

Hours polarization at the end of the 1990s

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During the last 20 years, both short (less than 35 hours) and long work weeks (more than 40 hours), have become increasingly popular. This movement away from the standard work week is known as “hours polarization.”

The following tables show the change in hours worked, and in paid and unpaid overtime, between 1976 and 1998. Distributions by sex, occupation and industry are provided, as is a comparison with the United States.

Data source and definitions

This paper uses data from Statistics Canada’s Labour Force Survey (LFS). All figures are annual averages and apply only to employees (the self-employed are not included). Overtime figures apply only to employees who were at work during the reference week. All other figures refer to all employees, whether or not they were at work during the reference week. Throughout this analysis, the term **standard work week** refers to the 35-to-40 hour work week (actual hours between 35.0 and 40.9 hours). **Long hours** refers to a work week of 41 hours or more, while **short hours** refers to less than 35 hours, including 0 hours.

“Hours polarization” (Sheridan, Sunter and Diverty, 1996) is a decline in the proportion of people working standard hours, matched with increases in the proportions of people working long and short hours. **Hours inequality** is a unidirectional shift in the distribution of hours in which the proportion of people working standard hours declines, and the proportion of people working *either* long *or* short hours, *but not both*, increases correspondingly.

The years 1980, 1989, and 1998 were chosen to avoid business cycle effects. This affects the analysis somewhat: the growth of short hours between 1989 and 1998 may

appear exaggerated, for example, because short hours reached their lowest level in 20 years in 1989.

Usual hours

Nearly all of Statistics Canada’s literature on hours of work refers to usual hours. Conceptual changes introduced during the phase-in of the 1997 redesign of the Labour Force Survey, however, resulted in a break in the usual hours time series in the autumn of 1996. The variables and data series relating to hours of work were revised in order to ensure accuracy in wage estimates. Prior to the redesign, usual hours included any paid or unpaid overtime usually worked in a week; with the new survey, the usual hours variable now measures only contract or scheduled hours of work.

Actual hours

The actual hours time series continues unbroken from 1976. Actual hours may be lower or higher than usual hours: lower because of vacation, illness, or other absences from work; higher because of paid or unpaid overtime. The LFS data allow hours away from work and reasons for absence to be measured, along with the number of total, paid, and unpaid overtime hours worked.

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Usual versus actual hours worked, 1998

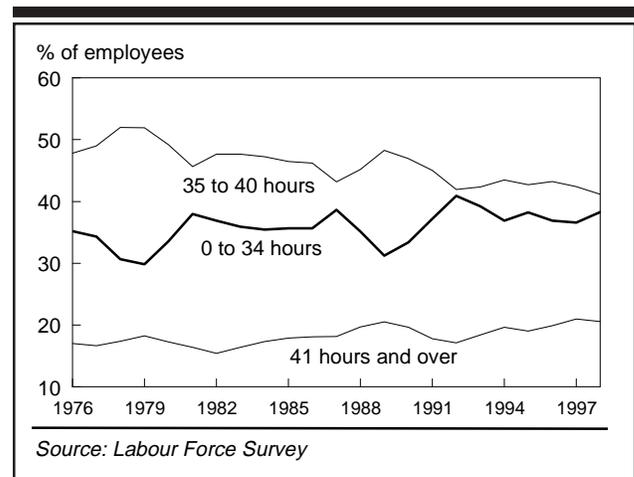
Usual and actual hours correlate reasonably closely, although the association is stronger at the poles. In 1998, some 94% of those who usually worked less than 35 hours a week reported similar actual hours; 82% of those who reported usual hours of 41 and over also reported similar actual hours. The association was not quite as strong in the middle: just 61% of those whose usual hours were between 35 and 40 reported actual hours in the same range; some 22% reported short actual hours, while 17% reported long actual hours.

	Actual hours		
	0 to 34	35 to 40	41 and over
	% of employees		
Usual hours	38.3	41.2	20.6
Less than 35	94.4	4.0	1.6
35 to 40	22.0	61.4	16.7
41 and over	11.3	7.1	81.6

Source: Labour Force Survey

Actual hours worked, 1976-1998

Between 1976 and 1998, the proportion of employees working 35 to 40 hours declined, while the proportions working more or working less increased. Most of this drop was due to the decreasing popularity of the 40-hour work week. The percentage of workers putting in 35 to 39 hours has remained reasonably stable since 1980, at around 16%, but a pronounced drop has occurred in those working 40 hours: just 25% of workers did so in 1998, compared with 32% in 1980 and 1989. The proportion with zero hours has remained relatively constant, fluctuating between 7% and 8%.



