

# Multiple jobs? The prevalence, intensity and determinants of multiple jobholding in Canada

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**Paul Glavin**

McMaster University, Canada

## Abstract

While traditional labour market estimates indicate that there has been little change in the proportion of workers holding multiple jobs in North America, survey instrument deficiencies may be hiding more substantial growth driven by the gig economy. To address this possibility, I test a broader measure of multiple jobholding to examine its prevalence in the Canadian workforce based on two national studies of workers (2011 Canadian Work Stress and Health Study and 2019 Canadian Quality of Work and Economic Life Study). Almost 20% of workers in 2019 reported multiple jobholding – a rate that is three times higher than Statistics Canada estimates. While multivariate analyses reveal that the multiple jobholding rate in 2019 was 30% higher than in the 2011 Canadian Work Stress and Health Study, multiple jobholders in 2019 were less likely to report longer work hours in secondary employment. Analyses also revealed that having financial difficulties is consistently associated with multiple jobholding in 2011 and 2019. Collectively, these findings suggest that while the spread of short-term work arrangements has facilitated Canadians' secondary employment decisions, for many workers these decisions may reflect underlying problems in the quality of primary employment in Canada, rather than labour market opportunity. I discuss the potential links between multiple jobholding, the gig economy and employment precariousness.

**JEL Code:** J21

## Keywords

Employment conditions, gig economy, informal economy, labour markets, multiple jobholding, secondary employment, sociology of work

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## Corresponding author:

Paul Glavin, McMaster University, 635 KTH, 1280 Main Street West, Hamilton, ON L8S 4L8, Canada.

Email: [glavinp@mcmaster.ca](mailto:glavinp@mcmaster.ca)

## Introduction

This article examines the prevalence, intensity and determinants of multiple jobholding (MJH) over the last decade in Canada. While traditional labour market estimates indicate only a slight increase in MJH rates in recent decades (Fulford and Patterson, 2019), some suggest survey instrument deficiencies may be hiding more substantial growth driven by the expanding gig economy (Abraham and Amaya, 2018; Jeon et al., 2019). A frequently heralded advantage of flexible gig work arrangements is that they entail fewer barriers to entry for workers; however, the flexibility and sporadic nature of gig work may result in its underestimation (Bracha and Burke, 2019). This has potential consequences for MJH estimates, given that much gig work is performed as secondary employment (Jeon et al., 2019).

In response to these measurement difficulties, some have called for new approaches to identify irregular and more transitory instances of paid employment (Collins et al., 2019; Katz and Krueger, 2019). This article contributes to these efforts by using a more inclusive measure of MJH and looks for evidence of previously undocumented growth in its prevalence and intensity – growth that may be in part due to the emergence of the ‘platform economy’ in recent years.

The typical approach followed by Statistics Canada and the American Bureau of Labour Statistics to determine MJH is to ask respondents about the presence of an additional job undertaken in the week prior. Rather than taking this path, I assess both frequent and infrequent instances of secondary employment. Adopting a broader definition of MJH that is not limited to the previous week’s work represents an opportunity to revise existing estimates of the prevalence of MJH in the Canadian labour market in recent years.

Two national Canadian surveys are drawn upon to investigate possible changes in MJH prevalence and intensity: the 2011 Canadian Work Stress and Health Study (CAN-WSH) and the 2019 Canadian Quality of Work and Economic Life Study (C-QWEL). These studies contain a similar measure of MJH as well as the same or similar measures of MJH covariates. And, since the CAN-WSH survey was initiated in 2011, just prior to the expansion of the gig economy, a comparison of MJH rates with the recent 2019 C-QWEL study enables an investigation into whether and how MJH has changed over the past decade in response to the proliferation of gig work.

Beyond offering a new assessment of MJH prevalence and intensity, this article examines the individual-level correlates of working more than one job. Multiple jobholders have historically been a diverse group, with some disadvantaged workers pursuing additional employment out of economic necessity, while others with in-demand skills and experience doing so to generate extra income (Panos et al., 2014). However, the emergence of online platform intermediaries offering flexible gig work opportunities may have altered these patterns. To investigate this possibility, I examine whether the sociodemographic characteristics and work conditions associated with MJH and MJH intensity have changed in the last decade.

This article addresses the following questions: (1) Has the prevalence and intensity of MJH increased in Canada over the last decade? (2) What role has change in labour force composition and work conditions played in any of the observed changes in MJH? (3) Have the individual-level factors associated with MJH and MJH intensity changed?

Understanding how workers take on additional sources of employment is important. While MJH is a critical source of income for many workers in precarious employment, it is also a potential work role stressor that is associated with burnout and increased difficulties balancing work and family (Boyd et al., 2016). A clearer understanding of MJH prevalence and intensity will serve to clarify the impact of the expanding gig economy on the Canadian labour market. In addition, since similar gig work expansion has been observed in other countries (Bracha and Burke, 2019; Kässä and Lehdonvirta, 2018), these patterns are likely to be relevant beyond the Canadian context.

## Literature

According to official labour market estimates, approximately 6% of the Canadian workforce report having more than one job or line of employment, a number that has slowly risen over the last 30 years (Fulford and Patterson, 2019; Kostyshyna and Lalé, 2019). In the United States, MJH rates declined from a peak of 6.2% in 1996 to 5% in 2018 and some have challenged these numbers as too low (Beckhusen, 2019; Bracha and Burke, 2019; Katz and Krueger, 2019). European patterns, in contrast, demonstrate either evidence of growth, most notably in Germany, or relative stability in the number of multiple jobholders in recent years (Klinger and Weber, 2020).

The lack of growth in North American MJH rates over the last decade is surprising, given the emergence of online platform intermediaries that have made flexible gig work accessible to wide segments of the labour force. Although research on the gig economy is nascent, initial findings suggest that much gig work is performed as secondary employment to supplement workers' primary incomes (Jeon et al., 2019). Given the connection between gig work and secondary employment, one might expect to observe an accompanying upwards trend in MJH as the gig economy has grown, yet no such trend has materialised – or at least one that is evident via traditional labour market estimates.

