

Working Time in Comparative Perspective

Volume II - Life-Cycle Working Time and Nonstandard Work

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Ch. 1 - Introduction and Overview

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This is the second of two volumes of selected papers presented at the conference “Changes in Working Time,” which was jointly sponsored by the Canadian Employment Research Forum (CERF), the W.E. Upjohn Institute for Employment Research, and Statistics Canada in Ottawa, Ontario, June 13–15, 1996. The chapters in the first volume focus on the weekly hours that individuals work. These chapters examine recent changes in the distribution of weekly working time in Canada and the United States, the implications of the changing distribution of hours worked for earnings inequality, and efforts to reduce unemployment through mandated hours reductions.

The chapters in this volume study an expanded set of working-time issues, which may be loosely grouped under two topics: working time over the life cycle and nonstandard work arrangements. While the distribution of weekly work hours for the population has changed, so too has the amount that individuals work at various points in their life. Most notably, women with small children have increasingly joined the workforce, while labor force participation among older workers has declined. In addition, a growing number of adults are interrupting their careers to go back to school. Two of the chapters in this volume present an overview of life cycle working patterns and trends in Canada and the United States. Several other chapters study the decision to work at key points in the life cycle: one chapter looks at the payoffs to education among adults who have returned to school; two chapters examine the decision to work by mothers; and two chapters focus on retirement and work patterns among older adults.

Often individuals trying to balance school or family responsibilities with a job are part-time, temporary, self-employed, or home-based workers. These nonstandard employment arrangements may allow them greater flexibility in scheduling to accommodate workers’ other responsibilities. Similarly, older workers who have left a full-time, career job often work in a nonstandard employment arrangement as a transition to retirement. While many older workers seek part-time or temporary jobs as a bridge to retirement, many prime-age workers take on secondary part-time or temporary jobs, typically to meet special financial needs. Evidence that most types of nonstandard employment arrangements have been growing in Canada and the

United States has led to concern about the implications for workers and firms.

Various nonstandard work arrangements are the focus of the last four chapters in this volume. Two chapters look at self-employment and home-based work as mechanisms for achieving greater scheduling flexibility among women. Another chapter compares moonlighting in Canada and the United States, describing the characteristics of workers who moonlight and offering explanations for the higher levels of moonlighting in the United States. The final chapter draws upon a survey of large companies to explain why employers are expanding their use of temporary help workers.

To help readers better understand the issues addressed in this volume and utilize the information contained in it, we provide a synopsis of each of the chapters below. For each chapter, we summarize the study's main objectives, the databases used, and the nature of some of the key findings. The chapters are organized into three groups by the aspects of working time that they consider.

The chapters in Part I examine general patterns and trends in working time over the life cycle for the United States and Canada, and they also introduce a number of the basic terms and concepts used in the rest of the volume.

In "The Life Cycle of Working Time in the United States and Canada: Long-Term Evidence," John D. Owen considers changes over the life cycle for working time in the United States and Canada since 1920. He notes that there have been important changes in weekly hours, in participation and employment rates, and in wages. The purpose of this chapter is to examine the relationship between changes in wage and life cycle labor supply patterns in the two countries.

Owen notes that a simple theory in which labor supply at each age is determined solely by contemporary conditions, without concerns about the future, does not explain life cycle variations in labor supply very well. Owen contrasts the implications of the simple model with the "life cycle theory" of Ghez and Becker. In their model, a young person's lifetime wealth is given by the initial stock of wealth that that person possesses plus the present value of all future income streams, including those from earnings. Owen also makes the important point that life cycle theory is not a theory about cross sections; rather, it is a theory about how the behavior of individuals changes as they age, and hence is a theory better examined with cohort data.

These insights provide the motivation for the empirical portions of this study, which study life cycle employment in the United States and Canada since 1920. The empirical work is based on a number of different data sources for both the United States and Canada that are detailed in a data appendix to the chapter. Owen concludes that the life cycle of working time has been remarkably similar in Canada

and the United States, but that each country has experienced important changes in its life cycle patterns of employment. In particular, the level of male labor supply has declined over time, at first because of decline in the number of hours worked, but more recently because of decline in labor force participation. The decline in labor force participation has been especially large among young and older workers. Over the period studied, real wage growth slowed. Life cycle theory would predict that if workers anticipated the stagnation of wage growth, they would supply more labor in their early years. No support for this hypothesis was found, however.

In “Perspectives on Working Time over the Life Cycle,” Michael Wolfson and Geoff Rowe utilize a new longitudinal microsimulation model developed by Statistics Canada—the LifePaths model—to examine statistical patterns of working time over the life cycle. LifePaths provides a means for blending data on both cross-sectional time-use patterns and longitudinal labor force dynamics. It can be used to produce multistate life tables that relax some of the restrictive assumptions that underlie conventional working life tables, and it can be used to conduct a wide range of policy-related analyses as well.

