

2008 Labour Force Perspectives

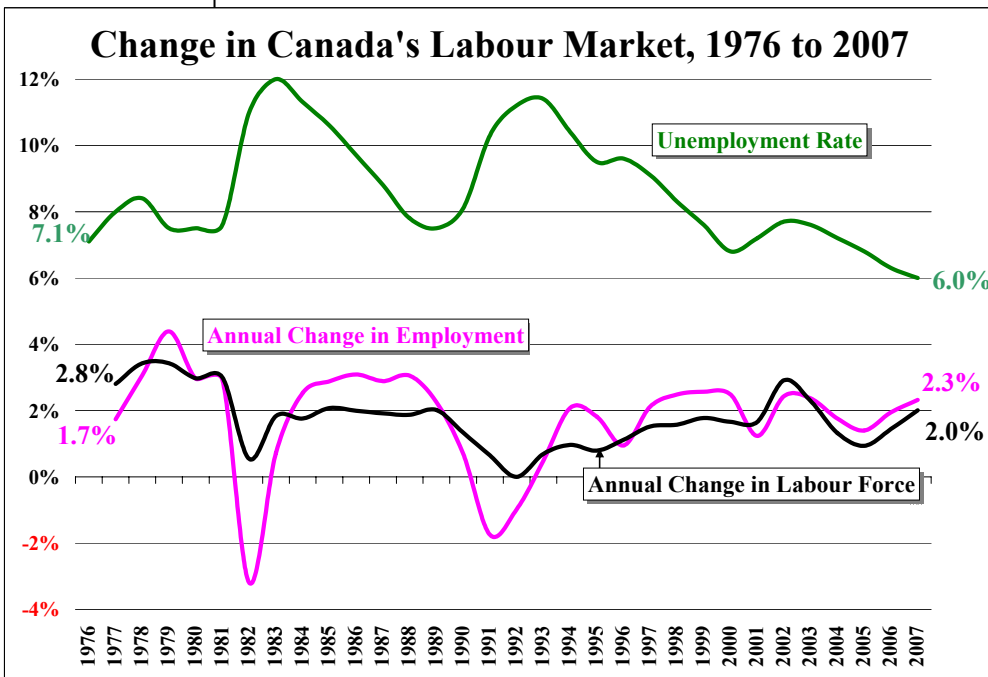
Demography and Behaviour: A Picture of our Changing Labour Force

The data from Statistics Canada's recent release of the 2007 Labour Force Survey illustrate the fundamental changes that are underway in Canada's labour supply. They show that we are in a period of transition towards a labour market that will be fundamentally different from that of the past: one characterized by a relatively scarce supply of labour compared to the abundance that has been experienced historically. But before exploring the data a quick note should be made about our – the two authors of this report – perspectives and interest in these data.

One of us has entered "active retirement", the other is at the peak participation stage of a typical working career. While we are at much different places on the working lifecycle, we share a common perspective about our labour force in the coming years: that we have entered a period in Canadian history where changes in the nation's demography will see the historical relationship between the labour force and economic activity change fundamentally. It will change from one where a robust economy was accompanied by rapid growth in the number of individuals available to work, to one predicated on a requirement for increasing productivity from a slowly growing (and aging) pool of labour to support even modest economic growth. In short, Canada has begun to experience the labour force consequences of entering its third great demographic transition.

Statistics Canada's Labour Force Survey covers the past three decades (1976 to 2007) of changing dimensions of the Canadian labour force. As has been widely published, the data show that by

Figure 1



2007 the national unemployment rate had fallen to 6.0 percent, the lowest rate in the thirty year period of the Agency's data collection (Figure 1). This marks the third year in a row that such a record has been established, following last year's 6.3 percent and 2005's 6.8 percent rate.

Interestingly, the recent low (and declining) unemployment rate is not occurring in a period which, at least by historical standards, could be called boom times with respect to growth in the Canadian economy. The number of people employed in Canada in 2007 grew by 2.3 percent over 2006's level, a

respectable growth, but no where near the 4.4 percent increase between 1978 and 1979, and below the three percent average annual growth of the 1984 to 1988 period. Total economic growth, as measured by national Gross Domestic Product, was in the range of two percent in 2007 versus an average of over four percent annual growth in the mid 1970's.