One explanation for the lack of evidence linking gig economy growth to rising MJH rates is that gig work tends to be sporadic, which can make it difficult to detect using traditional labour market questions that ask about the presence of an additional job in the week immediately prior to a respondent being interviewed (Bracha and Burke, 2019). In addition, many workers may simply fail to report gig work and other informal paid activities on these surveys – an oversight that has been highlighted by studies that have demonstrated higher prevalence rates of MJH when more expansive measures of the phenomenon are used (Beckhusen, 2019; Katz and Krueger, 2019).

Allard and Polivka (2018) compared Current Population Survey (CPS) MJH estimates to those from the American Time Use Survey (ATUS) that contains detailed information on income generating activities. Their findings revealed that the ATUS 2012–2016 MJH rate of 10% was approximately double the size of CPS MJH estimates. This suggests that the CPS may have misclassified many employed people who performed gig or informal work outside of their main job as a single, rather than multiple jobholder. This miscalculation has led some to argue that established labour market surveys may inadequately capture MJH that involves gig work or other informal work, calling for alternative approaches to measuring the labour market phenomenon (Abraham and Amaya,

2018; Boyd et al., 2016). In addition, beyond obscuring knowledge of the prevalence and social distribution of multiple jobholders, traditional indicators may also result in incorrect conclusions regarding the determinants of MJH.

Given that informal work may be overlooked in estimating the number of workers performing secondary work, I use a measure that assesses the extent that ‘wage workers’ perform any form of labour activity in addition to their main job, whether it is for another job, business, or some other line of paid work (e.g. freelancing, paid care work, etc.). Based on this more inclusive measure, I investigate whether MJH has increased in Canada over the last decade, driven by growing opportunities for temporary informal work in the gig economy.

### *Hypothesis 1: The Canadian MJH rate has increased since 2011*

It is of course possible that a growing supply of traditional employment opportunities—rather than gig work—is contributing to an increase in MJH. For example, Canadian unemployment fell from 8% in 2011 (the year of the first CAN-WSH study used in this article) to 5.5% in mid-2019 when the second C-QWEL study was conducted.

Since some research suggests that MJH rates are consistent with the fluctuations in an economic cycle (Zangelidis, 2014), a rising MJH rate may reflect growing overall job availability rather than new opportunities for flexible secondary employment in the gig economy. However, if MJH rates were tied to unemployment levels, one would expect to see more notable MJH growth reflected in traditional labour market estimates, which have registered less than a .25 percentage point increase since 2011. It is also possible that compositional changes in the labour force over the last decade have led to rising MJH rates (i.e. an increase in the types of workers for whom MJH is attractive or necessary). Sociodemographic changes as well as changes in paid work characteristics between 2011 and 2019 have been assessed for their contribution to any observed change in MJH.

### *Multiple jobholders’ work hours*

I explore possible changes in the intensity of MJH; that is, the typical weekly work hours that multiple jobholders report beyond their main source of employment. Perhaps unsurprisingly, multiple jobholders’ secondary work hours are relatively low – between 10 and 15 hours per week, representing approximately 20%–40% of their total working hours, according to European and North American studies (Fulford and Patterson, 2019; Hirsch et al., 2016; Zangelidis, 2014). However, these estimates are typically based on a rigid definition of secondary employment performed in the previous week.

It is possible that higher secondary work hour estimates may be obtained if a broader definition of MJH is used. Canadian research on this issue is limited however, and there is no research that has examined whether secondary work hours have changed over the last decade. It is plausible to expect that secondary job intensity has increased in the last decade, since the flexibility and fewer barriers to entry associated with gig work would make longer work hours possible for those with multiple jobs. For this reason, I expect to find an increase in MJH intensity between 2011 and 2019.

## Hypothesis 2: MJH intensity has increased since 2011

*Determinants of MJH between 2011 and 2019.* Beyond looking for evidence of a previously undocumented rise in the prevalence and intensity of MJH, I explore whether the traditional determinants and covariates of MJH and MJH intensity have changed in recent years. That is, have the types of individuals that hold multiple jobs and the work and nonwork factors associated with MJH – changed over the last decade?

While multiple jobholders tend to be heterogeneous as a group (Beckhusen, 2019), a number of Canadian patterns are evident. For example, based on the Canadian Labour Force Survey, women, the young and those with more education are more likely to report more than one job (Fulford and Patterson, 2019; Kostyshyna and Lalé, 2019). MJH is most common among workers in healthcare and educational sectors – growing economic sectors that have contributed to the rising MJH rate among women over the last two decades (Fulford and Patterson, 2019). Workers whose primary employment is temporary or part-time are also more likely to be a multiple jobholder. Despite this, the majority of multiple jobholders are employed full-time. It is important to restate that these patterns are based on a narrow definition of MJH (employed in two jobs or lines of work in the previous week) that may obscure other sociodemographic patterns. It is therefore important to investigate the determinants of MJH based on a broader definition of the phenomenon.

Traditional explanations for why workers hold more than one job are typically classified as pecuniary or nonpecuniary. Pecuniary motivations – the desire for additional income to meet financial goals or needs – have generally been proposed as part of the *job hours-constrained model*, which suggests that an individual's decision to take a second job depends on whether their primary job provides them with sufficient hours and a wage rate necessary to meet their income goals (Shishko and Rostker, 1976). Since searching for a new primary job that meets one's income requirements can be time-consuming, supplementing one's existing employment with additional work may be considered preferable.

While pecuniary motives and the hours constraint model have received the most attention from researchers interested in multiple jobholders' decisions, nonpecuniary factors have also been proposed, where the MJH strategy is to create a 'job portfolio' with job differentiation (Hirsch et al., 2016). The desire for differentiation may be because holding multiple jobs or lines of work provides access to an increased variety of activities and skills (*heterogeneous jobs model*) or as part of an insurance strategy to counter the risk of potential loss of income or job displacement in one's primary employment (*hedging model*) (Bell et al., 1997).

