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A Comparative Analysis of Moonlighting in Canada and the United States

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Moonlighting is a small but significant aspect of labor market activity of North America. Moonlighting, or multiple job-holding, is defined by a worker who holds more than one job. The worker may be job-packaging; that is, adding a part-time job to a full-time job, or the total hours of work on all jobs may still be less than what would usually be considered to be full-time hours. The incidence of moonlighting and the characteristics of moonlighters have been examined periodically by researchers in both Canada (Webber 1989; Cohen 1994; Krahn 1995; Pold 1995) and the United States (Sekscenski 1980; Stinson 1986, 1990; Levenson 1995). Researchers have also sought to examine the determinants of moonlighting, using econometrics to examine hypotheses such as primary job hours constraints, liquidity constraints, and job heterogeneity (Shishko and Rostker 1976; Krishnan 1990; Lilja 1991; Abdukadir 1992; Paxson and Sicherman 1996; Powell and Boucher 2001; Conway and Kimmel 1998; Kimmel and Conway 2001;).

This chapter will analyze moonlighting in a comparative context in Canada and the United States. Because the United States and Canada have interdependent economies with such broad similarities, the two countries serve as a useful basis for comparison. According to Card and Freeman (1993, p. 191), “. . . few countries offer a more natural pairing of policies and institutions or for uncovering the reasons for differences in outcomes than the United States and Canada.”

The chapter begins by providing detailed descriptive evidence concerning various aspects of moonlighting behavior in both countries. These descriptive analyses include an examination of differences across sex, age, education, marital status, occupation, industry, etc. Within this static comparison we are able to discuss reasons for moonlighting based on information reported by individual workers. We then seek further information regarding the determinants of moonlighting and the structure of primary job (PJ) and secondary job (SJ) wages by using regression analyses. We estimate separate PJ and SJ wage equations for each country and use them to construct predicted wages for use in a probit model for moonlighting.

The following section of this chapter provides a static cross-country comparison of moonlighting with respect to a variety of characteristics. The next section provides an econometric analysis of the determinants of moonlighting, and the last section concludes the chapter.

COMPARISON OF MOONLIGHTING BEHAVIOR BETWEEN CANADA AND THE UNITED STATES

Here we examine the incidence and distribution of moonlighting across country and sex in 1991. We consider various demographic characteristics, including age, education, marital status, and the presence of children in the household, and we use a sample of nonmoonlighters as a basis for comparison. Next, we describe the extent to which moonlighters are self-employed or hold temporary or union jobs, as well as the incidence and distribution of moonlighting for occupations and industries. Also analyzed in this section are wages on both jobs and total hours worked. Then we relate two basic motivations for moonlighting—primary job constraints and heterogeneous jobs—to reported reasons for taking a second job. Finally, we present multivariate analyses to explain the structure of primary and secondary job wages as well as the probability of moonlighting.¹

The United States 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 house-

holds. Only those rotation groups eligible for the supplement are included in these analyses. And, only individuals between the ages of 17–64 are included in our subsample. In the 1991 data, the full sample is comprised of 14,727 workers, 941 of whom moonlight. Broken down by sex, the full sample includes 7,896 male workers and 6,831 female workers.

The Canadian data used in this section are drawn from the Survey of Work Arrangements (SWA) which is a supplement to the November 1991 Labour Force Survey (LFS). While the LFS does flag multiple job-holders, the SWA 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. Certain data in the SWA are available only for paid employees, and these cases are noted in our tables. Our subsample includes those individuals aged 17–64 and omits unpaid family workers. Thus, our Canadian sample contains 29,875 workers, 13,500 of whom are female and 16,375 are male. Among all workers, 1,606 individuals are multiple job-holders.

While both survey designs aim for the resulting samples to be purely random representations of the two countries' populations, both samples suffer from some systematic nonresponse and over/underrepresentation of particular segments of the population. Therefore, all of the summary statistics presented in this chapter are weighted.²

Who Moonlights?

The discussion in this section will relate to data given in Tables 1, 2, and 3. Table 1 shows moonlighting rates; that is, the percentage of different groups of workers who moonlight. The numbers in Table 2 are distributions, showing the percentage of all moonlighters who fall in the given subcategory, defined by a characteristic such as educational level or marital status. For example, Table 2 shows that 65.9 percent of all Canadian moonlighters are married. Table 3 is interpreted just like Table 2, except Table 3 focuses on employed nonmoonlighters.

The incidence of moonlighting in Canada and the United States by different individual characteristics are given in Table 1. Overall, U.S. workers are more likely to moonlight than Canadian workers, at 6.01 percent in the United States and 5.04 percent in Canada.³ While female

Table 1 Incidence of Moonlighting in Canada and the United States, by Characteristics and Sex (%)

Characteristics	Canada			United States		
	Both sexes	Males	Females	Both sexes	Males	Females
All individuals	5.04	4.82	5.31	6.01	6.56	5.34
Age						
17–24	5.42	4.34	6.58	5.43	6.06	4.74
25–44	5.15	5.07	5.24	6.57	7.10	5.91
45–64	4.61	4.56	4.67	5.14	5.67	4.48
Education						
None or elementary	3.37	3.50	3.18	3.10	3.13	3.06
High school	4.29	4.02	4.56	5.03	5.41	4.60
Some post-secondary/diploma	6.07	5.75	6.43	7.22	8.32	6.08
University degree	6.21	5.90	6.63	8.04	8.86	6.93
Marital status						
Married	5.02	5.05	4.97	5.96	7.06	4.43
Never married	5.11	4.34	6.09	5.83	5.75	5.94
Other	5.06	4.31	5.59	6.58	5.38	7.44
Children aged 0–5	5.07	5.06	5.10	6.26	7.89	3.90
Self-empl. PJ ^a (unincorporated+ incorporated)	6.60	5.99	8.03	4.89	5.17	4.17
Self-empl. PJ (unincorporated)	7.32	6.84	8.22	3.71	4.01	3.04
Self-empl. PJ (unincorporated, no help)	7.16	5.74	9.36	N/A ^c	N/A	N/A
Temporary job PJ ^b	7.12	5.54	8.90	N/A	N/A	N/A
Union member PJ ^b	4.52	4.89	4.03	6.99	7.47	6.26
Occupation PJ						
Managerial	5.39	5.62	5.16	6.54	7.56	5.36
Clerical	5.54	5.64	5.51	6.15	6.70	6.02

Characteristics	Canada			United States		
	Both sexes	Males	Females	Both sexes	Males	Females
Sales	4.91	4.74	5.11	5.28	6.81	3.92
Service	5.33	5.32	5.33	7.35	9.84	5.45
Primary	8.69	7.86	12.32	6.30	5.97	8.45
Processing	4.03	4.18	3.39	4.98	5.10	4.65
Construction, transportation and material handling	3.16	2.94	5.49	4.44	4.49	3.97
Industry PJ						
Agriculture	8.96	9.13	8.53	7.40	7.34	7.66
Other primary	4.33	4.42	3.77	3.58	4.40	0.00
Manufacturing, nondurable	3.98	3.82	4.26	4.94	4.78	5.20
Manufacturing, durable	2.33	2.16	3.01	5.32	5.90	3.63
Construction	3.64	2.95	9.59	3.74	3.70	4.30
Transportation	3.89	3.44	5.16	6.32	6.62	5.60
Wholesale trade	4.30	4.47	3.93	7.14	7.25	6.87
Retail trade	5.39	6.04	4.76	4.52	5.28	3.78
Finance	5.26	3.56	6.33	4.82	5.58	4.20
Community services	6.97	8.64	6.20	7.59	9.91	6.55
Personal services	4.50	2.64	5.45	5.00	4.72	5.12
Business services	5.26	5.82	4.52	6.00	6.52	5.06
Public administration	4.83	5.96	3.40	10.00	12.81	5.95
Number of moonlighters	1,606	877	729	941	536	405
Full sample	29,875	16,375	13,500	14,727	7,896	6,831

^a PJ = primary job.

