had a new vintage of skills and education. However, the slow-down in the rate of growth of new entrants into the labor force and the pending surge in retirements is forcing employers to reconsider their retirement policies. Some organizations are now facing the loss of a substantial portion of their trained labor force over a very short time period as the baby boom cohort begins to retire. As a result, many employers are now considering policies that encourage older employees to remain on the job.

A company's desire to retain older workers, either full-time or part-time, depends on their productivity, the cost both in terms of cash and benefits, and the availability of young workers. When considering the adoption of phased retirement plans, managers

must also assess the impact of having a larger pool of part-time workers on their payrolls. Key issues include whether part-time workers can be successfully integrated into work teams, will phased retirees continue to exhibit a high degree of loyalty and commitment to the company, and will older workers be able to provide the level of productivity needed.

Employers also worry about whether phased retirement prolongs working life by enticing workers who no longer want to work full-time to remain on the job as phased retirees or whether phased retirement programs might actually shorten work life by enticing employees to switch from full time to part time earlier in their careers thus shortening the period of full-time employment. A final issue that is often articulated senior managers is what type of worker will enter phased retirement – highly productive workers or low quality employees. These concerns will differ across firms, industries, and occupations and thus, we should expect to observe considerable differences in the incidence of phased retirement across sectors of the economy.

Past hiring patterns influence the age structure of an organization or occupation and can directly affect the desire of employers to retain older workers, either full or part-time. In Canada, the combination of the age structure of the labor force and the early retirement age is most pressing in the public sector. Statistics Canada (2004) estimated that the median retirement age in the public sector in 2002 was 58.1 and that one third of public employees were within 10 years of retirement.¹ How will various governmental units deal with the loss of such a large amount of human capital? In contrast, the median retirement age in the private sector was 61.4 and only 15.6 percent of the labor force was within ten years of retirement.

In some specific occupations and especially in certain provinces, the potential for the retirement of a large proportion of the skilled labor force is even more dramatic, for example nursing. The average age of registered nurses in Canada is now over 44 and it is rising rapidly. In British Columbia, 20 percent of RNs are over the age of 55. With an average retirement age around 58, British Columbia and other provinces can expect a large number of retirements in the near future (Wortsman, 2003). A key question for public sector employers in Canada is whether phased retirement programs can be effective in enticing older nurses and other employees to remain on the job, at least part time, until older ages.

In the United States, phased retirement is becoming more popular and recent changes in government regulations should stimulate more companies to adopt these programs. Currently, the incidence of phased retirement programs varies substantially across industries. A study by Watson Wyatt Worldwide (1999) in the U.S. found that phased retirement is becoming increasingly common in higher education with over one third of employers offering a phased retirement program. Other industries and occupations where phased retirement was relatively common include professional, technical, and public administration. Coverage rates in these sectors ranged between 21 and 25 percent. Most other industries surveyed had only around 10 percent of employers offering these types of plans. Other more recent studies report large proportions of firms offering phased retirement (Collison, 2003; Bond, et al, 2005; and Hutchens, 2007). While the incidence of phased retirement in Canada may be lower, some employers have introduced these programs through the collective bargaining process. Human Resource

and Social Development Canada provides a list of Canadian employers that have included formal phased retirement plans in their collective bargaining contracts.

It should be noted that firms have always attempted to retain selected older retirees who were deemed as high value to the employer. These workers typically were identified and offered individual contracts to continue their association with the company. In contrast, the phased retirement programs under discussion are more formal plans that are offered widely to all workers or all workers in areas of high need. We do not consider these informal offers of part-time employment to selected retirees to be phased retirement programs. Neither are we considering use of older workers, retired from other firms, as part-time employees as phased retirement programs. Instead, this analysis focuses on formal phased retirement plans that are available to a wide range of older employees of a firm.

EMPLOYEES' VIEW OF PHASED RETIREMENT: PROS AND CONS

“In a recent Statistics Canada study,... almost 30% of those who retired between 1992 and 2002 indicated they would have continued working had they been able to move to part time status” (Conroy, 2006).²

It seems obvious that many older persons would prefer a gradual transition from full-time work to complete retirement. If offered the option of entering into a phased retirement program that would allow them to stay on their career job but at reduced hours, receive a reduced but prorated salary, continue to be covered by important employee benefits, and begin receiving a portion of their earned pension, many older workers would find this an appealing option. However, if staying on the current job

means continuing to work full time or if part-time employment requires a change of employers and results in a lower hourly wage and the loss of certain benefits, then more older workers will opt for total retirement. While there have been few studies of worker behavior in the presence of phased retirement programs, in general these programs have proved to be popular with workers and employers.