Survey evidence reveals that financial factors drive the majority of MJH decisions in the United States and Canada (Beckhusen, 2019; Hipple, 2010), although recent empirical evidence from the decade is lacking on this issue. Based on the 2004 CPS Work Schedules Supplement, 64% of Americans with more than one job reported that the main reason they did so was either due to expenses or to earn additional money (Hipple, 2010). Comparatively fewer – almost 20% – reported enjoyment as the primary reason for pursuing additional employment. Canadian data on the issue is older and not exactly equivalent; however, 45% of Canadian moonlighters in the 1991 Survey of Work Arrangements (SWA) reported financial hardship as the reason behind working multiple jobs (Kimmel and Powell, 2001).

Several European studies also reveal support for the *hours constrained model* (Klinger and Weber, 2020) but also some evidence for the *heterogeneous jobs model* (Dickey et al., 2011). Lower wealth and wage dissatisfaction were associated with an increased likelihood of MJH among men but not women (Wu et al., 2009). Dissatisfaction with the security of one's main job was not associated with MJH, providing no support for the *hedging model*.

While nonpecuniary motivations are frequently discussed as possible explanations for MJH, there are a limited number of studies that empirically test the *heterogeneous jobs* and *hedging models*. With regard to the *hedging model*, a few studies have examined objective indicators of job insecurity as potential antecedents of MJH (Bell et al., 1997; Wu et al., 2009); however, no study to date has examined whether workers' *perceptions* of job insecurity are associated with MJH.

I assess the *hours constrained hypothesis* by examining whether workers' financial difficulties predict an increased likelihood of working multiple jobs, based on the assumption that financial strain is in part a result of insufficient work hours and wages. The *hedging hypothesis* is tested by examining whether the perceived likelihood of a layoff in one's primary job is associated with being a multiple jobholder. Finally, I test the *heterogeneous jobs hypothesis* by examining if workers with challenging and interesting primary employment are less likely to have multiple jobs. I expect that the absence of interesting and challenging primary work will be associated with an increased likelihood of working multiple jobs.

*Hours constrained hypothesis:* Financial difficulties are positively associated with MJH and MJH intensity.

*Hedging hypothesis:* Perceived job insecurity is positively associated with MJH and MJH intensity.

*Heterogeneous jobs hypothesis:* Challenging primary work is negatively associated with MJH and MJH intensity.

### Changing MJH determinants

How might MJH patterns have changed over the last decade with the emergence of the gig economy, which is often performed as secondary employment (Jeon et al., 2019)? While I expect that the *hours constrained* and *heterogeneous jobs hypotheses* should be similarly supported in 2011 and 2019, it is possible that if there is support for the *hedging hypothesis*, MJH as a hedging strategy is more likely to have been pursued by CAN-WSH participants in 2011 when labour market conditions were weaker. This expectation is based on the argument that workers' ability to find employment if they encounter job loss is worse when economic and labour market conditions are poor, thus making MJH a more relevant hedging strategy for insecure workers in these contexts. In contrast, such hedging strategies may be less salient for those in the more favourable labour market context of 2019. Thus, while there is generally limited support overall for the *hedging hypothesis* in the literature, it is expected to find stronger support for it within the 2011 CAN-WSH sample.

Since the gig economy employs those in both high and low-skilled work (Jeon et al., 2019), one might not expect to see any change in the prevalence of MJH across education levels or across industries and occupations. One additional possibility, however, is that the increased flexibility of gig work and the ease that it can be performed in tandem with other employment (i.e. performed evenings and weekends etc.) may diminish the importance of an individual having flexibility in their primary job to be able to take on additional work.

Historically, flexible forms of employment, including part-time and temporary work, have been associated with MJH, in part because they often entail insufficient work hours and necessitate other employment, but also because they are easier to combine with another job or line of work (Beckhusen, 2019). As more flexible forms of secondary employment have become available, this may have reduced the importance of having primary employment that can accommodate secondary employment. I therefore look for evidence of 2011/2019 differences in any potential associations between MJH and primary job flexibility and insecurity.

*Heightened insecurity hypothesis:* The positive association between perceived job insecurity and MJH and MJH intensity is stronger in 2011 compared with 2019.

*Diminished flexibility hypothesis:* The positive association between schedule flexibility and MJH and MJH intensity is stronger in 2011 compared with 2019.

## Methods

The data for these analyses come from two representative samples of Canadian workers: the 2011 CAN-WSH and the 2019 C-QWEL. For the 2011 CAN-WSH study, interviews were conducted by telephone between January and August 2011. Calls were made to a regionally stratified unclustered random probability sample generated by random-digit-dial methods (N=6,004; 40% response rate).

The C-QWEL study, which was designed to replicate many of the focal measures of the CAN-WSH study, conducted 2,524 online survey interviews with working Canadians in September 2019. Respondents were members of the Angus Reid Forum, an online research company that maintains a rotating panel of approximately 65,000 Canadian survey panellists. A randomised sample of this panel was contacted and asked to complete an online questionnaire.<sup>1</sup> The response rate was 42%. Analyses of both datasets were weighted by gender, age, marital status, education and region (C-QWEL study only), according to the 2006 and 2015 Canadian Censuses, for CAN-WSH and C-QWEL respondents, respectively.

In order to examine potential changing MJH patterns between 2011 and 2019, I pooled the data from the two studies and included an indicator that reflects the study that respondents participated in. The pooled sample was limited to individuals whose primary employment is 'wage work' because the 2011 CAN-WSH study did not include information on the employment status of multiple jobholders' secondary employment. As such, the CAN-WSH sample does not allow for the identification and exclusion of those with multiple instances of self-employment, which is typically not considered to

reflect MJH. I therefore avoid this possibility by restricting the analytical sample to CAN-WSH and C-QWEL respondents that report 'wage work' as their primary employment (see Hirsch et al., 2016, for a similar approach). Primary wage workers that reported self-employment in their secondary job were included in the analytical sample.<sup>2</sup>

## Measures

### MJH

In the C-QWEL study, MJH was assessed by asking the following question: "How many different jobs, lines of work, or businesses do you currently have?" CAN-WSH participants were asked a similar question: "Do you currently earn money from more than one job, line of work, or business?" Respondents were coded as multiple jobholders (1) if they reported two or more instances of employment, or otherwise coded as single jobholders (0). A similar measure has been used in other large national studies, including the 2008 National Study of the Changing Workforce (Galinsky et al., 2013).