^b Available for Canada only for employees on PJ.

^c N/A = data not available.

Table 2 Characteristics of Moonlighters in Canada and the United States, by Characteristics and Sex

Characteristics	Canada ^a			United States		
	Both sexes	Males	Females	Both sexes	Males	Females
Age (%)						
17–24	16.6	13.2	20.3	13.1	12.8	13.7
25–44	58.7	60.0	57.3	63.3	63.1	63.7
45–64	24.7	26.8	22.4	23.5	24.1	22.6
Education (%)						
None or elementary	15.4	18.3	12.1	6.8	7.2	6.1
High school	20.4	18.7	22.3	33.2	31.6	35.7
Some postsecondary/ diploma	44.5	42.5	46.8	26.3	25.8	27.2
University degree	19.7	20.6	18.7	33.7	35.4	31.0
Marital Status (%)						
Married	65.9	70.8	60.7	60.9	69.0	47.6
Never married	26.5	24.1	29.1	23.7	21.5	27.1
Other	7.5	5.1	10.2	15.4	8.8	25.3
Children aged 0–5 (%)	17.9	20.2	15.3	20.0	24.8	12.8
Family income (\$)	N/A ^b	N/A	N/A	43,925	46,665	39,834
Self-empl. PJ (unincorporated+incorporated) (%)	18.4	22.3	14.1	9.1	11.5	5.5
Self-empl. PJ (unincorporated) (%)	13.2	15.3	10.9	5.2	6.5	3.3
Self-empl. PJ (unincorporated, no help) (%)	9.2	8.5	9.9	N/A	N/A	N/A
Temporary job PJ ^c (%)	7.2	6.1	8.3	N/A	N/A	N/A

Characteristics	Canada ^a			United States		
	Both sexes	Males	Females	Both sexes	Males	Females
Union member PJ ^c (%)	33.3	40.7	26.0	20.4	21.6	18.5
Total weekly hours	43.3	48.2	37.9	51.9	56.6	44.8
Distribution of total hours (%)						
0–29	15.3	9.3	22.0	7.6	3.8	13.3
30–39	22.6	14.6	31.4	7.6	3.7	13.6
40–49	25.1	25.1	25.2	30.1	24.4	38.6
50+	36.9	51.1	21.5	54.7	68.1	34.5
Mean hourly wage PJ ^b (C\$)	13.7	15.9	11.8	13.41	14.61	11.71
Hourly wage SJ ^d (C\$)						
Under 5.00	3.1	2.4	3.6	15.7	14.8	17.0
5.00–6.99	25.5	21.3	28.4	20.9	14.2	29.9
7.00–9.99	21.4	27.0	17.6	17.9	20.4	14.5
10.00–13.99	22.7	22.3	23.0	14.4	17.9	9.9
14.00–19.99	10.5	12.0	9.5	13.8	12.5	15.6
20.00 +	16.8	15.1	17.9	17.2	20.2	13.2
Mean hourly wage SJ ^c (C\$)	12.1	12.1	12.1	14.66	16.97	11.58

^a Canadian information available only for moonlighters who are employees on secondary job (SJ).

^b N/A = data not available.

^c Available information only for paid employees on primary job (PJ).

^d Available information only for paid employees on SJ.

Table 3 Summary Statistics for Nonmoonlighting Workers in Canada and the United States, by Characteristics and Sex

Characteristics	Canada			United States		
	Both sexes	Males	Females	Both sexes	Males	Females
Age (%)						
17–24	15.4	14.7	16.2	14.6	13.9	15.5
25–44	57.5	56.9	58.2	57.6	57.9	57.2
45–64	27.2	28.4	25.7	27.7	28.2	27.2
Education (%)						
None or elementary	23.4	25.6	20.7	13.6	15.7	11.0
High school	24.2	22.6	26.2	40.1	38.7	41.8
Some postsecondary/ diploma	36.6	35.2	38.3	21.6	20.0	23.7
University degree	15.8	16.6	14.8	24.6	25.6	23.5
Marital status (%)						
Married	66.4	67.4	65.1	61.5	64.5	58.0
Never-married	26.1	26.9	25.2	24.5	24.7	24.2
Other	7.5	5.8	9.7	14.0	10.8	17.8
Children aged 0–5 (%)	17.8	19.25	16.0	19.2	20.4	17.8
Family income (\$)	N/A ^a	N/A	N/A	44,248	44,94	43,405
Self-empl. PJ (unincorporated+incorporated) (%)	13.8	17.7	9.1	11.3	14.8	7.1
Self-empl. PJ (unincorporated) (%)	8.8	10.5	6.8	8.6	10.8	5.9
Self-empl. PJ (unincorporated, no help) (%)	6.3	7.1	5.4	N/A	N/A	N/A
Temporary job PJ (%)	4.7	5.0	4.5	N/A	N/A	N/A

Characteristics	Canada			United States		
	Both sexes	Males	Females	Both sexes	Males	Females
Union member PJ (%)	35.4	37.8	32.8	16.7	18.3	14.7
Mean total weekly hours	35.45	38.65	31.6	39.3	42.2	35.9
Distribution of hours (%)						
0–29	22.3	13.4	32.9	12.8	7.0	19.8
30–39	32.7	28.7	37.5	10.8	6.2	16.4
40–49	32.7	40.3	23.6	61.5	65.3	57.0
50+	12.4	17.6	6.0	14.9	21.5	6.8
Mean hourly wage PJ (C\$)	14.53	15.92	13.13	12.89	14.53	11.07

^a N/A = data not available.

workers in Canada have higher moonlighting rates than their male counterparts (5.31 percent versus 4.82 percent), the opposite is true in the United States (5.34 percent versus 6.56 percent). Note, however, that females in Canada and the United States moonlight at approximately the same rate. The U.S. male moonlighting rate is 1.74 percentage points higher than the Canadian male rate, a 36 percent difference.