A Statistics Canada study found that just under a third of recent retirees indicated they would have continued working had they been able to move to part time status. In addition, approximately 70 percent of Canadian baby boom pre-retirees reported that they intended to work, at least part time, in retirement (Conroy, 2006). However, this desire should be contrasted to actual retirement patterns. Statistics Canada found that in 1994, 86 percent of Canadians who had retired terminated their employment without moderating their employment schedule prior to retirement (van Sluys, 2005). Not only does phased retirement provide a productive use of one's time but it also continues earnings into the retirement period and should enhance the likelihood that individuals will have a successful retirement.

Until recently, most older workers faced the choice of continuing full-time on their career jobs, complete retirement, or working part-time on some other job. In general, part-time jobs pay lower wages and offer fewer benefits compared to full-time employment. Thus total compensation from these part-time jobs represents a substantial decline in the hourly value of working compared to compensation on one's full-time career job. For many older persons, the value of working part-time was below their perceived value of their time so they retired completely.

The offer of enrollment in a phased retirement program with one's career employer will usually have greater value than part-time employment with a new company and may also exceed the value of the person's time in retirement. Of considerable importance is whether phased retirees continued to be covered by company health insurance, whether phased retirement adversely affects future pension benefits, and whether the phased retiree can also receive some or all of their pension while working part-time. The inability to work part-time for a career employer while also receiving pension benefits is a significant impediment to entering phased retirement. Examining respondents in the Health and Retirement Study, Even and Macpherson (2004) concluded that "pensions are associated with a lower chance of switching from full-time to part-time work with a change in employer." Changes in tax law and other regulations in the U.S., for example, those included in the Pension Protection Act of 2006, should allow firms to provide for in-service distributions of retirement benefits in the future and make phased retirement plans more likely among American employers.

Several studies have attempted to estimate the characteristics of individuals entering phased retirement compared to those who do not. If we define phased retirement to be a reduction of weekly or annual hours while remaining with the same employer, the likelihood of entering phased retirement increases with age, is more common among white-collar workers, is more common in higher education and the public sector, and is more common among higher income and more highly educated workers (Even and Macpherson, 2004; Hutchens, 2007; Watson Wyatt Worldwide, 1999; Chen and Scott, 2006; and Allen, Clark, and Ghent, 2004).

PHASED RETIREMENT AND NATIONAL ECONOMIC POLICY

“If labour force participation by age remains around the present rates, more seniors will likely mean a shrinking workforce. In fact, the overall participation rate could fall as low as 57% by 2025, a considerable drop from its current level of 67%.”

(Statistics Canada, 2004)

In 2006, there were 26.2 million Canadians aged 15 and over and 67.2 percent of them were in the labor force resulting in a labor force of 17.6 million. Statistics Canada estimates that the Canadian population 15 and older will increase to 32.2 million in 2026. If only 57 percent of these choose to be in the labor force, the Canadian labor force will be approximately 18.4 million or an increase of less than a million workers over a 20 year period. During the same period, the total population 15 and over will have increased by 5.3 million. The modest increase in workers combined with a much larger increase in the number of retirees and other persons not in the labor force will place substantial pressure on Canadian retirement programs as the ratio of non-workers aged 15 and over to employed persons rises from 32.8 percent to 57.1 percent, or a decrease from about three workers per non-worker to 1.3 workers per non-worker in 2026. This is a substantial change in the support ratio and has substantial fiscal implications for the Canadian government.

A slowly growing or shrinking workforce may give federal policy makers concerns about the impact on the national economy. Fewer workers could mean a declining GDP. A scarcity of workers will tend to increase labor costs and make Canadian products less competitive. An aging population will increase tax rates necessary to finance any given level of retirement benefits. In the coming years,

governments in all developed countries will be forced to reevaluate their national retirement policies. In a world characterized by aging populations, economic incentives promoting early retirement are unlikely to be optimal national policies. Instead, the Canadian Parliament, the U.S. Congress, and other governmental bodies must reexamine their retirement plans. Consideration should be given to raising the normal and early retirement ages in national retirement plans. In addition, tax and regulatory policies that provide impediments to continued employment should be reviewed.