The falling unemployment rate in Figure 1 is therefore not driven by an economic boom, but rather by relatively slow growth in the size of the country's labour force. The 2006 to 2007 2.0 percent

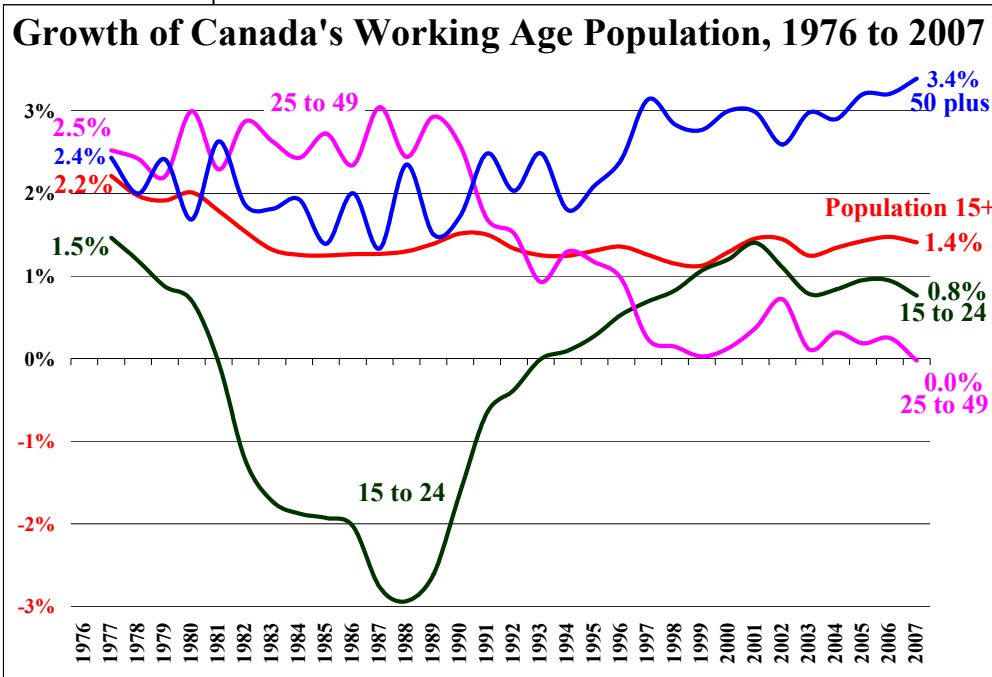
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increase in the number of people participating in the labour force was lower than the 2.3 percent growth in employment, a continuation of a situation that has generally prevailed over the past fifteen years. For example, from 1997 to 2007, employment growth in Canada averaged 2.1 percent per year, while the labour force only grew by an average of 1.8 percent each year. The cumulative impact of this prolonged differential in growth rates has been the record low unemployment rates experienced over the past three years.

To understand why our labour force has been growing relatively slowly we need to look at two dimensions of the labour force. The first is demographic, as participation in the labour force does show a strong lifecycle pattern, and hence demographic change will change the size of the pool from which the labour force may be drawn. The second dimension is behavioural, as measured by changes in male and female labour force participation rates. Changes in the propensity of people to participate in the labour force will change how much of this pool is actually drawn into the paid workforce. It is the interaction of changing demography and changing behaviour, sometimes countering and sometimes compounding each other, that is bringing about the fundamental shifts that are currently occurring.

Statistics Canada considers the working age population to be all of those people in Canada who are 15 years of age or older. In aggregate, the change in the total size of this population contributed

Figure 2



little to the changing conditions in Canada's labour market. Between 2006 and 2007, the 15 plus population grew by 1.4 percent, essentially the same rate (within a 1.1 to 1.5 percent range) as it has grown annually for the past 26 years (Figure 2). Historically the big growth in the working aged population occurred in the 1970s as the post war Baby Boom entered the 15 plus population, increasing the size of working age population by upwards of three percent per year.