The moonlighting age profile also is different across the two countries. For male and female workers combined, Canadian moonlighting rates peak for the youngest workers, while U.S. moonlighting rates peak for the middle-age workers (ages 25–44). The moonlighting rates for young workers (ages 17–24) are essentially identical across the two countries, at 5.4 percent. This pattern is altered when the sample is broken down by sex. Canadian male moonlighters are like their U.S. male counterparts, moonlighting at the highest rates during the middle ages. It is the Canadian female moonlighters driving their aggregate age profile: they are most likely to moonlight while they are young. Female moonlighters in the United States follow the same age/moonlighting profile as their male counterparts, moonlighting at the highest rates during the middle ages.

Further information regarding moonlighting patterns over the life cycle can be discerned from Table 2.⁴ Over half of all moonlighters are prime-age workers, and in the United States this figure approaches two-thirds. The life-cycle distribution of moonlighting across sex is quite similar for both countries. As shown in Table 3, compared with nonmoonlighters, U.S. moonlighters are somewhat more likely to be between the ages of 25 and 44.

As seen in Table 1, for Canadian and U.S. workers, male and female, the incidence of moonlighting rises with higher levels of education. For those with a university degree (16 or more years of education for U.S. workers), 6.21 percent of Canadians and 8.04 percent of U.S. workers moonlight. For lesser-educated workers, moonlighting rates are below 4 percent in both countries. Comparing Tables 2 and 3, nonmoonlighters are considerably more likely to have low levels of education compared to moonlighters. This implies that moonlighting is not mostly comprised of the most disadvantaged workers, contrary to what is often implied by the popular media. On the contrary, because of the rising marginal valuation of each additional foregone hour of leisure, if the substitution effect dominates, then those who are most likely to moonlight, *ceteris paribus*, would be those with the relatively greatest wage opportunities on the second job. Additionally, higher-educated workers are more likely to be salaried on their primary jobs rather than hourly paid, so extra hours worked on the primary job will not increase earnings. Overall, moonlighting is undertaken by relatively higher-educated workers. This finding is consistent with Levenson (1995).

One of the characteristics with the most significant differences in the incidence of moonlighting by sex is marital status. In particular, U.S. females who are divorced, separated, or widowed (the "Other" marital status category) moonlight at a rate of 7.44 percent, higher than the 5.38 percent rate for like U.S. male workers. No single marital status category for males has a moonlighting rate as high as for the "Other" females. In Canada, two marital status categories for females exhibit higher moonlighting rates than for any of the three marital status groups for the Canadian males. Females who have never married have a 6.09 percent incidence of moonlighting, while 5.59 percent of females who are divorced, separated, or widowed moonlight.

Table 2 shows that about two-thirds of moonlighters are married, reflecting the relatively high percentage of married workers in the general working population. In both Canada and the United States, male moonlighters are more likely to be married, at 66 percent for Canadians and 61 percent for the United States. However, the gender differences are striking for the United States, where 69 percent of male moonlighters are married but only 48 percent of female moonlighters are married. The extent to which these numbers are driven by overall labor market statistics can be seen in Table 3, where the distribution across marital status is quite similar to that found for the nonmoonlighters. The only substantive difference is for females, where the marriage rate for employed nonmoonlighters is 10 percent higher than the rate for moonlighters.

As is typical in most standard labor supply issues, the presence of young children (aged 0–5 years) is associated with less moonlighting for females but more moonlighting for males. That is, male workers with young children are more likely to moonlight than male workers in general, and the opposite is true for females. This pattern holds for both Canada and the United States, although the sex pattern is stronger in the United States. For men, the income effect of children is stronger, but for females the substitution effect is stronger, implying that the relative valuation of work and leisure causes women to work less when they have young children. Therefore, women with young children are less likely to moonlight as well. As seen in Table 2, Canadian male moonlighters are about 20 percent less likely to have young children than U.S. male moonlighters, while Canadian female moonlighters are more likely to have young children than their U.S. counterparts. Non-moonlighters (Table 3) are about equally as likely to have young children overall in the two countries, but there is more of a sex difference in the United States, where female nonmoonlighters are nearly 50 percent more likely to have young children than female moonlighters. The distribution of moonlighting across characteristics broken down by marital status and gender is given in Table 4.

Looking at marital status and the presence of young children combined (U.S. numbers, not shown in the tables), reveals that the bulk of the higher moonlighting rates for male workers with young children is associated with the higher moonlighting rates for married or once-married males. In fact, divorced fathers of young children moonlight at

Table 4 Characteristics of Moonlighters, by Marital Status and Sex

Characteristics	Canada			United States			
	Married	Never married	Other	Married	Never married	Divorced	Other
Females							
Age (%)							
17–24	9.9	48.7	0.9	4.0	42.9	1.0	0.7
25–44	64.9	39.2	63.9	75.9	51.8	54.4	53.4
45–64	25.2	12.1	35.3	20.1	5.3	44.6	45.9
Education (%)							
None or elementary	12.2	12.8	9.8	7.8	3.7	4.1	5.6
High school	25.1	15.3	25.8	33.0	27.0	51.2	50.0
Some postsecondary/ diploma	46.0	45.6	55.6	28.3	33.1	14.4	18.7
University degree	16.7	26.3	8.8	30.9	36.2	30.4	25.7
Children aged 0–5 (%)	23.6	0.8	7.6	20.3	4.9	7.2	7.0
Family income (\$)	N/A ^a	N/A	N/A	45,973	37,253	31,932	30,427
Self-empl. PJ (unincorporated + corporated) (%)	18.7	9.9	8.7	9.0	1.7	1.7	2.9
Self-empl. PJ (unincorporated) (%)	13.5	6.4	7.9	5.5	0.6	0.3	2.0
Self-empl. PJ (unincorporated, no help) (%)	12.0	6.4	7.6	N/A	N/A	N/A	N/A
Temporary job PJ (%)	5.0	14.4	8.2	N/A	N/A	N/A	N/A
Union member PJ (%)	30.4	16.4	30.6	19.1	10.0	27.7	26.4
Mean total weekly hours	37.24	38.62	39.45	41.6	46.4	50.3	49.4

Characteristics	Canada			United States			
	Married	Never married	Other	Married	Never married	Divorced	Other
Distribution of total hours (%)							
0–29	25.0	18.0	14.9	19.4	11.7	5.0	3.6
30–39	29.4	38.8	22.7	16.3	12.6	5.6	9.3
40–49	26.2	19.7	34.7	38.2	34.4	44.0	43.9
50+	19.4	23.6	27.7	26.1	41.2	45.5	43.2
Mean hourly wage, PJ (\$)	12.88	9.84	11.61	11.17	11.84	13.04	12.52
Hourly wage, ^b SJ (%)							
Under 5.00	2.8	4.2	5.8	13.7	25.6	12.3	12.8
5.00–6.99	19.2	40.3	34.4	31.7	31.2	27.3	25.5
7.00–9.99	16.1	16.5	27.6	16.8	16.2	6.2	8.6
10.00–13.99	25.8	21.6	14.8	6.4	9.0	14.0	16.8
14.00–19.99	15.6	1.4	5.9	17.5	7.0	24.6	21.9
20.00+	20.5	16.1	11.4	14.0	10.9	15.7	14.5
Mean hourly wage, SJ (\$)	13.51	10.77	10.12	11.79	10.14	13.42	12.83
Number of observations	499	159	71	196	113	62	96