Both countries have been reconsidering policies and regulations that adversely affect the ability and willingness of older workers to remain in the labor force. Mandatory retirement was once a common HR policy among large employers and in the public sector. However, compulsory retirement policies for most jobs have been illegal in the U.S. since 1986 and now mandatory retirement policies also seem to be on their way out in Canada, e.g. the Ontario legislature made mandatory retirement illegal in the province effective December 2006. In both the U.S. and Canada, there have been recent initiatives to remove barriers to older workers enrolling in phased retirement plans with their career employers. In the U.S., the Pension Protection Act of 2006 allows workers to receive pension benefits while continuing to work provided that they had reached the normal retirement age specified in their retirement plan or at age 62 (Rappaport and Young, 2007). In Canada, the proposed 2007 Federal Budget included a proposal to allow employees to start receiving benefits from their defined benefit pension while continuing to accrue further benefits (Canada Revenue Agency, 2007).³

The median retirement age in Canada is now slightly less than 61. After declining by almost 4 years between 1987 and 1997, the median retirement seems to have, at least

temporarily, stabilized (Statistics Canada, 2004). The retirement age is considerably lower in the public sector, around 59, compared to the private sector, slightly less than 62 (Statistics Canada. Catalogue no. 75-511-XIE). A key policy question is whether the adoption of phased retirement policies and the removal of regulatory impediments to entering these programs will be sufficient to entice older Canadians to remain in the labor force.

PHASED RETIREMENT IN HIGHER EDUCATION: CAN IT BE A MODEL FOR THE FUTURE

There have been relatively few studies of the impact of phased retirement plans on the retirement patterns of older workers and whether they have assisted employers in achieving their employment objectives. Over the past decade, I served on several committees that helped develop and implement a phased retirement plan for the 15 campuses of the University of North Carolina (UNC) system. As part of the implementation strategy, I was given access to administrative records for faculty at UNC approximately 15 years prior to the adoption of the program and five years after it was included as an employment benefit. My charge was to document the impact of the program so that university leaders could decide the merits of the program and decide whether to retain the plan or eliminate it. Thus, I was able to assess the change in retirement behavior after the introduction of the program. This section briefly describes the effect of the introduction of this program and assesses its value as a management tool.

Phased retirement is particularly well-suited for use at colleges and universities. Work assignments are easily divisible, e.g. a half time teaching load or administrative or

research assignments; and individual performance in these tasks is not necessarily linked to the individual's relationship or interaction with other faculty members. The academic labor force is also aging rapidly leading to concerns that the universities may have too many elderly professors now but also a fear that they will be mass retirements in the near future. Can phased retirement be used as an effective employment policy to help universities achieve their institutional goals?⁴

Limited evidence indicates that phased retirement programs are more common in higher education than in other sectors of the U.S. economy (Watson Wyatt Worldwide, 1999). Ehrenberg (2003) reports that research oriented universities are more likely to offer phased retirement programs as are institutions that offer defined contribution pension plans. In general, phased retirement plans seem to be a popular employment policy that provides significant advantages to the university while providing a new retirement option to older faculty. As a result, an increasing proportion of institutions are offering phased retirement plans and a relatively large proportion of faculty are opting for gradual as opposed to complete retirement.

The University of North Carolina (UNC) adopted a phased retirement plan in 1998. The plan called for faculty to retire, relinquish tenure and in exchange receive a three year employment contract that provided half time pay for half time work. Each phased retiree negotiated a reduced work load with their department head. Their compensation was half of the annual salary in the year before entering phased retirement. The faculty member could start their pension benefits if they chose and received health insurance as a retiree. Faculty could work halftime in both academic semesters or full time one semester and have no university responsibilities during the other semester.

In a series of papers, my colleagues and I have examined the implications of this plan on the retirement behavior of UNC faculty (Allen, 2006; Allen, Clark, and Ghent, 2004; Ghent, Allen, and Clark, 2001).⁵ Using data for 15 years prior to the adoption of the plan, we developed baseline patterns of retirement. The data indicated that the probability of retiring at various ages depended on the type of pension plan chosen by the faculty, the type of institution where the faculty member was employed, and various other individual characteristics.