Actual hours worked by sex, 1980-1998

Women are far more likely than men to work short hours, in part because their absence rate is almost twice that of men. In 1998, 50% of women and just 28% of men worked less than 35 hours per week. Twice as many women worked between one and 14 hours (8% versus 4%). More women also worked between 35 and 39 hours: in 1998, 12% of men and 20% of women clocked between 35 and 39 hours, compared with 12% and 23% in 1980.

Men outnumber women at the long hours end of the distribution. More men than women worked between 35 and 40 hours (in 1998, 43% versus 39%, down from 51% and 47% in 1980). At least twice as many men as women worked between 41 and 49 hours a week (15%, compared with 7%). Finally, women were much less likely than men to work very long hours. In 1998, 6% of men and 1% of women worked 60 or more hours a week.

	1980			1989			1998		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
Hours	%								
0 to 34	33.5	25.5	45.1	31.2	21.6	42.6	38.3	27.9	49.6
35 to 40	49.2	50.9	46.8	48.2	50.0	46.2	41.2	43.3	38.8
41 and over	17.3	23.7	8.1	20.5	28.4	11.3	20.6	28.8	11.6

Source: Labour Force Survey

Actual hours worked by sex, 1993-1998

In the short term, the distribution of actual hours worked has remained fairly static since 1993. The percentage of those working less than 35 hours has changed only 1% from 1993 to 1998, remaining around 39%. The proportion working a standard work week has remained around 42%, with a much

closer distribution between men and women (about 44% for men, compared with 39% for women). Finally, the percentage of those working long hours has remained around 20% since 1993. Men are more likely than women to work longer hours (29% versus 12%).

	Hours								
	0 to 34			35 to 40			41 and over		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
	%								
Year									
1993	39.2	29.3	50.1	42.4	44.7	39.8	18.4	26.0	10.1
1994	36.9	26.8	48.1	43.5	45.4	41.3	19.6	27.8	10.5
1995	38.2	28.2	49.4	42.7	44.9	40.3	19.0	26.9	10.4
1996	36.9	26.6	48.3	43.2	45.5	40.7	19.9	27.9	11.1
1997	36.6	26.0	48.4	42.4	44.9	39.6	21.0	29.1	12.0
1998	38.3	27.9	49.6	41.2	43.3	38.8	20.6	28.8	11.6

Source: Labour Force Survey

Actual hours worked by industry, 1989-1998

Actual hours of work vary by industry.¹ The polarization pattern of the 1976-95 period (Sheridan, Sunter and Diverty, 1996) continues: long hours are still more common in goods-producing industries, and short hours more common in service-producing industries.

High rates of long hours in 1998 were recorded in agriculture (36%), primary industries (39%), construction (29%), manufacturing (28%), and transportation and warehousing (29%). In fact, 12% of workers in agriculture and in primary industries worked more than 60 hours.

Short hours, too, are related to industry. More than half of workers in accommodation and food services (59%) and health care and social assistance (51%), and just under half in educational services (48%) and trade (45%) put in under 35 hours in 1998. In addition, 39% of workers in management and administrative support and 37% of those in agriculture² worked less than 35 hours.

The standard work week declined in every industry (except agriculture, where it registered a 3 percentage-

point gain) between 1989 and 1998. These declines were matched with increases in short hours and, in some industries, declines in long hours.

The greatest move away from the standard work week was in utilities (14 percentage points), which experienced a nearly 10-point increase in short hours and a 5-point increase in long hours. Similarly, standard hours in primary industries declined by almost 11 points, short hours rose 5 points and long hours increased 6 points.

These two cases were, however, somewhat anomalous: in other industries, the shift to short hours was much more pronounced. In public administration, for example, a 10-point drop in standard hours was paired with a matching rise in short hours; long hours were unchanged. In educational services, the 9-point decline in standard hours was paired with a similar rise in short hours.

Finally, in management and administrative support, a 3-point dip in standard hours and a 2-point drop in long hours meant a 5-point increase in short hours.