The LifePaths model constructs estimates of birth cohort life cycles by synthesizing samples of hypothetical but realistic individual life histories. It therefore generalizes a variety of more traditional life table analyses, including working life tables, and affords a much wider variety of “views” of working time over the life cycle. More recent work has extended LifePaths from a single “period” cohort to a sequence of overlapping historical birth cohorts. This makes it possible to use the model to address questions of the intergenerational equity of public pensions, as well as issues of income adequacy, health, and the use of nonwork time.

One of the most striking results to emerge from the LifePaths representation of time use is a greater recognition of how our impressions of the importance of paid work over the life cycle are affected by the “granularity” of the time accounting that is used. Conventional approaches tend to go year by year, in which case a typical working lifetime can be expected to extend over 20–40 years of the life cycle. However, when finer units of time (e.g., hours and days) are used, the proportion of unit time intervals over the typical life cycle that are dominated by market work becomes a much smaller fraction.

Part II contains five chapters that examine individuals’ work decisions at key points in the life cycle. In “Adults Returning to School—Payoffs from Studying at a Community College,” Duane E. Leigh and Andrew M. Gill examine the choices of and the returns to different fields of study for returning adult students versus those who proceed on to college directly from high school. They use National Longitudinal Survey of Youth data through 1993 for respondents who were between 28 and 35 years of age. Leigh and Gill find substantial evidence that returning adults comprise

a substantial share of those in postsecondary education. For instance, students in their thirties comprise 10 percent of those in two-year colleges and 37 percent of those in vocational or technical institutions. Sixteen percent of all BA degrees were earned by respondents classified as returning adults.

Leigh and Gill find that the size of the college earnings premium varies substantially by field of study, with the highest paying fields being engineering/computer science and social science/public service for men and nursing for women. Moreover, they find evidence, particularly for men, that returning adults are more sensitive to market wage differentials in choosing fields of study than are ones who continue on directly from high school.

In “Children’s Effects on Women’s Labor Market Attachment and Earnings,” William E. Even and David A. Macpherson attempt to explain significant changes since the 1970s in the labor force attachment and earnings among women of childbearing age. Using data from the March Current Population Surveys over the 1976–1995 period, the authors document the dramatic rise in employment rates and the dramatic decline in the exit rates among civilian women aged 21 to 40. Not surprisingly, the exit rate among women with infants is the highest and among women with no children the lowest throughout the period. However, the differential in the exit rates across these groups narrowed dramatically over time: among women with some work history during the previous year, the exit rate among women with infants declined by 25.7 percentage points, whereas the exit rate among women with no children declined just 5.4 percentage points from 1976 to 1995. Even and Macpherson also find a convergence of exit rates by marital status. Interestingly, compared to previously married and never married women, married women were the most likely to exit employment in 1976, but by 1995 they were the least likely to exit employment.

Even and Macpherson try to explain this sharp decline in the exit rates among married women. By estimating probit models of exit behavior among married women over the 1976–1979 period and over the 1992–1995 period, however, they find that changes in observed characteristics explain only a small share of the large decline in exit rates between the two periods. The most striking finding in these probit models is that the presence of infants had a much smaller effect on the probability that a married woman would exit the labor force in the 1990s than in the 1970s. This finding indicates that the behavior of women, not their characteristics, has fundamentally changed over the period.

In wage models, the presence of children has a negative effect on women’s earnings, a finding that is consistent with both theories of human capital and statistical discrimination. According to human capital theory, women who expect to exit the workforce when they have children would invest in less human capital. According to

theories of statistical discrimination, employers would discriminate against hiring or promoting women of childbearing age into jobs that require large investments of human capital on the grounds that they are more likely than men to quit. Even and Macpherson, however, find that the adverse effect of children on women's wages has declined over time, especially among married women, which is consistent with the decline in their exit rates.

In the chapter "U.S. Health Policy and Mothers of Children with Disabilities," Janet Hunt-McCool examines the effects on the labor supply of mothers whose children suffer from disabilities or physical limitations. The health insurance options facing these mothers include no insurance; Medicaid (a free state/federal program for very low-income households); employment-based insurance, often conditional on full-time work and relatively high wages; and, if married, possible coverage by the spouse's employer-provided insurance policy. She notes that just under 60 percent of the U.S. population receives coverage from private carriers, while 18 percent have no insurance coverage, either private or public. Only 40 to 60 percent of the low-income population in each of the U.S. states is covered by Medicaid.