Males

Age (%)							
17–24	4.2	42.3	0.0	5.9	40.5	0	0
25–44	62.9	51.2	61.4	64.9	55.9	63.3	66.8
45–64	32.9	6.5	38.6	29.3	3.6	36.7	33.2
Education (%)							
None or elementary	20.4	13.1	14.8	6.4	9.7	7.6	8.1
High school	18.7	19.9	13.8	32.1	31.6	28.1	27.6
Some post-secondary/ diploma	40.5	46.8	48.4	26.1	21.5	36.8	33.4

(continued)

Table 4 (continued)

Characteristics	Canada			United States			
	Married	Never married	Other	Married	Never married	Divorced	Other
University degree	20.5	20.2	23.0	35.5	37.2	27.5	30.9
Children aged 0–5 (%)	28.1	1.2	1.3	34.6	0.3	8.1	6.8
Family income (\$)	N/A	N/A	N/A	51,196	35,444	37,979	36,813
Self-empl. PJ (unincorporated + incorporated) (%)	26.5	9.9	21.7	11.5	12.5	1.4	9.0
Self-empl. PJ (unincorporated) (%)	17.3	9.6	13.1	5.5	9.8	0	5.5
Self-empl. PJ (unincorporated, no help) (%)	8.9	7.8	7.0	N/A	N/A	N/A	N/A
Temporary job PJ (%)	3.4	10.8	16.2	N/A	N/A	N/A	N/A
Union member PJ (%)	42.8	33.1	54.6	25.1	14.7	12.7	10.4
Total weekly hours	50.27	42.19	47.09	58.4	51.4	54.4	54.4
Distribution of total hours (%)							
0–29	5.4	21.3	7.4	7.4	9.4	1.3	6.1
30–39	13.7	15.2	24.1	24.1	9.5	3.6	2.8
40–49	23.4	29.4	28.8	28.8	29.0	21.2	23.8
50+	57.6	34.2	39.8	39.8	52.1	74.0	67.3
Hourly wage, PJ (C\$)	17.59	10.74	23.22	15.72	11.22	14.92	14.13
Hourly wage, SJ (C\$)							
Under 5.00	4.1	0	0	15.0	17.3	4.9	7.8
5.00–6.99	10.1	41.8	8.3	10.9	18.4	16.8	25.3
7.00–9.99	26.1	29.8	19.1	20.7	24.3	12.3	9.1

Characteristics	Canada			United States			
	Married	Never married	Other	Married	Never married	Divorced	Other
10.00–13.99	26.6	15.9	18.4	18.3	16.7	14.8	17.7
14.00–19.99	14.4	9.3	3.5	14.2	9.1	14.0	10.3
20.00+	18.7	3.1	50.8	21.0	14.2	37.2	29.9
Hourly wage SJ (C\$)	13.3	9.04	17.54	17.95	13.32	19.58	22.67
Number of observations	691	153	33	365	121	38	50

^a N/A = data not available.

^b In Canadian dollars.

more than twice the rate of all workers, 12.88 percent. Presumably the financial pressures of alimony or single-parenting play an important role here. Relating marital status and the presence of young children for females in the United States, married women with young children have the lowest moonlighting rate (3.72 percent), while unmarried women without young children moonlight at the highest rate, nearly 8 percent.

Canadians who are self-employed are much more likely to moonlight than the typical Canadian worker. However, in the United States, workers who are self-employed in their primary jobs are less likely to moonlight. The corresponding rates of moonlighting for those self-employed in their primary jobs are 6.6 percent for Canadian workers and 4.9 percent for U.S. workers. Comparing moonlighters to non-moonlighters (Table 3), the difference across the two countries is striking. While U.S. moonlighters are less likely to be self-employed than nonmoonlighters, Canadian moonlighters are much more likely to be self-employed.

Workers in Canada who hold temporary primary jobs moonlight at a rate greater than the overall moonlighting rate, 7.12 percent versus 5.04 percent. And female temporary workers are 50 percent more likely to moonlight than the typical female worker. Comparing moonlighters to nonmoonlighters, moonlighters are considerably more likely to hold temporary primary jobs.

The patterns of moonlighting for those workers unionized on their primary jobs differs between Canada and the United States. Unionized male workers are more likely to moonlight than all male workers, but this increased moonlighting incidence is only 0.07 percentage points for male workers in Canada, but equals a 0.91 point difference for U.S. male workers. Canadian females who are unionized on their primary jobs have significantly lower moonlighting rates than the overall female rate, but the opposite is true for U.S. females. This might reflect the differences in unionization rates and the types of workers unionized between Canada and the United States. In our 1991 data, Canadian males and females were unionized at rates of 39.7 percent and 34.1 percent, respectively. However, in the United States, males and females were unionized at much lower rates, 18.5 percent and 14.9 percent, respectively.

From Table 2, 33.3 percent of Canadian moonlighters and 20.4 percent of U.S. moonlighters are unionized on their primary jobs; that is, Canadian moonlighters are more than 50 percent more likely than their U.S. counterparts to be unionized. In Canada, male moonlighters are considerably more likely to be unionized than females, but the rates across sex in the United States are fairly similar. Compared to non-moonlighters (as seen in Table 3), the differences across sex for Canada persist. Canadian male workers who moonlight are more likely to be unionized than their nonmoonlighting counterparts, but the opposite is true for females. The result for males is somewhat counterintuitive, given the greater than 20 percent boost to wages associated with holding a union job (Riddell 1993). However, union workers are more likely to work full time, and female moonlighters are less likely than males to combine a full-time with a second part-time job. For the United States, unionization rates for moonlighters and nonmoonlighters are fairly close, but like the Canadian males, moonlighters are more likely to be unionized.

As one might expect, moonlighting rates vary across occupations and industries.⁵ In Canada, by far the highest moonlighting rate for both men and women is the Primary occupation (7.86 percent and 12.32 percent), which includes farming, forestry, fishing, and mining. Of course, relatively few workers overall are employed in this occupation. The managerial and professional technical occupation (referred to as Managerial in the tables) is the most common occupation for

workers of both sexes in both countries. Male workers in this occupation are a bit more likely to moonlight than workers overall. However, Canadian female workers in the Managerial occupation are less likely to moonlight, while the rate for this occupation for U.S. females is nearly identical to their overall moonlighting rate.

One of the occupations most frequently talked about in discussions of moonlighting is sales; however, only U.S. males in sales moonlight at relatively high rates. Sales become more important as the occupation choice for the second job. Approximately 40 percent of female moonlighters in both countries hold second jobs in sales. For males, 37 percent and 25 percent of moonlighters in Canada and the U.S., respectively, moonlight in sales. A second occupation prevalent in moonlighting jobs is the Professional/Skilled occupation; one-third of U.S. male moonlighters hold second jobs in Semiskilled/Unskilled jobs.