	1989			1998			1989-98 change		
	0-34	35-40	41+	0-34	35-40	41+	0-34	35-40	41+
	%			%					
All industries	31.2	48.2	20.5	38.3	41.2	20.6	7.1	-7.0	0.1
Agriculture	38.8	24.2	37.0	36.9	27.3	35.7	-1.9	3.1	-1.3
Primary industries	18.3	48.8	32.9	22.9	38.3	38.8	4.6	-10.5	5.9
Utilities	18.0	64.8	17.2	27.4	50.6	22.0	9.4	-14.2	4.8
Construction	20.9	51.7	27.4	26.6	44.0	29.5	5.7	-7.7	2.1
Manufacturing	17.2	57.8	25.0	22.4	50.0	27.6	5.2	-7.8	2.6
Trade	38.6	42.4	19.0	44.7	37.3	18.0	6.1	-5.1	-1.0
Transportation and warehousing	26.0	47.2	26.8	31.2	39.9	28.9	5.2	-7.3	2.1
Finance, insurance and real estate	26.9	53.4	19.7	35.5	46.0	18.5	8.6	-7.4	-1.2
Professional, scientific and technical services	23.8	52.0	24.2	30.1	46.2	23.7	6.3	-5.8	-0.5
Management and administrative support	34.6	46.0	19.3	39.4	43.1	17.5	4.8	-2.9	-1.8
Educational services	39.7	38.9	21.4	48.5	30.2	21.3	8.8	-8.7	-0.1
Health care and social assistance	44.5	46.2	9.3	51.5	39.1	9.4	7.0	-7.1	0.1
Information, culture and recreation	32.8	47.9	19.3	39.9	41.8	18.3	7.1	-6.1	-1.0
Accommodation and food services	52.1	33.3	14.6	58.7	28.8	12.6	6.6	-4.5	-2.0
Other services	33.5	43.9	22.6	38.1	40.8	21.1	4.6	-3.1	-1.5
Public administration	26.4	57.9	15.7	36.4	48.0	15.6	10.0	-9.9	-0.1

Source: Labour Force Survey

Actual hours worked by occupation, 1989-1998

Actual hours of work also vary according to occupation.³ Managers worked the longest hours in 1998. Those in sales and service jobs, and attendants, helpers and other service workers put in the shortest hours.

Among managers, long hours are common: in 1998, 38% worked more than 40 hours per week, with 14% putting in between 49 and 59 hours, and another 8% working 60 or more. Short hours were relatively rare for this group: 22% worked less than 35 hours.

For professionals, too, long hours are a fact of life: in 1998, nearly one-quarter worked more than 40 hours per week. They were less likely than managers to work very long hours, however: just 4% worked 60 or more. Short hours were also more common for this group than for managers: 38% worked less than 35 hours per week.

On the other hand, 61% of attendants, helpers and other service workers, and 48% of those working in

sales and service jobs, worked less than 35 hours per week. Just 8% of the former and 16% of the latter worked more than 40 hours per week.

Between 1989 and 1998, a decline in the standard work week occurred in *every* occupational group, along with a rise in work weeks less than 35 hours. In fact, the decline in standard hours was most often accounted for by a rise in short hours – and in some cases, even slight drops in long hours.

The decline in standard hours was greatest in administrative occupations (9 points), matched by a rise in short hours. For workers in technical occupations, a 7-point drop in standard hours (and a one-point decrease in long hours) was accompanied by an 8-point increase in short hours. Finally, the standard work week dipped by 7 points among trades and production workers, while short hours rose 6 points, and long hours rose 2 points.

	1989			1998			1989-98 change		
	0-34	35-40	41+	0-34	35-40	41+	0-34	35-40	41+
	%			%					
All occupations	31.2	48.2	20.5	38.3	41.2	20.6	7.1	-7.0	0.1
Managerial	16.2	45.6	38.3	22.1	39.6	38.3	5.9	-6.0	-
Professional	31.4	44.9	23.7	37.7	39.0	23.3	6.3	-5.9	-0.4
Technical	34.9	49.4	15.7	42.8	42.3	14.9	7.9	-7.1	-0.8
Trades and production	19.7	53.3	27.0	25.4	46.1	28.5	5.7	-7.2	1.5
Administrative	31.9	56.6	11.5	40.6	48.1	11.3	8.7	-8.5	-0.2
Sales and service	41.6	39.9	18.5	48.3	35.3	16.5	6.7	-4.6	-2.0
Attendants, helpers and other service workers	54.5	36.4	9.0	61.2	31.1	7.8	6.7	-5.3	-1.2

Source: Labour Force Survey

Paid and unpaid overtime hours by sex, 1998

In 1998, 8% of workers put in paid overtime, and 10% worked unpaid overtime. Just under a million Canadians put in an average 8.7 paid overtime hours per week, and another one million worked an average 9.5 unpaid overtime hours. Unpaid overtimers were more likely to work longer hours: 4% worked 10 or more extra hours in 1998, compared with 3% of paid overtimers.

Men were more likely than women to work paid overtime: 11% versus 6%. And more than twice as

many men as women worked 5 hours or more paid overtime a week (8% versus 3%).