Although the total size of the 15 plus population has grown significantly over the past three decades, the aging of the large boom cohort (from entry into

the labour force towards exit) has seen its composition change much more dramatically. Changes in the age composition of the population are important in labour markets because there is a strong age related pattern to labour force participation. As is explored in greater detail over the following pages, the working stage of the lifecycle is comprised of three distinct stages: relatively low participation in the 15 to 24 age group (labour force entry), relatively high participation in the 25 to 49 age group (prime working years) and relatively low participation in the 50 plus population (from active to full retirement).

From 1976 to 1993 the 25 to 49 prime working age group in Canada increased faster than the total 15 plus population, growing in the range of 2.5 percent per year. Over this period growth in the 25

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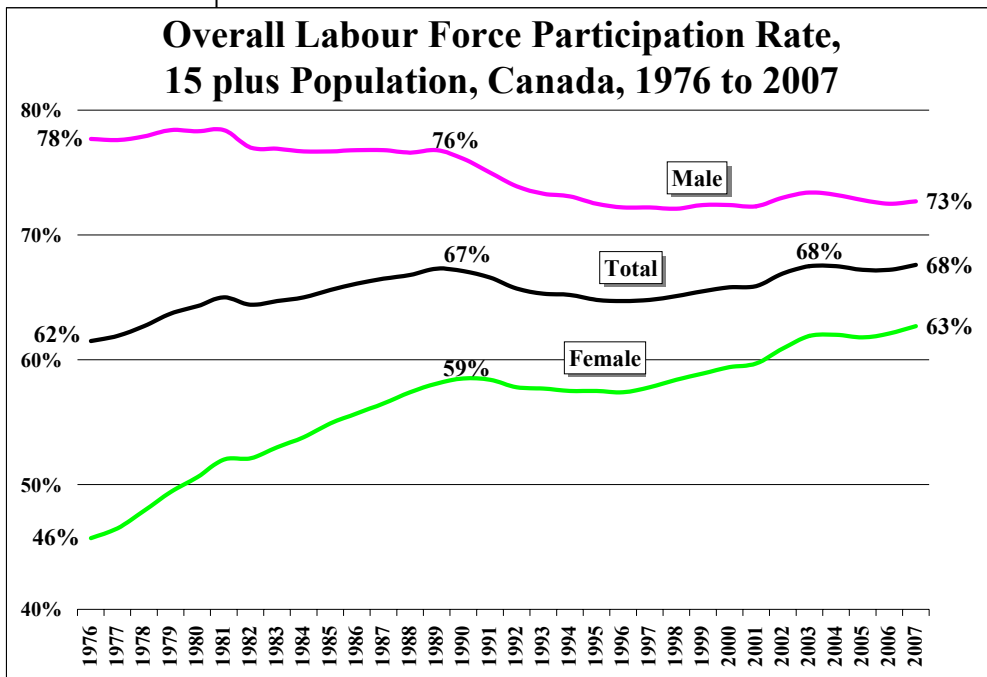
to 49 population came at the expense of the 15 to 24 age group; the boomers aging out of these younger age groups resulted in the number of 15 to 24 year olds declining significantly until 1993.

By 1990, the growth of the prime working age 25 to 49 population began to slow, falling below one percent in 1993, and further to almost no growth by the end of the 1990s. Two factors caused this decline: all of the boomers had aged out of the 15 to 24 age group (so a slowing supply), and the 1938 to 1945 pre-boomer cohort (which marked the ramping up of births during the Second World War) aging into the lower participation 50 plus age groups. From 1997 on, the prime working age group has been the slowest growing component of Canada's population. Conversely, since the 1990's the fastest growing age group in Canada's 15 plus population has been the oldest, 50 plus, age group. Since 1997 the 50 plus population has been growing in the range of three percent per year, with a record 3.4 percent growth in 2007 relative to the no growth of the 25 to 49 groups.

Demographic change is working against growth in our labour force, and it will continue to do so in the coming years as the baby boom cohort continues to age from higher to lower labour force participation stages of the lifecycle. This is in the opposite direction to which the second dimension – behavioural change – has been contributing to labour force change.