### MJH intensity

Both C-QWEL and CAN-WSH respondents who indicated that they worked more than one job were asked about the typical number of weekly hours that they worked beyond their main job. In the CAN-WSH study, a continuous measure of work hours was used, while C-QWEL respondents were asked to select from a set of hourly response categories. Since the majority of multiple jobholders report 10 or less hours per week (66%), I collapsed responses to create a binary measure, capturing whether they work 11 or more hours (coded 1) versus 1–10 hours per week (coded 0). To ensure study compatibility for the analyses, I collapsed the continuous work hours measure for CAN-WSH respondents to create the same binary indicator of working more than 10 hours in additional employment.

## Focal determinants

*Financial hardship* was assessed by three items. Respondents were asked: 'how often did you have trouble paying the bills?' and 'how often did you not have enough money to buy food, clothes, or other things your household needed?' Response choices were coded: 'never' (1), 'rarely' (2), 'sometimes' (3), 'often' (4) and 'very often' (5). A third item asked: 'How do your finances usually work out by the end of the month?' Response choices were coded: 'a lot of money left over'; (1), 'a little money left over' (2), 'just enough to make ends meet' (3) and 'not enough to make ends meet' (4). Responses from the three items were then standardised; higher scores indicated more financial hardship (CAN-WSH  $\alpha = .78$ ; C-QWEL  $\alpha = .86$ ).

*Perceived job insecurity* was assessed with the following question in both the CAN-WSH and C-QWEL study: 'How likely is it that during the next couple of years you will lose your present job and have to look for a job with another employer?' Respondents were able to choose from the following answers: (1) 'not at all likely', (2) 'not too likely', (3) 'somewhat likely' and (4) 'very likely'. Respondents in the latter two categories,



'somewhat likely' and 'very likely' (1) were combined and contrasted to respondents who answered 'not at all likely' or 'not too likely' (0).

### *Challenging work*

Five items measured challenging work, including: 'My job requires that I keep learning new things', 'My job requires that I be creative' and 'My job lets me use my skills and abilities' (Schieman, 2013). Response choices were coded 'strongly disagree' (1), 'somewhat disagree' (2), 'somewhat agree' (3) and 'strongly agree' (4). The responses were averaged: higher scores reflected more challenge (CAN-WSH  $\alpha = .78$ ; C-QWEL  $\alpha = .78$ ).

### *Schedule flexibility*

CAN-WSH and C-QWEL respondents were asked: 'How much control do you have in scheduling your work hours?' Response options were: 'none' (1), 'very little' (2), 'some' (3), 'a lot' (4), 'complete' (5). Schedule flexibility has been modelled as a continuous variable.

The analyses have also been adjusted for respondent work conditions and sociodemographics. Appendix 1 includes a description and coding strategy for these measures.

### *Plan of analyses*

Table 1 presents 2011 and 2019 weighted descriptives for all focal measures. Tables 2 and 3 present multivariate results from logistic regressions where MJH (and MJH intensity) is regressed on a binary variable indicating 2011 CAN-WSH respondents (coded 1) versus '2019' C-QWEL respondents (coded 0), adjusting for sociodemographic characteristics and work conditions.

The 2011 CAN-WSH respondents are coded 1 and 2019 C-QWEL respondents are coded 0, and are adjusted for sociodemographic characteristics and work conditions. Guided by the *hours constrained*, *hedging* and *heterogeneous jobs hypotheses*, I tested whether financial hardship, the absence of challenging work and perceived job insecurity were associated with MJH and MJH intensity.

## **Results**

In the 2019 C-QWEL study, 19% of workers were multiple jobholders, a rate 30% higher than in the 2011 CAN-WSH study (15%) (Table 1). This difference is statistically significant, [ $\chi^2(1, 6130) = 17.653, p < .001$ ], revealing support for Hypothesis 1. Comparison of multiple jobholders' secondary work hours indicates no support for Hypothesis 2. However, in both studies, while the majority of multiple jobholders worked 10 hours or less per week in secondary employment, a considerable proportion worked longer hours, with approximately 39% of CAN-WSH multiple jobholders and 35% of C-QWEL multiple jobholders working 11 or more hours per week – a difference that is not statistically significant, [ $\chi^2(1, 930) = 1.525, p = .217$ ].

**Table 1.** Descriptive statistics on variables by study (weighted).

	2011 CAN-WSH (N=4,285)		2019 C-QWEL (N=1,642)	
	Mean/%	95% CI	Mean/%	95% CI
Multiple jobholder	14.7*	13.77 to 15.63	18.91	16.85 to 20.97
11+ hours for additional jobs (weekly)	39.10	34.13 to 44.07	34.63	28.99 to 40.27
Perceived job insecurity	24.66	23.05 to 26.27	22.91	19.85 to 25.97
Financial hardship	.021	-.015 to .057	.031	-.018 to .080
Challenging work	3.286*	3.261 to 3.311	2.963	2.928 to 2.998
Schedule control	2.772	2.733 to 2.811	2.779	2.718 to 2.840
Job autonomy	2.804*	2.777 to 2.831	2.552	2.514 to 2.590
Job pressures	3.053*	3.009 to 3.097	3.208	3.156 to 3.260
Work hours (main job)	38.483	37.67 to 39.29	38.771	38.19 to 39.35
College degree holder	50.21	48.46 to 51.96	48.83	46.31 to 51.35
Household income				
Less than \$25,000	9.40*	7.61 to 11.2	5.12	3.87 to 6.37
\$25,000–\$49,999	21.51*	20.79 to 22.23	17.64	16.67 to 18.61
\$50,000–\$99,999	39.42	37.28 to 41.56	39.13	38.13 to 40.13
\$100,000–149,999	17.31*	15.63 to 18.99	22.63	20.74 to 24.52
\$150,000+	12.41	10.42 to 14.4	15.63	13.69 to 17.57
Age	39.056*	38.52 to 39.60	40.710	40.22 to 41.20
Women	50.11	49.12 to 51.08	50.81	50.40 to 55.22
Caucasian	85.20	84.45 to 85.95	87.02	85.23 to 88.81
Cohabiting or married	61.12	58.76 to 63.48	59.71	57.25 to 62.17
Parent	48.15*	46.50 to 49.80	34.01	33.05 to 34.97

CAN-WSH: Canadian Work Stress and Health Study; C-QWEL: Canadian Quality of Work and Economic Life Study; CI: confidence interval.