Turning to PJ industries, relatively high moonlighting rates are seen in Agriculture and Community Services in all four samples. In fact, 45 percent of U.S. females are employed in primary jobs in Community Services, which is a broadly defined industry category that includes professional services and entertainment. And U.S. males employed in the industry of Public Administration also moonlight at a high rate. For the second job, by far the most common industry is Services.

The final section in Table 2 shows the percentage of moonlighters whose second job occupation or industry are the same. Occupation-switching between the PJ and SJ (seen as a relatively low percentage in the table) occurs with different occupations for men than women. For men employed in a clerical occupation in their second job, only about one-fourth were employed in the same PJ occupation. For women, only about one-fourth of those employed in a Semiskilled/Unskilled occupation were employed in the same occupation in the primary job. For U.S. females, about three-fourths of those employed in Sales and Service second jobs are occupation-switchers. Industry-switching is most prevalent for those employed in Retail Trade for the second job.

Information concerning wages on both jobs and total weekly hours is given in Table 2. On average, U.S. male and female moonlighters work more total hours per week (at 57 and 45 total hours, respectively) than their Canadian counterparts (at 48 and 38 hours, respectively). These averages are nearly 10 hours per week higher than the average hours worked per week for nonmoonlighters. Additionally, moonlight-

ers have a much greater percentage working more than 50 hours per week than nonmoonlighters. Approximately 50 percent of Canadian male moonlighters and two-thirds of U.S. male moonlighters work more than 50 hours per week. Relatively few nonmoonlighters work this many hours. These numbers suggest that many moonlighters face significant time pressures.

Male moonlighters earn on average \$15.90 per hour on the PJ in Canada and \$14.60 per hour on the PJ in the U.S.⁶ Hourly wages for female moonlighters are nearly equal on average in Canada and the U.S., with Canadian moonlighters earning \$11.80 per hour on average and U.S. moonlighters earning \$11.71. Compared to nonmoonlighters, moonlighters in three of the four samples earn more per hour on average. Only U.S. female moonlighters earn less per hour on their PJ than do nonmoonlighters.

Secondary job wages are much higher on average for U.S. males (\$16.97 per hour) than Canadian males (\$12.10), but the opposite is true for females. This might explain in part the higher moonlighting rate for males in the United States. Canadian females earn \$12.10 per hour on their SJ while U.S. females earn \$11.58 per hour. Surprisingly, Canadian males and females earn identical SJ hourly wages on average. However, as is seen from the SJ wage distribution, 32 percent of Canadian females are low wage (defined as a SJ wage less than \$7.00 per hour) while only 24 percent of Canadian males are low wage. In the U.S., 29 percent of male moonlighters are low wage workers, as opposed to 47 percent of U.S. females. With respect to earnings capacity on both jobs, U.S. females seem to be at the greatest disadvantage.

Why Moonlighters Take Second Jobs

Why do workers in the United States and Canada moonlight? The evidence cited so far shows that there are many reasons, reflecting many factors, including age, education, marital status, and household composition. As explained by Conway and Kimmel (1998), the reasons for multiple-job holding can be summarized as constraints on the primary job (insufficient hours or earnings) or heterogeneous jobs (different jobs provide different nonpecuniary benefits to the worker.) These sorts of reasons for moonlighting can be identified in both the Canadian and U.S. data sources because individual workers report spe-

cific reasons in the survey for taking a second job. These findings are given in Table 5 and include the following responses: to meet regular household expenses, pay off debts, buy something special, save for the future, gain experience or build up a business, or enjoys the work of the second job.

While there are some similarities between the two countries, some differences can be seen, particularly in how the aggregate figures break down into their sex components. Combining the first and second categories gives the percentage of moonlighting attributable to financial hardship. Approximately 45 percent of Canadian moonlighters and 42 percent of U.S. moonlighters report moonlighting due to financial hardship. And Canadian male moonlighters are somewhat more likely than U.S. male moonlighters to take a second job due to financial hardship—45.6 percent versus 39.2 percent. The rates for females are similar for the two countries, and U.S. women are more likely to moonlight due to financial hardship than U.S. men. Combining the first four categories provides a more comprehensive picture of the percentage of moonlighters who are choosing to take a second job for financial reasons, or for PJ constraints, as alluded to earlier. Canadian

Table 5 Main Reasons for Undertaking Moonlighting in Canada and the United States (%)

	Canada			United States		
	Both sexes	Males	Females	Both sexes	Males	Females
Meet regular household expenses	33.7	33.4	33.9	31.2	28.0	36.0
Pay off debts	11.3	12.2	10.5	11.0	11.2	10.7
Buy something special	4.6	4.5	4.7	7.2	6.7	7.9
Save for the future	12.4	12.8	12.1	10.7	11.1	10.1
Gain experience/build business	10.8	9.7	11.5	7.8	7.1	8.7
Enjoys the work of SJ	15.0	14.6	15.3	13.9	15.2	11.9
Other	12.3	12.7	12.0	18.4	20.8	14.7

NOTE: Canadian information in this table pertains only to moonlighters who were “employees” in their second job.

males are more likely than U.S. males to moonlight for financial reasons (62.9 percent versus 57 percent), but the opposite is true for women (61.2 percent versus 64.7 percent). However, both rates are fairly close.

The last two specific categories identify those moonlighters who have taken a second job because there is some characteristic of that second job that does not exist on the PJ.⁷ From the two general moonlighting motivations listed earlier, this is the heterogeneous jobs motive. Canadian and U.S. workers moonlight for this reason at fairly substantial rates—25.8 percent for Canadians, and 21.7 percent for U.S. moonlighters. Breaking this down by sex reveals a more substantial discrepancy between female moonlighters—27.3 percent for Canadians and 20.6 percent for U.S. moonlighters. Overall, while financial motivations are most important in moonlighting, the heterogeneous jobs motive is important for a substantial percentage of individuals.

In summary, there are several findings of note in this section. Moonlighting is most prevalent among relatively higher educated workers, and unmarried females are most likely to moonlight. Also, the bulk of moonlighting is undertaken for financial reasons. There are two major differences between moonlighting in Canada and the United States. First, U.S. workers overall are about 20 percent more likely to moonlight than Canadian workers, while females in the two countries moonlight at comparable rates. Second, U.S. moonlighters work on average more total hours per week than Canadian workers, but moonlighters in all cases work considerably more hours per week than non-moonlighters.

ECONOMETRIC ANALYSES

In addition to the descriptive analyses using the summary statistics, we seek further information regarding moonlighting patterns and the structure of PJ and SJ wages using regression analyses. Previous econometric studies of moonlighting behavior include Shishko and Rostker (1976), Krishnan (1990), Lilja (1991), Abdukadir (1992), Paxson and Sicherman (1996), Conway and Kimmel (1998), Kimmel and Conway (2001), and Powell and Boucher (2001). First, to determine

what factors are important in determining the level of wages in each of the two jobs, we estimate ordinary least squares (OLS) wage equations for both the PJ and SJ wages. Because SJ wages are observed only for those holding a secondary job, we include an econometric sample selection term to account for this selection on positive SJ wages in this equation. We refer to this term as λ , and it is the standard Heckman (1979) sample selection correction term.⁸ The two wage equations are written out in summary form below.