In aggregate, there does not appear to have been much change in labour force participation over the past two decades: the 68 percent of the 15 plus population that was in the labour force in 2007 was essentially the same level that has prevailed since the late 80's (Figure 3). In exploring the behavioural dimension of the labour force, it is important to examine not only the age related

Figure 3



pattern of change, but also the pattern for males and females, as each have differed considerably over the past three decades.

For example, the overall pattern masks the rapid underlying growth in female participation over the period. Growing from 46 percent of females aged 15 plus being in the labour force in 1976 to 59 percent in 1990, this increase in female participation was entirely responsible for the increase in overall participation in this period, as the percentage of 15 plus males in the labour force declined marginally from 78 percent in 1976 to 76 percent in 1990.

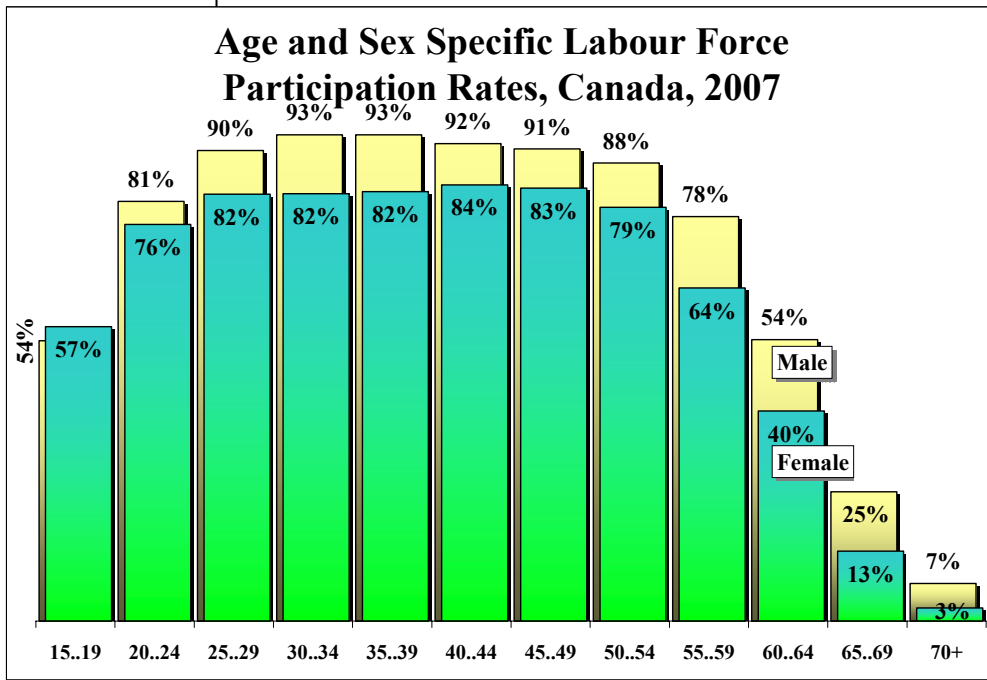
During the 1990s, female labour force participation did not change significantly, while the rate for males continued to decline, falling below 73 percent. From 2000 on, however, female participation rates again increased, reaching a record 63 percent level in 2007.

Participation by sex and age, needs to be considered to more fully understand how behaviour has changed over this period. Figure 4 shows the three general stages of the working lifecycle for both males and females. In the labour entry stage (under 25 years of age), only 57 percent of the females

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and 54 of the males aged 15 to 19, and 81 percent of the males and 76 percent of the females aged 20 to 24, are in the labour force. In the prime working stage however, 90 percent or more of the males and over 80 percent of females aged 25 to 49 are labour force participants.