\*2019 mean/proportion significantly different from 2011 mean/proportion at  $p < .05$  (two-tailed).

Several other statistically significant differences across studies were apparent. Compared with CAN-WSH workers, workers in the C-QWEL study were older, less likely to have children under 18 in the household and reported a higher household income (unadjusted wages presented). CAN-WSH workers reported more job autonomy, fewer job pressures and more challenging work compared with C-QWEL workers.

### Multivariate analyses

Table 2 presents results from a series of logistic regression analyses with MJH as the dependent variable. Models 1 and 2 are based on a pooled sample of 2011 and 2019 respondents, and include a binary control for the survey year. In model 1, 2019 C-QWEL workers were more likely to report multiple jobs, after adjusting for sample sociodemographics, as revealed by the statistically significant odds ratio for ‘Surveyed in 2011’. Younger workers and college degree holders were more likely to report MJH. Predicted probabilities for MJH – based on postestimation analyses where all controls were held at

**Table 2.** Logistic regression of multiple jobholding on sociodemographics and work/financial conditions.

	Pooled Sample N=5,927		2011 CAN-WSH N=4,285		2019 C-QWEL N=1,642	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Surveyed in 2011	.638***	.648***	–	–	–	–
Sociodemographics						
Age	.988**	.989**	.990*	.990*	.990	.985*
Women	.867	.818*	.786	.786	.961	.892
Caucasian	.875	.915	.970	.970	.808	.770
Cohabiting/married	.916	.922	.905	.905	1.008	.971
Parent	.984	.928	.908	.908	1.081	.998
College degree	1.228*	1.305**	1.262*	1.262*	1.336*	1.409*
Household income						
\$25,000–\$49,999	.875	.955	.924	.996	.596	.849
\$50,000–\$99,999	.801	.974	.846	.986	.619	.927
\$100,000–149,999	.800	1.044	.759	.948	.660	1.182
\$150,000+	.750	1.072	.698	.987	.646	1.189
Work/financial conditions						
Work hours	–	.987**	–	.987*	–	.987
Job pressures	–	.987	–	1.020	–	.886
Job autonomy	–	1.032	–	1.060	–	.963
Schedule control	–	1.029	–	1.016	–	1.064
Challenging work	–	1.012	–	.992	–	1.135
Perceived job insecurity	–	1.061	–	.997	–	1.208
Financial hardship	–	1.232***	–	1.183**	–	1.382**

CAN-WSH: Canadian Work Stress and Health Study; C-QWEL: Canadian Quality of Work and Economic Life Study.

Odds ratios presented.

\*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001 (two-tailed).

their respective mean or model category – revealed a six-percentage point difference in MJH across the 2011 and 2019 studies (14 vs 20%, respectively).

In model 2, after adjusting for work and financial conditions, the ‘Surveyed in 2011’ odds ratio remains statistically significant, and similar in strength to the odds ratio in model 1. The MJH 2011–2019 difference presented in Table 1 therefore cannot be explained by compositional differences across CAN-WSH and C-QWEL workers, or differences in their paid work and family lives. In examining the various determinants of MJH, model 2 reveals support for the *hours constrained hypothesis*. Financial hardship is associated with an increased likelihood of MJH. Individuals reporting fewer work hours in their primary job are also more likely to report MJH. In contrast, neither perceived job insecurity (*hedging hypothesis*) nor a lack of challenging work (*heterogeneous jobs hypothesis*) is associated with holding multiple jobs.

The patterns previously presented in the pooled model analyses are largely the same in each study. However, while primary job work hours are associated with MJH in the

**Table 3.** Logistic regression of working 11+ hours in secondary employment on sociodemographics and work conditions.

	Pooled sample (N = 938)			2011 CAN- WSH (N = 588)		2019 C-QWEL (N = 350)	
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 1	Model 2
Surveyed in 2011	1.372	1.589**	.967	–	–	–	–
Sociodemographics							
Age	1.006	1.008	1.007	1.005	1.008	1.015	1.013
Women	1.228	1.224	1.258	1.032	1.003	1.972*	2.179**
Caucasian	.394***	.437***	.750	.319***	.353***	.625	.757
Cohabiting or married	1.183	1.241	1.278	1.118	1.128	1.963*	1.876*
Parent	.918	.885	.885	.841	.819	1.582	.953
College degree holder	.799	.847	.845	.735	.732	1.065	1.229
Household income							
\$25,000–\$49,999	.821	.862	.842	.990	1.062	.337	.268
\$50,000–\$99,999	1.001	1.201	1.231	1.252	1.584	.478	.427
\$100,000–149,999	.992	1.198	1.211	.835	1.112	.889	.691
\$150,000+	.659	.844	.826	.697	.915	.388	.383
Work/financial conditions							
Work hours	–	1.000	1.000	–	.994	–	1.009
Job autonomy	–	.839	.843	–	.748	–	1.090
Schedule control	–	1.224**	.927	–	1.377***	–	.873
Challenging work	–	.980	.983	–	1.186	–	.624
Job pressures	–	1.038	1.045	–	1.030	–	1.167
Perceived job insecurity	–	1.414	1.415	–	1.544	–	1.082
Financial Hardship	–	1.267**	1.282**	–	1.243*	–	1.220*
2011–2019 contingency							
Caucasian × 2011	–	–	.467	–	–	–	–
Schedule control × 2011	–	–	1.476**	–	–	–	–

CAN-WSH: Canadian Work Stress and Health Study; C-QWEL: Canadian Quality of Work and Economic Life Study.