PJ wage = dummy variables for age categories; dummy variables for education categories; dummy variable for young children;⁹ regional dummies; industry dummy variables.

SJ wage = dummy variables for age categories; dummy variables for education categories; dummy variable for presence of young children;¹⁰ regional dummies; λ .

These specifications reflect a standard human capital model of wages in which the level of education and years of experience (proxied by age in our data) are expected to contribute positively to wages. Additionally, in the regressions for females, an additional dummy variable for the presence of young children in the family is included as a proxy for intermittent work history (Blau and Beller 1988). And, the regional dummies are included to control the effect of regional differences in labor market demand conditions. Industry dummy variables are included in the PJ wage equation but not the secondary wage equation because the industry of the SJ is not available for all workers, so the results could not be used to predict the SJ wage for nonmoonlighters.

PJ and SJ wage equations are estimated separately by country and sex. Results from these regressions are given in Tables 6 and 7. Because the equations are estimated with the natural logarithm of the wage as the dependent variable, coefficient values reflect percentage returns to the different characteristics.¹¹ Additionally, for each categorical dummy variable, the coefficient is interpreted in comparison to the excluded category. Only coefficients with statistical significance of 10 percent or greater are discussed in text.

Table 6 OLS Log PJ Wage Equations in Canada and the United States^{a,b}

Variables	Males		Females	
	Canada	United States	Canada	United States
Intercept	2.1808*** (113.256)	1.7012*** (68.907)	2.2388*** (128.569)	1.7278*** (75.602)
Age 25–34	0.2967*** (22.986)	0.2732*** (15.603)	0.1929*** (15.935)	0.2450*** (14.068)
Age 35–44	0.4496*** (33.302)	0.4521*** (25.015)	0.2795*** (22.264)	0.3172*** (17.737)
Age 45+	0.4585*** (32.585)	0.5103*** (28.325)	0.2611*** (19.528)	0.2980*** (17.625)
High school	0.1172*** (9.867)	0.2138*** (13.047)	0.1394*** (11.453)	0.2040*** (11.201)
Some postsecondary	0.2063*** (19.345)	0.3520*** (19.023)	0.2177*** (19.075)	0.3378*** (17.047)
University degree	0.4382*** (29.444)	0.6215*** (33.000)	0.4950*** (32.077)	0.5772*** (28.110)
Number of children	—	—	-0.0162*** (-4.389)	-0.0287*** (-4.986)
Region 1 ^c	-0.2427*** (-19.632)	0.1248*** (8.363)	-0.2136*** (-18.076)	0.1179*** (8.274)
Region 2	-0.0557*** (-4.692)	0.0261* (1.755)	-0.0333*** (-2.799)	0.0051 (0.353)
Region 3	-0.1417*** (-10.200)	0.0982*** (6.485)	-0.1179*** (-9.094)	0.1148*** (7.749)
Region 4	-0.3537*** (-2.271)	—	-0.0489*** (-3.306)	—
Region 5	0.2196 (1.391)	—	-0.0353** (-2.246)	—
Agriculture	-0.2943*** (-8.736)	-0.3375*** (-7.951)	-0.3699*** (-9.460)	-0.1641*** (-2.404)
Other primary	0.2576*** (11.816)	0.2738*** (5.547)	0.0142 (0.298)	0.1043 (1.235)
Manufacturing, nondurable	0.0711*** (4.018)	0.1724*** (7.348)	-0.1733*** (-9.621)	-0.0203 (-0.911)
Manufacturing, durable	0.0888*** (5.091)	0.2351*** (11.449)	-0.0988*** (-3.801)	0.0927*** (4.027)

Variables	Males		Females	
	Canada	United States	Canada	United States
Construction	0.1072*** (5.664)	0.2234*** (9.769)	-0.1696*** (-4.490)	0.0471 (0.902)
Transportation	0.0928*** (5.206)	0.2501*** (11.047)	0.0607*** (2.927)	0.1840*** (7.226)
Wholesale trade	-0.0539*** (-2.533)	0.1052*** (3.740)	-0.2530*** (-9.314)	0.0022 (0.063)
Retail trade	-0.1888*** (-10.481)	-0.0988*** (-4.651)	-0.3979*** (-30.579)	-0.2327*** (-14.796)
Finance	0.0848*** (3.074)	0.2162*** (7.681)	-0.0771*** (-4.540)	0.0705*** (3.498)
Personal services	-0.3748*** (-15.913)	-0.1158*** (-2.721)	-0.5313*** (-36.377)	-0.3456*** (-13.048)
Business services	-0.0566*** (-2.622)	0.0526** (1.983)	-0.1695*** (-9.163)	-0.0191 (-0.696)
Public administration	0.1581*** (8.673)	0.1856*** (7.164)	0.0637*** (3.999)	0.1675*** (6.604)
R^2	0.4026	0.3961	0.4375	0.3425
Number of observations	8,643	6,477	8,846	6,210

^a * = 10% statistical significance.

** = 5% statistical significance.

*** = 1% statistical significance.

^b *t*-Statistics are in parentheses.

^c In Canada, the regions are 1) Atlantic, 2) Quebec, 3) Manitoba and Saskatchewan, 4) Alberta, 5) British Columbia. In the United States, the regions are 1) Northeast, 2) Midwest, 3) West.

Table 7 OLS Log SJ Wage Equations in Canada and the United States^{a,b}

Variables	Males		Females	
	Canada	United States	Canada	United States
Intercept	1.9828*** (4.939)	2.2316*** (2.906)	1.4408*** (5.998)	2.0342*** (3.467)
Age 25–34	0.1619* (1.694)	0.1481 (1.128)	0.2741*** (3.733)	0.2042* (1.886)
Age 35–44	0.4153*** (3.740)	0.3407** (2.241)	0.3090*** (4.061)	0.2379** (2.071)
Age 45+	0.2518* (1.853)	0.5074*** (3.308)	0.1924** (2.131)	0.1721 (1.333)
High school	0.1535 (1.419)	0.0836 (0.467)	0.1410 (1.587)	0.0556 (0.310)
Some postsecondary	0.2696*** (2.668)	0.2134 (1.029)	0.3553*** (4.302)	0.2017 (1.039)
University degree	0.4828*** (3.880)	0.3305 (1.536)	0.5535*** (5.350)	0.4641*** (2.399)
Number of children	—	—	0.0139 (0.679)	0.0450 (1.157)
Region 1 ^c	-0.1889 (-1.620)	-0.333 (-0.245)	-0.2143*** (-2.374)	-0.1140 (-1.087)
Region 2	-0.0107 (-0.094)	-0.0593 (-0.481)	-0.0952 (-0.811)	-0.1505 (-1.344)
Region 3	-0.2241* (-1.905)	0.1868 (1.532)	-0.0792 (-1.095)	0.0731 (0.665)
Region 4	-0.0239 (-0.186)	—	-0.2470*** (-2.837)	—
Region 5	-0.1507 (-1.120)	—	-0.0625 (-0.636)	—
Lambda	-0.0209 (-0.131)	-0.1708 (-0.532)	1.2921* (1.839)	-0.1120 (-0.486)
R ²	0.2807	0.1420	0.2503	0.1720
Number of observations	161	223	280	248

^a * = 10% statistical significance.