The introduction of phased retirement tended to decrease the probability that a faculty member aged 50 and older would completely retire by about one percentage point. This represented approximately a 10 percent reduction in the full retirement rate among older faculty. However, phased retirement raised the odds that the person would either retire completely or enter phased retirement by about two percentage points. It is important to remember that retirement rates among university faculty tend to be much lower than for older workers throughout the labor force and that many American universities have been concerned about the aging of their faculties especially since the ending of mandatory retirement in the mid-1990s. In general, we are observing faculty in their mid-60s making decisions to retire completely, remain on the job full time, or enter phased retirement.

Work assignments matter even among the relatively homogenous employment of faculty in a public university system. Phased retirement was much more attractive to faculty on campuses where the main mission was teaching compared to the research oriented campuses. Faculty at the two flagship campuses of UNC had phased retirement rates of 1.6 percent while the annual proportion of eligible faculty entering phased

retirement on other UNC campuses ranged between 3.2 and 4.0 percent. Overall, about one of every five retirements was a phased retirements.

After a five year trial period, the Board of Governors of UNC decided to make the phased retirement plan a permanent component of the employment benefits for faculty. The overall assessment was that this program was popular among the faculty and provided a useful tool for academic administrators. As older faculty moved into phased retirement, deans and department heads could better plan for future hiring patterns. In general, the plan was considered to be a win-win for faculty and the university. It was a program that was implemented at a very low cost and achieved its objectives. While the direct evidence is sparse, the spread of phased retirement programs across institutions of higher education supports the notion that phased retirement plans provide value to universities and are popular among their faculties. Are these findings applicable to the employers throughout the economy?

IS PHASED RETIREMENT THE WAVE OF THE FUTURE?

The populations of Canada and the U.S. are aging due to the surge in births after World War II, the subsequent decline in fertility, and long term reductions in mortality at older ages. Increasing life expectancy, slowing growth in the labor force, and a higher old age dependency ratio are placing greater stress on national retirement programs. In addition, these demographic trends also are causing concern about their implications for the size of the labor force and potential impacts on national economic growth. In a world of aging populations, governments should not encourage early retirement nor should they create policies that reduce the ability of companies to retain older workers. Instead,

national leaders should be considering policies that make work at older ages more desirable and more attainable. One such policy is phased retirement.

In an effort to encourage older workers to remain economically active, employers should assess the costs and benefits of developing phased retirement programs that give their employees the option of remaining on the job but gradually reducing hours as they age. Such programs will be easier and less costly in some industrial settings compared to others. Thus, we should not expect employers in all sectors of the economy to be equally willing to adopt phased retirement programs. Prior to establishing phased retirement plans, employers need to consider

- the age structure of their labor force and their projected employment needs over the next decade,
- their ability to hire replacement workers from a more slowly growing labor force,
- age specific patterns of productive increments and decrements,
- the cost of retaining older workers compared to the cost of new younger employees, and
- the need for team work and the potential loss of institutional knowledge associated with early retirements of a large number of employees during a short period of time.

In many circumstances, I believe employers will conclude that they need new policies in the coming years to attempt to slow the rate of retirements among their older employees and phased retirement will be viewed as a viable option.

Having determined that there is a business need for phased retirement, employers and policy makers must consider what government policies limit the effectiveness and desirability of phase retirement programs. In the U.S., the inability of companies to allow older workers to reduce hours and receive a partial (or full) pension while working has been a major roadblock in the establishment of phased retirement plans. One of the objectives of the Pension Protection Act of 2006 was to eliminate this problem. In Canada, the issue seems to have been whether workers who have reduced their hours can continue to accrue future pension credits. Once again, government regulators seem to be moving to reduce or eliminate this restriction which limits the attraction of phased retirement programs.

As in the movie, *A Field of Dreams*, I believe that if we build it they will come, e.g. if employers establish phased retirement programs, older workers will enter them and embrace this opportunity to gradually move into retirement. This new transition will enhance their retirement experience and provide additional resources that will enable them to achieve a higher standard of living in retirement. Thus, while many barriers to the successful spread of phased retirement programs still exist, governments are moving to reduce or eliminate the regulatory constraints and companies will soon be forced to consider phased retirement along with other options for retaining older workers. Thus, future employment policies in many sectors of the economy will include innovative variations of phased retirement plans.

REFERENCES

Allen, Steven. 2006. "The Value of Phased Retirement," in Robert Clark and Jennifer Ma (eds.), *Recruitment, Retention, and Retirement: The New Three Rs of Higher Education*. Edward Elgar Publishing, pp. 185-208.