Odds ratios presented.

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$  (two-tailed).

CAN-WSH study, there is no evidence of an association in the C-QWEL study. Additional analyses tested whether any of the year-specific associations differed across the studies. These analyses enabled a test of the *diminished flexibility and heightened insecurity hypotheses*. It revealed no evidence that the determinants of MJH varied between 2011 and 2019. I therefore find no evidence that the individual-level factors that predict MJH have changed over the last decade.

Table 3 represents results from logistic regression models, with the dependent variable indicating whether a multiple jobholder works 11 hours or more a week in their second job. These analyses are therefore constrained to the sub-sample that reported having more than one job or line of work. The odds ratio for ‘Surveyed in 2011’ is not statistically significant, indicating that there is no evidence that multiple jobholders in the

C-QWEL study were more likely to report working longer hours in their secondary employment than their CAN-WSH counterparts.

However, when respondent work and financial conditions are included in model 2, the ‘Surveyed in 2011’ odds ratio becomes statistically significant, revealing that CAN-WSH multiple jobholders were 1.5 times more likely to report working 11 or more hours per week in secondary employment, compared with C-QWEL multiple jobholders, after differences in other paid work and financial conditions across the studies were taken into account. Specifically, the predicted probability of CAN-WSH multiple jobholders working 11 or more hours per week is 10 percentage points higher compared with those in the C-QWEL study. These results are contrary to Hypothesis 2 that predicted a higher MJH intensity in the 2019 C-QWEL study. While MJH is more prevalent in the 2019 C-QWEL study, when we consider CAN-WSH and C-QWEL multiple jobholders with similar paid work and non-work conditions, multiple jobholders in the C-QWEL study are less likely to work longer hours in secondary employment.

Examining the determinants of MJH intensity, model 2 of Table 3 reveals support for the *hours constrained hypothesis*. Multiple jobholders reporting financial hardship are more likely to work longer hours in their secondary employment. Workers with more schedule flexibility in their primary job are also more likely to report working 11 hours or more a week in a secondary job. However, the odds ratios for perceived job insecurity and challenging work are not statistically significant, indicating no support for the *hedging* and *heterogeneous jobs hypotheses*.

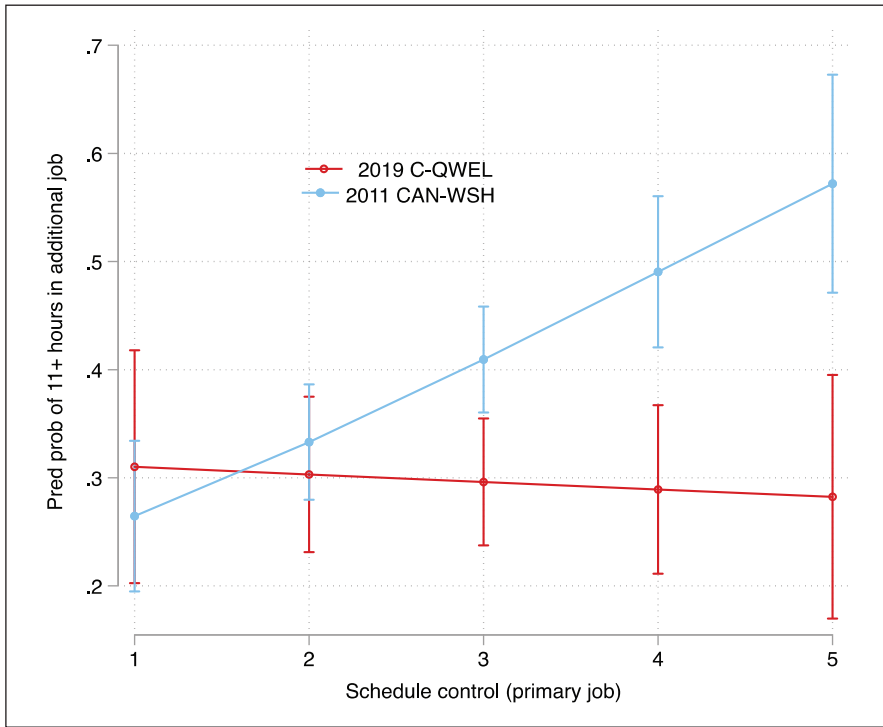
As with Table 2, I also present the study-specific analyses, which reveal several differences across workers in the CAN-WSH and C-QWEL studies. Model 3 presents two statistically significant interactions with study year. As depicted in Figure 1, a positive association between schedule flexibility and MJH intensity exists only for CAN-WSH workers.

To correctly interpret any conditional association in MJH, post-estimation predicted probabilities and marginal effects from the underlying interaction models were used. This is due to the fact that it is inadvisable to rely on the coefficient of the interaction term in binary outcome models to interpret the size and significance of the interaction effect on the predictions (Mize, 2019).

During 2011, having complete schedule flexibility compared with those with no flexibility increased the predicted probability of working 11 or more hours in secondary employment by 30 percentage points ( $p < .001$ ). For 2019 multiple jobholders, the schedule flexibility difference ( $-3$  percentage points) in the predicted probability of working longer hours is not statistically significant. A comparison of marginal effects across studies was statistically significant ( $.335$ ;  $p < .01$ ). Schedule flexibility in one’s primary job is associated with an increased likelihood of longer secondary work hours only for those in the 2011 study. These results therefore provide support for the *diminished flexibility hypothesis* with respect to MJH intensity.