The data used in this study are from the 1987 National Medical Expenditure Survey (NMES), which collected information on medical care use and expenditures, health insurance coverage, and employment and hours worked in the United States. This analysis employs a subset of families with children between 1 and 17 years of age. These data are for 3,069 two-parent and 1,590 single-parent families in which the mothers were present. The sample of married mothers was further restricted to households in which husbands were employed full time as wage and salary workers. Multinomial logit estimates of the choice of usual hours of work per week are used to estimate the effects of child health status and the availability of private and public insurance on maternal labor supply. They are estimated separately for married and single mothers. The choices considered are no work, part-time hours (less than 35 hours per week), or work at full-time hours.

One of the main findings is that potentially chronic illnesses in children deter both single and married mothers from full- or part-time employment. This result differs from many previous studies that find a response only among married women. Women who do work are found to be more likely to choose limited hours or part-time work. Another main result is that health insurance on the job matters. These empirical results indicate that the odds of a woman opting for full-time work versus not working rise as the chance of being offered insurance increases. When the husband holds insurance, the mother is more likely to choose part-time work over full-time work, or, more often, to choose no work at all.

Hunt-McCool concludes that there are many reasons why the U.S. system of health insurance provision, in which coverage is tied to jobs, is inefficient or

inequitable. She notes that the zero-sum alternative of Medicaid has its own set of disadvantages, including that lifetime income and wealth must remain very low to maintain this coverage, and market skills may depreciate with the limitations this imposes on work. She concludes that women will particularly suffer from the problems created by the employment/health insurance nexus since they routinely provide a large part of the nonmarket time their families require.

In “Early Retirees of a Telecommunications Firm—Patterns of Employment and Working Time,” Gangaram Singh and Anil Verma investigate bridge employment among older workers, using data from the Survey of Work and Lifestyle Activities, a survey of former Bell Canada employees. In July 1995, a survey questionnaire was sent by mail to a sample of 3,614 individuals who had left the company between 1985 and 1995. This survey group consisted of all eligible individuals ages 45–50, and a randomly selected 50 percent of the over–50 age group. All of those aged 45–50 were included to try to ensure enough respondents from the “younger retirees” group. The response rate was 60 percent. This is a survey of persons who voluntarily retired from a long-term career job with what was Canada’s largest telecommunications company. The majority of those included left Bell with a special financial settlement, and all of them were entitled to a private pension from Bell Canada at the time that the survey was conducted.

Singh and Verma find that 39 percent of the respondents had returned to work after their initial retirement from Bell and were still working, 2 percent were unemployed, and the remaining 59 percent were out of the workforce and hence still retired. For those who had returned to work, 82 percent reported having gone back to work in some form of nonstandard employment, while 18 percent had gone back to standard employment. In addition to providing descriptive statistics, the authors use a multinomial logit model to help explain the choices that these early retirees made between remaining retired, working in standard employment arrangements, and working in nonstandard employment arrangements. Most interestingly, they find that pension schemes that “clawback” benefits when retirees earn income reduce employment, particularly in full-time jobs.

Michael Baker and Dwayne Benjamin examine the effects of public pension schemes on retirement behavior in “Working Time Over the Life Cycle: Do Public Pensions Matter?” They point out that in 1980, over 60 percent of Canadian men between age 60 and 64 were working, whereas by 1994, this figure had fallen to 50 percent. Also, in the intervening years, early retirement provisions had been introduced into the Canadian Pension Plan (CPP), which governs pensions in all provinces besides Quebec, and into the Quebec Pension Plan (QPP). They examine whether there was any causal relationship between the change in pension policy and the increase in retirement rates. The approach they take is to make use of the difference in the time of introduction for the early retirement provisions in the CPP

and the QPP. They rely primarily on time series evidence from the Canadian Labour Force Survey data. For portions of the study, they also utilize individual-level panel data from the Labour Market Activity Survey. Their analysis uncovers no strong evidence to suggest that major changes to the public pension schemes in Canada can explain the sharp decline in retirement age.

The chapters in Part III focus on various forms of nonstandard employment. The first three of these have to do with worker behavior and employment patterns. The fourth examines employer hiring practices.

In introducing her chapter, “Self-Employment and Schedule Flexibility for Married Females: Evidence for the United States from SIPP,” Theresa J. Devine notes that as the employment rate for prime-age married women in the United States rose through the 1980s, their self-employment rate rose by more. She also points out that the findings to date on self-employment for married women suggest that many may be using this as a way to exercise more control over work schedules than is typically possible in the wage-and-salary sector. Her chapter presents new evidence on this work schedule hypothesis from the Survey of Income and Program Participation (SIPP).

Devine calls attention to a number of reasons why the SIPP data are particularly useful for investigating this work schedule hypothesis for the self-employment of married women. She points out that each SIPP interview collects relatively detailed information on job characteristics and work schedules (weeks worked, usual hours, and deviations from usual schedules of work). As well, SIPP is longitudinal, so changes in usual schedules and self-employment status can be measured, and SIPP interviews are just four months apart, which means that short-term changes can be measured quite accurately. SIPP also collects detailed information on business characteristics including husband/wife business ownership, legal status, and number of employees, all of which make this a rich data source for the study of self-employment in the United States.