** = 5% statistical significance.

*** = 1% statistical significance.

^b *t*-Statistics are in parentheses.

^c In Canada, the regions are 1) Atlantic, 2) Quebec, 3) Manitoba and Saskatchewan, 4) Alberta, 5) British Columbia. In the United States, the regions are 1) Northeast, 2), Midwest, 3) West.

Starting with the PJ wage equation, as expected, age is positively associated with wages across the board, with older workers receiving increasingly larger wage boosts. The one exception to this rule is U.S. females, where the middle age category receives the highest wage boost. This could be due to the fact that entry level wages for female workers have been relatively higher in the past 20 years or so (thereby shifting up the entire wage profile for these workers), a wage increase not enjoyed by the older U.S. female workers.

The wage returns to education rise with higher education levels, as predicted by human capital theory. For men, Canadian and U.S. workers receive 12 percent and 24 percent wage boosts, respectively, for having finished high school. This is a wage premium relative to workers who have failed to complete high school. See that the returns to finishing high school for U.S. males is twice as high as that for Canadian males. This reflects a fact of the U.S. labor market that has contributed to growing wage inequality in the United States. For female workers, the returns to completing a high school education for Canada and the United States are 14 percent and 20 percent, respectively. In all cases, the wage return rises with the higher education levels. So, for males, having completed some postsecondary education is associated with a 21 percent and 35 percent return for Canadian and U.S. workers, respectively. Those two returns are 22 percent and 34 percent for females. Finally, having finished a university degree (or 16 or more total years of education in the United States) is associated with 44 percent and 62 percent returns for Canadian and U.S. men, respectively, and 50 percent and 58 percent returns for women. In each case, the returns to the different level of education is higher in the United States. The returns across sex are quite close, with the most noticeable being the returns to men and women in the United States for having com-

pleted college. Here, men receive a 4 percent larger return than the women workers.

As predicted by theory, having young children (associated with a greater disrupted work history) has a negative impact on wages for both Canadian and U.S. female workers. The negative impact is almost double for the U.S. females, but the absolute magnitude in both cases is quite small. And, as expected, region of residence is important. Canadian workers living in Ontario receive the highest wage return, as do workers living in the Northeast and the West in the United States.

The overall explanatory power of the PJ wage equations is quite high in all four cases, with R^2 ranging in value from 0.34 up to 0.44. The explanatory power of the SJ wage equations is much weaker, with R^2 ranging in value from 0.14 to 0.28. And fewer of the *a priori* hypotheses for the specific variables hold in this equation. There is a fairly strong return to age (the proxy for experience), but the additional proxy for experience for females (the dummy variable for the presence of young children) is not significant in either case. Education is not strongly related to wages for any of the four samples. For Canadians (both males and females), there is a significant return for having some postsecondary education as well as a college degree, with the females receiving the higher returns. For the United States, the only case of a significant education coefficient is for females with a university degree. Here, the return is 46 percent, but it is not as large as it is for Canadian female moonlighters. While no U.S. regions are significant, for Canadian males, living in Manitoba or Saskatchewan is associated with lower wages (relative to Ontario), as is living in the Atlantic Provinces or Alberta for females. The only sample for whom sample selection is significant is Canadian females. That is, for this group, the probability of moonlighting is significantly positively correlated with higher SJ wages.

Results from these two wage equations are used to construct predicted wages for use in a probit model for moonlighting. The probit equation is written out in summary form below.

Probability of moonlighting = (PJ wage; SJ wage; dummy variables for age categories; dummy variables for education categories; dummy variable for young children; total number of children; dummy variables for marital status).

The probit model transforms a discretely measured dependent variable (here, a 0–1 dummy variable equaling one for moonlighters) into a continuous probability.

The results for the probit model of moonlighting are given in Table 8. Probit coefficients are given, then probit derivatives. For the two wage measures, elasticities are also given.¹² *Ceteris paribus*, one would expect that higher primary job wages would be associated with a lower probability of moonlighting. Indeed, in each of the two cases in which the PJ wage is significant, it is significantly negative. For males in the United States and Canada, those with higher primary job wages are less likely to moonlight. The PJ wage elasticity is fairly large in both cases: -0.81 for males in Canada and -1.18 for males in the United States. For females, both PJ wage coefficients are positive with very large standard errors.

As a standard wage employment effect, we would expect that the coefficient on the SJ wage would be positive; that is, we would expect those individuals with a higher predicted secondary job wage to be more likely to take a second job. This coefficient is negative and insignificant in three of four cases, but in the one case where it is significant, for females in Canada, the coefficient is positive. The corresponding SJ wage elasticity is 1.26.

For Canadian males, age is not significantly related to the probability of moonlighting. But for Canadian females, older workers are increasingly less likely to moonlight. (Recall that the coefficient is interpreted in relation to the excluded category, which is the youngest age group.) For workers in the United States, the only significant relationship between age and the probability of moonlighting is found with females, who are less likely to moonlight if they are older than 45 years of age.

The coefficients for the education variables are interpreted relative to the excluded category of the lowest education level, fewer than 12 years of education. Having more education increases the probability of moonlighting for Canadian males and U.S. males and females. Interestingly, having more education is not significantly related to increased moonlighting probabilities for Canadian females.

Having young children can be expected to have different effects on men than women, due to traditional family roles. We would expect fathers to be more likely to moonlight due to an income effect; that is,

Table 8 Moonlighting Probit Regressions^{a,b,c}

Regressors	Canada		United States	
	Males	Females	Males	Females
Intercept	-0.3144 (-0.464) -0.0129	-2.9380*** (-6.575) -0.1952	-0.6243 (-0.777) -0.0447	1.2681* (-1.671) -0.0994
PJ wage	-0.3692* (-1.809) -0.0151 [-0.8110]	0.1296 (0.927) 0.0086 [0.2749]	-0.5683*** (-2.846) -0.0407 [-1.1810]	0.1102 (0.518) 0.0086 [0.2163]
SJ wage	-0.4555 (-1.213) -0.0186 [-1.0005]	0.6028* (1.887) 0.0400 [1.2606]	-0.0998 (-0.304) -0.0071 [-0.2075]	-0.5245 (-1.530) -0.0411 [-1.0291]
Age 25–34	-0.1188 (-0.928) -0.0049	-0.3646*** (-3.117) -0.0242	0.0423 (-0.342) -0.0030	0.0194 (0.144) 0.0015
Age 35–44	0.0032 (0.017) 0.0001	-0.4661*** (-3.559) -0.0310	-0.0387 (-0.209) -0.0028	-0.0283 (-0.180) -0.0022
Age ≥ 45	-0.2114 (-1.203) -0.0086	-0.4991*** (-4.078) -0.0332	0.0221 (0.096) 0.0016	-0.2805* (-1.867) -0.0220
Education = 12	0.3178*** (2.904) 0.0130	0.0227 (0.237) 0.0015	0.3704*** (3.094) 0.0265	0.2858** (2.092) 0.0224
Education 13–15	0.3801*** (2.910) 0.0156	-0.0830 (-0.624) -0.0055	0.6518*** (4.335) 0.0466	0.4909*** (2.957) 0.0385
Education ≥ 16	0.6915*** (3.406) 0.0283	-0.2493 (-1.235) -0.0166	0.8501*** (4.309) 0.0608	0.6142*** (2.537) 0.0481
Preschool children	-0.0041 (-0.041) -0.0002	-0.0354 (-0.422) -0.0023	0.0038 (0.039) 0.0003	-0.2679*** (-2.652) -0.0210
Number of children	-0.0159 (-0.504) -0.0006	-0.0034 (-0.129) -0.0003	0.0258 (0.698) 0.0018	0.1013*** (2.457) 0.0079