### *Additional analyses: Self-reported motivations for MJH*

The 2019 C-QWEL survey also asked multiple jobholders about the primary reason they worked more than one job – information that can shed further light on their decision-making process. Presented in Table 4, the most common primary reason for MJH was to



**Figure 1.** Predicted probability of working 11+ hours in additional job by schedule control and study (multiple jobholder subsample). Predicted probabilities derived from a logistic regression model (Table 3, model 3) with control measures set to their respective mean or mode. 95% confidence intervals presented.

**Table 4.** C-QWEL workers’ main reason for working multiple jobs (N=350).

	%
To earn extra income	40.1
I don’t earn or work enough in my main job	22.6
To pursue a favourite hobby/interest	21.5
To develop new skills	5.5
To have income in case my main job doesn’t work out	5.1
Other reason	5.2
	100%

C-QWEL: Canadian Quality of Work and Economic Life Study.

earn additional income (40%). The second most reported reason was insufficient earnings in one’s main job (23%). A close third factor was to pursue a hobby or interest (22%). Skill development was rarely provided as a primary factor for MJH (6%) – a finding that does not suggest support for the *heterogeneous jobs hypothesis*. However, it

is possible that those engaging in additional work to pursue a hobby are in part doing so because of a desire for increased variety of activities and skills. Finally, only 5% of multiple jobholders said that they worked an additional job in case they lost their main job, indicating little support for the *hedging hypothesis*.

These findings, which highlight the importance of insufficient primary job earnings, therefore provide some support for the multivariate results presented in Table 2. However, it is also clear that many C-QWEL multiple jobholders are driven by the *desire* rather than the *need* for additional earnings.

## Discussion

While research documents a growing gig economy consisting of short-term temporary employment and contract work, there has been little evidence of an accompanying rise in the percentage of North American workers with more than one job. This is surprising, since one might expect to see the gig economy driving up the MJH rate. One potential answer to this puzzle is that secondary employment has traditionally been narrowly measured, resulting in many instances of secondary work being overlooked. The results of this article suggest support for this possibility, revealing a non-negligible increase in Canadian MJH over the last decade when a more inclusive definition of secondary employment is used.

Close to one in five Canadian workers in the 2019 C-QWEL study reported working in more than one job or line of work – a rate that is considerably higher than 2019 Statistics Canada estimates and also the MJH rate in the 2011 CAN-WSH study. Given the rapid growth of gig work in the last decade, it is possible that these findings reflect the influence of the gig economy on Canadian MJH rates.

While we await more reliable estimates of the size of the gig economy, these findings are useful in serving as a proxy for its impact on the Canadian labour market and the lives of working Canadians. They also raise important questions about the challenges that workers face in juggling work and family roles, since MJH has been linked to greater work-life conflict and worker stress (Boyd et al., 2016). On the one hand, it is possible that we are witnessing the growth of more family-friendly instances of MJH – secondary employment that can be performed at the discretion of the worker (for example, an Uber driver working a few shifts when time permits), or the increased availability of desirable work. The supplementary findings documenting C-QWEL respondents' motivations for MJH support this latter possibility – with one in five doing so to pursue a hobby or interest. On the other hand, there is growing evidence that many gig workers do not enjoy flexibility or control in their work (Rosenblat and Stark, 2016), which may exacerbate the problems of juggling multiple jobs. This view is supported in additional analyses of C-QWEL multiple jobholders, where one in five indicated that they work additional jobs out of necessity rather than choice. More research is therefore necessary to understand not just the implications of gig work, but also the consequences of combining gig work with more traditional employment, and whether MJH represents a potential new form of generalised insecurity.<sup>3</sup>

While the findings of this article suggest a rise in the prevalence of MJH, I find no evidence that MJH intensity has increased. In fact, the proportion of multiple jobholders

with longer secondary work hours decreased between the 2011 and 2019 studies, after adjusting for other work and nonwork conditions. This contradicts the expectation that the flexibility of gig work leads workers to invest more time into secondary sources of employment. One possible explanation is that the gig economy has increased the prevalence of limited-hour and sporadic instances of MJH – a possibility that is consistent with research that documents very low annual earnings that come from gig employment (Farrell and Greig, 2016). This explanation is supported in the C-QWEL study, where four out of 10 multiple jobholders reported that they worked less than weekly in their second job. Unfortunately, I do not have similar information on CAN-WSH multiple jobholders' work schedules in 2011 against which to compare. Nevertheless, the high rate of sporadic multiple jobholders in the C-QWEL study may explain why the prevalence of MJH in 2019 is so much higher than official estimates that exclude less-than-weekly participation. Further research on the work schedules of multiple jobholders and gig workers as a broader group is necessary.

In testing three dominant explanations of why workers take on additional employment, I find support only for the *hours constrained hypothesis*. Financial difficulties are associated with an increased likelihood of MJH in both CAN-WSH and C-QWEL studies. This is further supported by C-QWEL specific results that show that many multiple jobholders in 2019 cite financial factors as the reason for working additional jobs.

It is worth considering the possibility that some of these workers may not struggle with hardship but seek additional employment due to blocked earning mobility in their main job. This alternative explanation reflects the considerable diversity of multiple jobholders' socioeconomic circumstances (Panos et al., 2014).

Also consistent with previous research, I find no evidence supporting the *hedging* or *heterogeneous jobs hypotheses*. In analyses of MJH intensity, however, I find that flexibility predicts more secondary work hours only in the 2011 CAN-WSH study. This provides support for the *diminished flexibility hypothesis* and the argument that the increasing availability of short-term work arrangements means that contemporary workers may now more easily accommodate additional jobs, regardless of whether they have flexible primary work schedules. There was no evidence, however, that perceived security of one's primary job influenced MJH in either 2019 or during the less favourable labour market conditions of 2011 (*diminished insecurity hypothesis*). Collectively, these findings suggest that both financial precariousness and the availability of flexible secondary employment are prominent drivers of MJH decisions.

Several limitations of these analyses deserve consideration. While focal survey measures are largely consistent across the studies, it is possible that the higher MJH rate observed in the C-QWEL survey is a result of its online nature, which may capture a disproportionate number of gig workers, who tend to be younger and online more. The 2011 CAN-WSH study, in contrast, was based on a telephone survey. Furthermore, the C-QWEL sample was randomly selected from a rotating list of panellists who completed surveys for the Angus Reid Forum, while the CAN-WSH relied on a probability sampling method to select respondents.