Allen, Steven, Robert Clark, and Linda Ghent. 2004. "Phasing into Retirement," *Industrial and Labor Relations Review*, October: 112-127.

Bond, T.J., E. Galinsky, S.S. Kim, and E. Brownfield. 2005. *2005 National study of employers*. <http://familiesandwork.org/summary/2005nsesummary.pdf>

Canada Revenue Agency. 2007. *2007 Budget – Questions and Answers*, <http://www.cra-arc.gc.ca/tax/registered/budget2007-e.html>

Chen, Yung-Ping and John Scott. 2006. "Phased Retirement: Who Optes for It and Toward What End?" Washington, DC: AARP Public Policy Institute.

Clark, Robert and Linda Ghent. 2007. "Strategic HR Management with an Aging Workforce: Using Demographic Models to Determine Optimal Employment Policies." Paper present to International Seminar on Applications of Demography in Business, Sydney Australia, October.

Collison, J. 2003. *2003 Older Workers Survey*. Alexandria, VA: Social for Human Resource Management.

Conroy, Nancy. 2006. "The New 'Third Stage of Life: Semi-retirement is Here to Stay.'" http://theconroygroup.com/articles/55plus_retirework_part2.html

Ehrenberg, Ronald. 2003. "The survey of changes in faculty retirement policies." American Association of University Professors, accessed at www.aaup.org/Issues/retirement/retrpt.htm.

Even, William and David Macpherson. 2004. "Do Pensions Impede Phased Retirement?" *IZA DP 1353*. Bonn, Germany: Institute for the Study of Labor.

Ghent, Linda, Steven Allen, and Robert Clark. 2001. "The impact of a new phased retirement option on faculty retirement decisions," *Research on Aging*, November: 671-693.

Human Resources and Social Development Canada. "Transitions to Retirement: Collective Agreements and Older Workers." Canada Work-Life Balance, Chapter 6. http://www.hrsdc.gc.ca/en/lp/spila/wlb/caowc/11chapter_6.shtml

Hutchens, Robert. 2007. "Phased Retirement: Problems and Prospects," *Issue Brief*, Center for Retirement Research at Boston College.

Leslie, David and Valerie Martin Conley (eds.). 2005. *New Ways to Phase into Retirement: Options for Faculty and Institutions*. San Francisco: Jossey-Bass.

Rappaport, Anna and Mary Young. 2007. *Phased Retirement after the Pension Protection Act*, New York: The Conference Board.

Schellenberg, Grant, Martin Turcotte, and Bali Ram. 2005. "Post-retirement employment," *Perspectives*. September, pp. 14-17. Statistics Canada.

Statistics Canada. 2004. "The near-retirement rate," *Perspectives*. February 2004, pp. 18-22.

Stone, Leroy. 2006. *New Frontiers of Research on Retirement*. Statistics Canada. <http://www.statcan.ca/english/freepub/75-511-XIE/0010675-511-XIE.pdf>

van Sluys, Bryce. 2005. "Current Trends in Retirement: The Implications for the Canadian University Community," unpublished memo, University of Lethbridge.

Watson Wyatt Worldwide. 1999. *Phased Retirement: Reshaping the End of Work*. Washington, DC: Watson Wyatt Consulting Research Report.

Watson Wyatt Worldwide. 2007. "2007 Federal Budget: Retirement Rule Changes and Tax Relief," *InfoFlash Canada*. March.

Wortsman, Arlene. 2003. "Phased-in Retirement Options Needed for Skill Shortage Challenge," *A CLBC Commentary*. October.

ENDNOTES

¹ This represents a very large decline from 1987 when the median retirement age was 62.8.

² The Health and Retirement Study of older persons in the U.S. found that in 1996, over 50 percent of employed survey respondents age 55 to 65 had preference for gradually reducing their hours of work as they aged (Hutchens, 2007).

³ Several provinces have also passed legislation addressing the relationship among earnings of phased retirees, the level of benefits they can receive while in phased retirement, and whether a phased retiree can continue to accumulate future pension credits.

⁴ In a recent paper, Clark and Ghent (2007) explore how employers could use demographic models to project the future size and age distribution of their labor. He also shows how changes in employment and compensation policies can be used to increase or decrease transition rates to enable the firm to alter these projects.

⁵ The implications of adopting phased retirement plans in Canada is discussed by van Sluys (2005). Leslie and Conley (2005) review phased retirement programs in American universities.