Men also work longer unpaid overtime hours than women. In 1998, 10% of men and women clocked overtime hours for which they were not paid. Women were most likely to work under 5 such hours (3.4%, compared with 2.4% of men), and least likely to work 15 hours or more of unpaid overtime (1.7% versus 2.5%). Roughly equal percentages of men and women worked between 5 and 9 unpaid overtime hours.

	Paid			Unpaid		
	Both sexes	Men	Women	Both sexes	Men	Women
	%			%		
Overtime hours						
None	91.2	88.6	94.1	89.9	89.6	90.3
Less than 5	2.9	3.2	2.4	2.9	2.4	3.4
5 to 9	3.0	4.0	2.0	2.8	2.9	2.7
10 to 14	1.5	2.1	0.7	2.2	2.5	1.9
15 and over	1.4	2.1	0.7	2.2	2.5	1.7

Source: Labour Force Survey

Paid and unpaid overtime hours by industry, 1998

Paid overtime hours are more common in certain industries. Nearly 13% of those in utilities, 12% in manufacturing, 12% in primary industries, and 10% in construction worked 5 hours or more of paid overtime in 1998. On the other hand, only 3% of those in educational services worked any paid overtime.

Unpaid overtime, too, is tied to the industry in which people work. Some 25% of those in educational services, 13% in professional, scientific and technical services, 10% in finance, insurance and real estate, and 8% in information, culture and recreation worked unpaid overtime of 5 or more hours a week in 1998.

	Paid overtime hours					Unpaid overtime hours				
	0	1-4	5-9	10-14	15+	0	1-4	5-9	10-14	15+
	%									
All industries	91.2	2.9	3.0	1.5	1.4	89.9	2.9	2.8	2.2	2.2
Agriculture	95.1	1.6	1.0	1.0	1.4	96.3	0.9	1.2	0.9	0.8
Primary industries	85.5	2.9	4.0	3.2	4.5	91.4	2.5	2.5	1.9	1.7
Utilities	83.3	3.8	5.5	3.2	4.2	89.9	3.1	3.2	2.1	1.7
Construction	87.5	2.9	3.8	2.7	3.1	94.9	1.6	1.3	1.1	1.1
Manufacturing	83.4	4.6	6.6	2.9	2.5	92.8	1.9	2.2	1.7	1.5
Trade	93.5	2.5	2.3	1.0	0.8	92.6	2.4	2.1	1.5	1.4
Transportation and warehousing	88.1	3.9	3.6	2.0	2.4	93.7	1.7	1.9	1.3	1.4
Finance, insurance and real estate	94.5	2.1	1.9	0.8	0.6	84.8	4.7	4.6	3.3	2.5
Professional, scientific and technical services	91.9	2.7	2.7	1.5	1.3	82.6	4.4	5.1	4.2	3.8
Management and administrative support	93.0	2.3	2.3	1.1	1.2	94.1	1.9	1.7	1.0	1.2
Educational services	97.5	1.0	0.9	0.3	0.4	70.7	4.4	7.2	8.0	9.7
Health care and social assistance	93.8	2.8	1.9	0.7	0.8	91.9	3.9	2.0	1.2	1.1
Information, culture and recreation	92.1	2.9	2.4	1.3	1.3	88.6	3.2	3.3	2.7	2.2
Accommodation and food services	94.9	2.0	1.8	0.7	0.7	96.1	1.4	0.9	0.9	0.7
Other services	93.5	2.4	2.1	1.1	0.9	91.7	2.6	2.1	1.6	1.9
Public administration	92.1	2.7	2.4	1.2	1.5	87.0	4.9	4.0	2.2	1.9

Source: Labour Force Survey

Paid and unpaid overtime hours by occupation, 1998

Trades and production workers put in the most paid overtime in 1998: 16% worked overtime, with 6% working 10 or more hours paid overtime. Some 9% of technical workers and 7% of those in administrative occupations worked paid overtime. Managers (5%) and professionals (6%) were the least likely to do so.

When unpaid overtime is considered, however, the story changes dramatically: 29% of managers and 23% of professionals worked unpaid overtime in 1998. Among managers, 8% put in 15 or more hours of unpaid overtime per week, and 8% worked 10 to 14 hours extra. Among professionals, 6% worked 15 or more unpaid overtime hours, and another 6% worked between 10 and 14.

Among occupational groups, managers were the most affected by overtime. With overtime excluded, the proportion working long hours dropped 21 points

(from 38% to 17%), while the proportion working standard hours rose 18 points (from 40% to 58%). Among professionals, the proportion working long hours dropped 15 points (from 23% to 8%) and that putting in standard hours rose 11 points (from 39% to 50%).