It is possible that these different collection and sampling methodologies could have contributed to the observed differences in MJH. However, both samples were weighted to ensure they were representative of the underlying population of Canadian workers in



2011 and 2019. Furthermore, the 2011–2019 MJH differences remain in multivariate analyses that adjust for covariates. Nevertheless, it is vital to examine whether the 2019 C-QWEL MJH patterns are replicated in other representative samples of the contemporary workforce. Regarding the tests of possible MJH determinants, cross-sectional associations between financial difficulties, perceived job insecurity and challenging work can only be used to infer potential antecedents of MJH. Analyses using longitudinal data are therefore warranted.

## Conclusion

The findings in this article, which reveal substantial growth in MJH in Canada, are the first to my knowledge in the North American context. Nevertheless, this trend is consistent with other countries, including Australia, that have adopted similar broader measures of defining multiple jobholders (Australian Bureau of Statistics (ABS), 2019). MJH growth should be of concern to researchers and policymakers, given that multiple jobholders appear to be vulnerable to financial hardship. Many workers continued to struggle finding employment with sufficient hours and pay during the last economic recovery period (Bamberry and Campbell, 2012). Thus, while the proliferation of flexible, short-term work may have made it easier for workers to juggle several jobs, the findings of this article suggest a precarious dimension to MJH that reflects underlying problems in the quality of workers' primary employment, rather than labour market opportunity.

Since precarious multiple jobholders may be overlooked by traditional survey, measures that are not sensitive to sporadic or informal secondary work arrangements are important for future research to adopt more inclusive MJH measures to understand the prevalence and experiences of this vulnerable group of workers. This likely requires broader and more fluid definitions of employment, as well as a generalised view of employment precariousness that extends beyond a worker's primary job. In addition, research should examine how the nature and consequences of MJH varies across labour market contexts. In Europe, for example, MJH rates tend to be highest in Nordic countries (Eurostat, 2015), which tend to have stronger social welfare protections. It is possible that MJH arrangements in these contexts are less likely to reflect precariousness and instead more voluntary job combinations. Cross-national comparisons of the link between MJH and employment precariousness are therefore worthy of further study.

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## Notes

1. The Angus Reid Forum draws randomised samples that represent the Canadian population as a whole. In order to ensure that research participants accurately represent the public in terms of both demographics and attitudes, surveys are based upon representative samples that are randomised and statistically weighted according to the most current demographic and regional voting data available. For the C-QWEL study, sample selection started with creating a balanced sample matrix of the Canadian population. A randomised sample of Angus Reid Forum members were then selected to match this matrix to ensure a representative sample. Subsequent to this step, final sample data were analysed and weighted to a series of variables (Age, Gender, Region, 2015 Federal Election voting behaviour) to ensure balanced representation of all working Canadians.
2. The C-QWEL sample, which includes information on respondents' secondary employment status, allows for an estimate of the prevalence of MJH across all workers (i.e. workers with primary 'wage work' or primary self-employment status). Excluding those reporting as self-employed in both their primary and secondary jobs, the estimate of MJH was 18% among C-QWEL respondents – slightly less than the 19% reported in the main analyses, in which the sample was restricted to primary 'wage workers'.
3. I thank a journal reviewer for this insight.

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## Author biography

Paul Glavin is Associate Professor of Sociology at McMaster University. His research examines emerging challenges to the employment and health of Canadian workers. As a coinvestigator on the Canadian Work, Stress and Health Study – a national panel survey of Canadian labour force

participants funded by the Canadian Institutes of Health Research – his current research examines Canadians' experiences in self-employment and alternative work arrangements.

## Appendix I

### *CAN-WSH and C-QWEL study controls*

*Job autonomy.* C-QWEL and CAN-WSH respondents were asked the extent that they agree or disagree with the following statements: 'I have the freedom to decide what I do on my job', 'It is basically my own responsibility to decide how my job gets done', and 'I have a lot of say about what happens on my job'. Response choices are coded 'strongly disagree' (1), 'somewhat disagree' (2), 'somewhat agree' (3), and 'strongly agree' (4). I averaged responses to create the index; higher scores reflect more autonomy (CAN-WSH  $\alpha = .78$ ; C-QWEL  $\alpha = .78$ ).

*Job pressures.* Three items assess pressure in the work role (Schieman, 2013). The items ask about the frequency of the following in the past 3 months: 'Felt overwhelmed by how much you had to do at work?', 'Had to work on too many tasks at the same time?', 'The demands of your job exceeded the time you have to do the work?' Response choices are coded: 'never' (1), 'rarely' (2), 'sometimes' (3), 'often' (4), and 'very often' (5). I averaged the items; higher scores indicate more job pressure (CAN-WSH  $\alpha = .78$ ; C-QWEL  $\alpha = .88$ ).

I use a continuous measure of C-QWEL and CAN-WSH respondents' main job work hours.

*Education.* *Education* is dummy-coded as respondents with a college degree or higher (1) versus all other respondents (0).

*Household income.* Respondents' household income for the year prior to the interview is modelled with a series of dummy categories: from \$25,000 or less (the reference category) to \$150,000 and higher. Household income was used instead of personal income to better capture potential wealth constraints that may motivate taking on additional jobs; that is, relying only on personal income ignores the possible role of the employment circumstances of one's partner on multiple jobholding decisions. Age is modelled as a continuous variable.

*Gender.* *Gender* is coded as (1) for women and (0) for men.

*Race/ethnicity.* I use dummy-codes to contrast 'White' (1) with 'Other Race/Ethnicity' (0).

*Marital status.* I use a dummy variable for cohabitating and married individuals (1), and contrast with 'single' respondents (0).

*Parental status.* A dummy variable is used to indicate respondents who reported one or more children in the household (1) versus those with no children (0).