Regressors	Canada		United States	
	Males	Females	Males	Females
Single	-0.0045	0.1420*	-0.0679	0.2272***
	(-0.046)	(1.946)	(-0.693)	(2.527)
	-0.0002	0.0094	-0.0049	0.0178
Not married/Other	0.1154	0.3203***	-0.0063	0.3723***
	(0.746)	(3.759)	(-0.055)	(4.773)
	0.0047	0.0213	-0.0004	0.0292
Log-likelihood	-776.271	-1,208.044	-949.876	-1,008.746

^a These regressions exclude those self-employed on their PJ or SJ. Uses log wages from log wage equations.

^b Presents coefficients first, then *t*-statistics in parentheses, then derivatives. For the two wages, elasticities are given in brackets.

^c * = 10% statistical significance.

** = 5% statistical significance.

*** = 1% statistical significance.

having young children would be expected to increase the stresses on the family budget. For women, we would expect that having young children would raise the opportunity cost of working, implying a substitution effect, therefore reducing the probability of moonlighting. The only case in which this expectation is upheld is for females in the United States, where having young children significantly decreases the probability of holding a second job. But these expectations are not contradicted in any of the other cases, because the coefficients are not statistically significant. The number of children would be expected to have somewhat the same role in the moonlighting choice, with a less strong negative impact on females. The results show that having more children actually increases the probability of moonlighting for females in the United States. This implies that for these women, while the substitution effect dominates in the case of young children, the income effect dominates for total children.

We already saw in the previous descriptive analyses that marital status is strongly linked to moonlighting behavior. But in a regression framework we are able to determine the importance of marital status after controlling for the effect of other factors. Controlling these effects, the role that marital status plays in the moonlighting choices of

women is still evident. For both Canadian and U.S. females, being never-married or once-married both are significantly positively related to the probability of moonlighting. It is likely that some of this effect would have been reduced had income been included as a variable, but still the importance of marital status is clear. Thus, within our multivariate analyses, the wage regressions reveal that the structure of SJ wages is more ambiguous than PJ wages, because while the expected wage return to experience is found, no consistent SJ wage return to education can be seen. And, the moonlighting probit equation shows the importance of PJ wages in the moonlighting choice, with those males having higher PJ wages being less likely to moonlight. And, *ceteris paribus*, those with higher education levels are more likely to moonlight. Finally, unmarried females are more likely to moonlight as well.

CONCLUSIONS

In this chapter, we have described and compared moonlighting behavior in Canada and the United States. What are the major findings? First, education plays a major role in moonlighting, with higher educated workers more likely to moonlight. Second, about two-thirds of moonlighters take a second job for financial reasons. Third, total hours worked per week are much higher for moonlighters than non-moonlighters, and hourly wages on the primary job are higher for all moonlighters except U.S. females. Fourth, unmarried females and married males are most likely to moonlight. Finally, there is evidence that workers moonlight due to both primary job constraints and job heterogeneity.

Now, how does moonlighting behavior differ between Canada and the United States? First, overall moonlighting rates are higher in the United States than in Canada, although females in both countries moonlight at approximately the same rate. Second, U.S. moonlighters tend to be older on average than Canadian moonlighters, while Canadian moonlighters tend to be somewhat more educated. Third, total hours worked are considerably higher in the United States than in Canada. So what are the reasons for the differences between Canada and the United States? One factor contributing to the higher moonlighting rate in the

United States is higher U.S. divorce rates. Males in the United States are more likely to be unmarried fathers (custodial or not), and these fathers moonlight at very high rates. Canadians might moonlight less overall in part due to the higher unemployment rates in Canada. With such an excess supply of labor, both primary and secondary jobs are hard to find.

Finally, what are the implications of all these numbers? Why do we care about moonlighting? To put it succinctly, moonlighting itself is not so much a problem as it is a symptom of a broader labor market problem. Two issues are of most importance here: time pressures faced by moonlighters and their families, and the degree to which moonlighting reflects perceived financial hardship. First, because total hours worked for moonlighting are considerably higher than for nonmoonlighters, rising moonlighting rates imply increased time pressures faced by individuals and families. For children, this implies increases in nonparental child care. Second, moonlighters clearly face financial pressures. They do not tend to be lower-income workers, so their financial concerns extend beyond the basics of minimal shelter and food to more middle class concerns such as home ownership and saving for retirement and their children's college educations. While these pressures are not as desperate as those faced by low-income workers, they probably reflect for many moonlighters the desire to achieve the standard of living they enjoyed during their upbringing. For divorced mothers, they reflect a desire to maintain the lifestyle experienced during the previous marriage. And the plight of moonlighters reflects the growing frustrations of today's workers who feel they are working more for less.

Notes

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1. The primary job is the job with the higher weekly hours. Hereafter we use PJ and SJ to denote the primary and secondary jobs.
2. The U.S. CPS weight used is the multiple job-holder (supplement) weight. This weight corrects for nonresponse in general, as well as nonresponse that varies systematically by class of worker.

3. These rates differ from the rates implied by the raw data, but again, this is due to the weighting necessary to assure that the summary statistics reflect the populations in the two countries.
4. For example, in Canada, 16.6 percent of all moonlighters are between the ages of 17 and 24 years.
5. U.S. three-digit industry and occupation SIC codes were matched to the broader categories reported in the Canadian data.
6. Wages are measured in Canadian dollars.
7. This discussion ignores the final category of Other. It is not possible to assign these individuals to either of the two general categories with any certainty. In fact, a small percentage of these moonlighters are not truly holding a second job because they are changing jobs and so probably only hold two jobs during a short overlapping time period.
8. Lambda is constructed from the results of a reduced form probit in which the dependent variable takes on the value of 1.0 if the individual moonlights, and takes the value of 0 otherwise. Any worker self-employed on the primary or secondary job is excluded from all these regression analyses.
9. This variable is included just in the regressions for females.
10. See previous note.
11. Also, recall that the wages are measured in Canadian dollars, using the 1991 exchange rate. According to Card and Freeman (1993), using purchasing-power parity figures would yield similar results.
12. Note that income is excluded because it is unavailable in the Canadian data.

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