Consistent with her hypothesis, Devine finds that the self-employed and wage-and-salary women report very different usual hours of work. Self-employed women rarely report 40 hours as their usual per week, while 40 is the number reported most often by wage- and-salary women. Usual hours of the self-employed are much more varied, both from one woman to another and over time for all individuals. Self-employed women also deviate from or change their own usual schedules more frequently than wage-and-salary women. Women who are only self-employed are less likely than wage-and-salary women to report that their part-time hours or the variability in their work schedules is due to insufficient work.

The data also suggest that the self-employment decisions of married women often depend on the employment circumstances of their husbands. Usual hours of self-employed women are more correlated with the usual hours of their husbands, particularly when their husbands are also self-employed. Additionally, more than half of the women who report self-employment during the period of a year had self-employed husbands.

In the chapter “Work Site and Work Hours: The Labor Force Flexibility of Home-Based Female Workers,” Linda N. Edwards and Elizabeth Field-Hendrey examine the hypothesis that fixed costs of work play an important role in determining the probabilities of whether women work at home (home-based work), or out of the home (on-site work), or not at all. The data for their study are from the 5 percent Public Use Microdata Sample of housing units from the 1990 Census of Population of the United States. Identification of home-based workers is derived from answers to the journey to work question, which asks, “How did this person usually get to work last week?” The persons who responded that they “worked at home” are regarded as home-based workers. The sample was limited to those 25–55 years of age to avoid the years when large numbers of women either are still attending school or are retired.

Home-based women are found, on average, to differ greatly from on-site workers in both their personal characteristics and in the nature of their work. For example, 62.9 percent of the former are self-employed compared with 3.3 percent of the latter. Home-based workers are also found to have much more variety in their work schedules, both with respect to weekly hours and weeks worked per year. The authors conclude that their findings support the hypothesis that home-based work gives women greater flexibility in scheduling work and increases the labor force participation among women with high fixed costs of working, such as those with young children, with elderly relatives living in their home, with disabilities, and with long commutes to on-site work locations.

In “A Comparative Analysis of Moonlighting in Canada and the United States,” Jean Kimmel and Lisa M. Powell provide a wealth of information for the United States and Canada about multiple job-holders and the jobs they hold. Their descriptive analysis provides information about differences across gender, age, education, marital status, region, and other characteristics. Separate information is provided about the primary jobs (PJ) versus the secondary jobs (SJ) that are held by multiple job-holders. They estimate PJ and SJ wage equations for each country and then use these to compute predicted wages that are included in probit models for the probability of moonlighting.

For the United States, the data are drawn from the May Current Population Survey (CPS), which contains a special supplement with information on multiple jobs.

The CPS is a randomly drawn U.S. sample of households. The Canadian data are drawn from the Survey of Work Arrangements (SWA), which is a supplement to the November 1991 Canadian Labour Force Survey. While the Labour Force Survey does flag multiple job-holders, the SWA supplement provides additional information on work patterns, primary job union membership, occupational and industrial distributions of secondary jobs, secondary job wages, and the reason for moonlighting.

Kimmel and Powell find that moonlighting rates rise with the level of education, that unmarried females and married males are the most likely to moonlight, and that the total hours of work per week are much higher for moonlighters than nonmoonlighters. Although about two-thirds of moonlighters give financial reasons for taking a second job, moonlighters are not predominantly lower-income workers. Moonlighting rates are higher in the United States than in Canada, which Kimmel and Powell ascribe to the higher divorce rates and the lower unemployment rates in the United States.

In “Large Companies and the Changing Use of Temporary Workers: Trends and Impacts on Financial Measures of Performance,” Shulamit Kahn, Fred Foulkes, and Jeffrey Heisler report findings from in-depth interviews with human resource executives at 35 large U.S. companies. They correlate changes in the way these companies use temporary workers with various financial measures of profitability. They also examine detailed case study results for selected firms in a narrowly defined manufacturing industry.

The authors find that many large companies are hiring more temporaries and are using them differently than in the past. For instance, temporary hiring is being used increasingly as a recruiting and screening mechanism for permanent employees. In addition, temps are increasingly being used as a way of dealing with variability in demand for labor that is both foreseen and unforeseen. The authors also look for correlations between use of temporary help agencies and financial performance, but find conflicting evidence in their cross-sectional and time-series analyses. However, as they note, it is difficult to tease out any causal relationship given their small sample size and the fact that human resources policies tend to be overshadowed by other factors in determining a company’s financial performance.