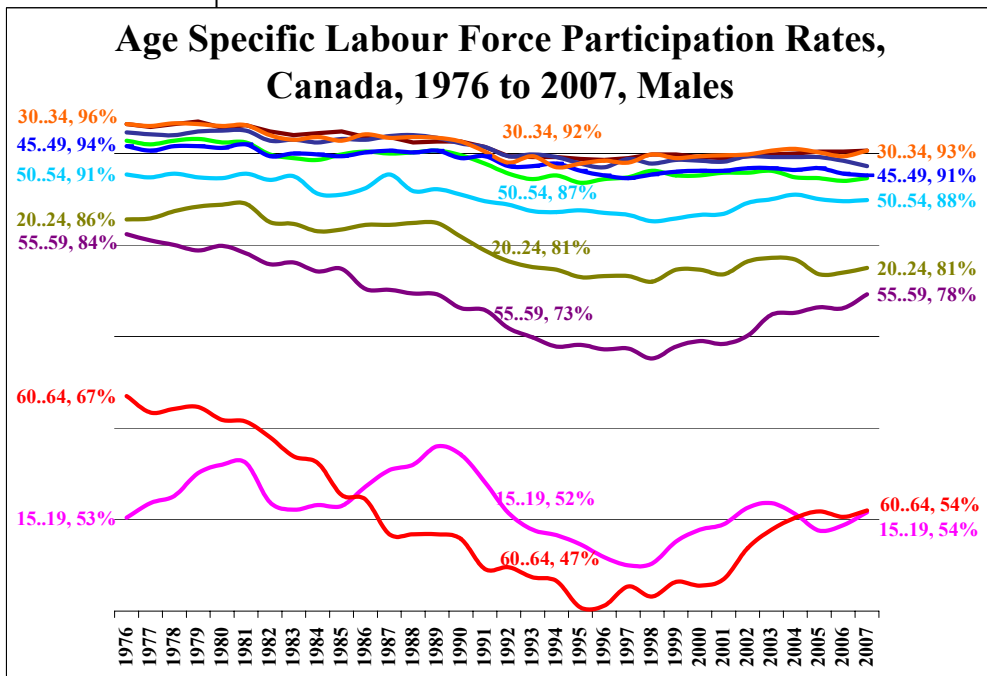
Figure 4



From these relatively high levels, labour force participation begins to decline, at first slowly, and then more rapidly as more people choose to retire. For example, from the 55 to 59 age group's 88 percent participation for males, the rate drops to 54 percent in the 60 to 64 age group, and only seven percent for the 70 plus age group. Similarly, the participation rate for females declines from 79 percent in the 50 to 54 age group to 40 percent in the 60 to 64 age group, and only three percent of the 70 plus population.

It is easy to see why, with most of Canada's recent population growth concentrated in the relatively low participation oldest stages of the working lifecycle, labour force growth has not proceed at the rapid pace of previous eras, constrained as it is by essentially no growth in the high participation rate stage of the lifecycle.

Figure 5



Examining the age specific changes for the under 65 male and female population against the pattern of change for 65 plus age groups provides a better understanding of how this picture was created, and provides some indication of what the future might hold.