Conversely, less than 3% of trades and production workers and a similar proportion of attendants, helpers and other service workers put in any unpaid overtime in 1998. Not surprisingly, overtime has little effect on hours of work for the latter. Minus overtime, standard hours for this group increase just 2 points (from 31% to 33%) and short hours, one point (from 61% to 62%). But among trades and production workers, who are the most likely to work paid overtime, the removal of overtime hours results in a 12-point drop in long hours (from 29% to 17%), and a 10-point rise in standard hours (from 46% to 56%).

	Paid overtime hours					Unpaid overtime hours				
	0	1-4	5-9	10-14	15+	0	1-4	5-9	10-14	15+
	%									
All occupations	91.2	2.9	3.0	1.5	1.4	89.9	2.9	2.8	2.2	2.2
Managerial	95.4	1.3	1.6	0.9	0.8	71.4	5.4	7.9	7.6	7.7
Professional	94.1	2.0	2.0	1.0	1.0	76.6	5.2	6.3	5.8	6.1
Technical	90.8	3.3	3.0	1.4	1.5	91.3	3.6	2.5	1.3	1.4
Trades and production	83.8	4.4	5.8	3.0	3.0	97.4	1.0	0.7	0.5	0.4
Administrative	93.0	3.1	2.2	1.0	0.8	91.6	3.7	2.5	1.3	0.9
Sales and service	93.9	2.1	2.1	1.0	0.9	93.7	2.3	1.8	1.2	1.0
Attendants, helpers and other service workers	94.9	2.0	1.8	0.6	0.7	97.4	1.3	0.6	0.4	0.3

Source: Labour Force Survey

Actual hours worked in Canada and the United States, 1980-1998

Between 1980 and 1998, standard hours declined 8 points in Canada and 9 points in the United States. Forty-five percent of Canadians and 43% of Americans worked standard hours in 1998, down from around 53% and 52%, respectively, in 1980.⁴

In general, Canadians are more likely to work short hours and Americans, long hours. In 1998, for example, 33% of Canadians worked short hours and 26% of Americans did so. On the other hand, 22% of Canadians and 31% of Americans put in long work weeks. These differences have widened with time. In 1980, the difference in the proportion working long hours was 5 points; by 1989, the difference had grown to 7 points. By 1998, the difference was 9 points. The gap at the short-hours end of the spectrum increased from 3 points in 1980 to 7 points in 1998.

	1980		1989		1998	
	Canada	U.S.	Canada	U.S.	Canada	U.S.
	%					
Hours						
1 to 34	28.1	24.6	25.8	22.8	32.9	25.8
35 to 40	53.2	52.1	52.0	48.0	44.8	43.3
41 and over	18.7	23.3	22.1	29.2	22.3	31.0

Sources: *Labour Force Survey*; *U.S. Current Population Survey*

Between 1989 and 1998, the United States saw gains of almost 2 points in long hours and 3 points in short hours, and a decline of 5 points in standard hours. In comparison, Canada's 7-point drop in standard hours was almost entirely explained by a gain in short hours.

Perspectives

■ Notes

1 Industry groupings are based on the new North American Industrial Classification System (NAICS). The NAICS codes are substantially different from the old SIC codes, so the two systems are not comparable.

2 More than in any other industry, the distribution of work hours in agriculture is clustered in short and long actual hours. This study includes only employees, while many farmers are owner-operators (who are therefore excluded). Included are farmhands, employees of corporate-owned farms, and short-term workers like fruit-pickers, whose hours tend to cluster at the short and long poles (short hours in times of low activity or demand, and long hours during harvests and other peak activity periods). In 1989, 37% of agricultural workers put in long hours, and a further 39% put in short hours. In 1998, 36% worked long hours, with another 37% working short hours.

3 Occupational groupings are based on the 1991 Standard Occupational Classification (SOC), which is not comparable with the 1980 SOC.

4 American data are annual averages from the Current Population Survey, in which short hours refer to 1-to-34.9 hours. Canadian figures have, therefore, been adjusted to exclude employees reporting 0 hours. These workers are included in the short hours figures cited in the rest of the paper.

■ Reference

Sheridan, M., D. Sunter and B. Diverty. "The changing work-week: Trends in weekly hours of work in Canada, 1976-1995." *The Labour Force* (Statistics Canada, Catalogue no. 71-001-XPB) 52, no. 6 (June 1996): C-2 - C-31.