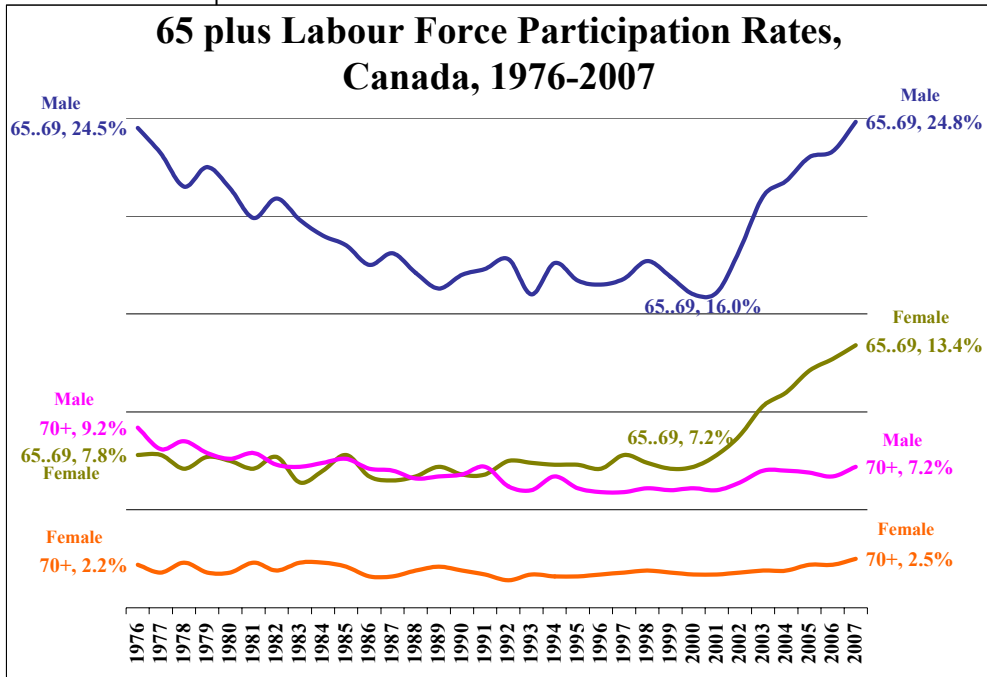
In the case of males under the age of 65, there has been an overwhelming pattern of decline (albeit relatively small declines, Figure 5). For example, in 1976 96 percent of the males in the highest participation age group (30 to 34) were active in the labour force, falling to 93 percent by 2007. In the retirement planning stage (50 to 54 age group), the pattern was the same, a drop from 91 percent in 1976 to 87 percent by 1993 and then up modestly to 88 percent by 2007. In the labour entry stage (20 to 24 age group) the drop was from 86 percent in

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1976 to 81 percent in 1993, and remaining constant thereafter. In the case of the 15 to 19 age group, while there has been much short term movement in the rate, overall it has remained in the 53 to 54 percent range for most of the past three decades.

Only when we get into the older stages of the working lifecycle do we see movement away from these longer-term patterns of slow decline. The 55 to 59 age group was characterized by a marked decline in participation from 84 percent in 1976 to 73 percent in 1993; but since the mid 1990's it has increased steadily to reach 78 percent in 2007, still below its level in the 1970s and 1980s, but above the low recorded through the 1990s. Similarly, the participation rates for males in the 60 to 64 age group dropped from 67 percent in 1976 to 47 percent in 1993, and then began to climb, reaching 54 percent in 2007 (again still below the late 1970's level, Figure 6).

Figure 6



Looking to even later stages in the working lifecycle we again see a different pattern of change. In the 65 to 69 age group, the decline in participation was even longer, dropping from 24.5 percent of the males in 1976 to a low of 16.0 percent in 2001. The increase since this low in early 2000 has also been steeper, returning to its 1976 level by 2007. In the 70 plus age group, while only a modest change has been seen thus far, it will be interesting to see if the increasing participation of the 65 to 69 year olds will be dragged into even later stages of

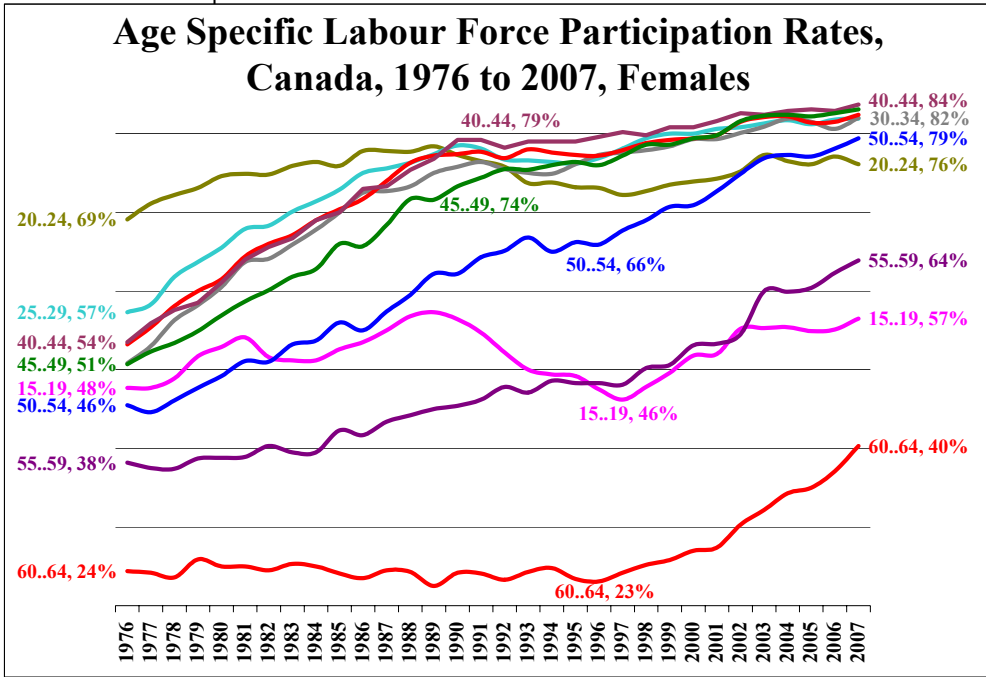
careers in the coming years, resulting in increases for this eldest age group.

Thus it appears that changes in male participation for young and middle career age groups have been relatively independent of the changing economy, as while unemployment rates dropped by almost half (from 11.4 to 6.0 percent), participation rates for males in these age groups declined or remained constant. It is only in the older population where changes in participation have been significant, which may in large part be due to a combination of a long term trend to increasing disability free life expectancies and growing opportunities to remain in the labour force provided by falling unemployment rates.

In considering changes in female labour force participation, a much different historical pattern is seen (Figure 7). Broadly speaking, female age specific rates increased dramatically from 1975 to the early 1990s, increasing much more slowly thereafter. Thus the contribution of increasing female participation to growth in labour supply has diminished over time. Given declining or stable male rates, this has reduced the ability of gains in participation to offset the impact of an aging population, contributing to slower overall growth in the labour force.

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Figure 7



In the 40 to 44 age group (the highest participation stage for females), the participation rate increased steeply from only 54 percent in 1976 to 79 percent by 1991, an increase of almost 50 percent (Figure 7). Between 1991 and 2007, the rate continued to increase, reaching 84 percent in

2007 (an increase of six percent). Such a pattern prevailed in all of the prime working age groups. One can anticipate, at some point in the near future, no increases in participation will be seen in these age groups as it also the stage of the lifecycle characterized by family formation and child rearing.

As with males, it is outside the prime working age stage of the lifecycle where more significant patterns of female labour force increase are found. In the 50 to 54 age group, for example, the percentage of women participating in the labour force grew almost continuously over the 1976 to 2007 period, from

46 percent in 1976 to almost 80 percent in 2007. Again, one can reasonably anticipate this growth slowing in the near future, in part because it is approaching the rate of the age groups that precede it. Albeit with slower starts, a similar pattern is observed for other age groups: the 55 to 59 age group has grown from 40 percent in 1984 to 64 percent in 2007; the 60 to 64 age group has grown from 23 percent in 1996 to 40 percent in 2007; and the 65 to 69 age group where participation went from 7.2 percent in 2000 to 13.4 percent in 2007.

As the future these data portend is dramatically different from the past they describe, the direction of change in the demographic and behavioural dimensions of labour supply take on a much wider importance, becoming of interest to not only employers and workers, but to all of us. The ability to provide the goods and services, from food to health care and pensions, demanded by the (aging) Canadian population will be shaped in an environment of scarce rather than abundant labour.

Given the age composition of Canada's current population, in the absence of immigration and with constant labour force participation, the number of workers in Canada would start to decline by 2011. A trend of increasing immigration, given its concentration in the prime working stage of the lifecycle, would stop the decline but only result in growth in the range of 0.2 percent annually with constant participation rates. A growing labour force will therefore also require increasing participation of the working population. The historical data show that such increases are occurring in the older age groups, and that there is the potential for these increases to continue. Having noted that, even continuing the historical increases in participation into the future will still result in a slowly growing labour force, in the range of one percent per year. For economic growth beyond this level, increasing productivity, and all of the fundamental changes in how Canadians work, will also be essential. From slow labour force growth, low unemployment rates, and an increasing reliance on immigration; to an aging workforce, and a growing emphasis on productivity – our economic and demographic future will be one of managing change; and managing to change.