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Precarious Employment: Labour Market Insecurity among Immigrants in Canada

by

Parvinder Hira-Friesen

A THESIS

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Abstract

Using the Canadian Labour Force Survey (2006-2012), I examine the prevalence of and trends in precarious employment, comparing recent and established immigrants to their Canadian-born counterparts. I define precarious employment as holding jobs that involve involuntary part-time work, temporary contracts, or multiple job holding. Although current Canadian labour market research views precarious work as a vital part of that country's employment outlook (see Krahn, 1995; Vosko et al, 2003; Goldring, 2009; Kapsalis and Tourigny 2004; Zeytinoglu and Cooke 2005) just one Canadian study specifically examines immigrants employed in this type of work (Godin and Renaud, 2005). As a result, my research is unique in examining immigrant participation in non-standard work within Canadian labour markets offering an interdisciplinary approach combining perspectives from sociology and economics. The findings of my research indicate that recent immigrant males and females are overrepresented in involuntary part-time work and this trend is increasing over time. This trend also exists for established immigrants although to a lesser extent. I also observed that recent immigrant women are nearly twice as likely as Canadian-born women to be employed in temporary jobs, net of the controls.

For the purposes of further investigation of precarious work among immigrants I expand my research by running multilevel models at individual and CMA levels and find employment in temporary jobs and multiple jobs by both recent and established immigrant males is affected by a CMA's median hourly earnings as well as the immigrant representation in a CMA. In addition, cross-level interactions reveal that recent male immigrants less likely to be employed in multiple jobs in CMAs in which the median wage is higher.

Finally, I use OLS regression to focus on how these types of jobs may lead to lower earnings among these newcomers. I find that recent immigrants are struggling financially due to wage disparities in part created by precarious employment. Both males and females experience an initial earnings disadvantage that is further exacerbated by being employed in involuntary part-time work, temporary work and multiple jobs. Overall, my findings suggest that some form of government intervention is needed through immigration policy reform if Canada values the economic integration of its large immigrant population.

Acknowledgements

I would like to acknowledge Dr. Richard A. Wanner's tireless assistance to countless revisions in the pursuit for a judicious examination of Canadian immigrants employed in precarious work.

Dedication

I dedicate this dissertation to Friese, Indy and Sukster for their never ending and much appreciated support.

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Chapter One: **Introduction**

Changing global economies and a subsequent increase in the diversity of labour markets have necessitated the need for flexibility in the Canadian workforce. This desire for flexibility among Canadian businesses has also created job insecurity throughout the Canadian workforce. Many view precarious work as an unreliable employment alternative for economic success. Kalleberg defines "precarious work," as employment that is uncertain, unpredictable, and risky from the point of view of the worker (Kalleberg, 2009). Some Canadian scholars refer to work that differs from that of standard employment as non-standard work[1] (Krahn, 1992). However, argue Vosko et al., (2003), definitions of 'nonstandard work' seldom include direct indicators of insecure or precarious employment. Vosko furthers states the focus should be on all employment types or arrangements that differ from the standard employment relationship (Vosko et al., 2003). Therefore, non-standard work classifications fail to address all aspects of precarious work. Vosko suggests linking notions of non-standard work with that of precarious work using mutually exclusive employment forms (Vosko et al., 2003). For example, mutually exclusive employment forms are identified by differentiating employees from those who are self-employed, establishing whether those who are self-employed have employees, and whether they work full-time or part-time (see Figure 1.1). Hence, these and numerous other conditions that exist within this relationship of employer and employee have the potential of precariousness.

Precarious work is referred to by American scholars as "contingent work". Nardone and Polivka (1989) define contingent work as flexible arrangements made between firms and their

---

[1] Standard employment is by and large defined as a circumstance where the employee has one employer, works full-time, year-round on the employer's premises, takes pleasure in extensive statutory benefits and entitlements and is employed indefinitely (Fudge 1997;Rogers 1989; Schellenberg and Clark 1996; Vosko 1997).

employees. These arrangements include part-time and temporary work, as well as contracting-out services that were previously performed by the company's core labour force. The operational definition of contingent work according to these researchers also includes employee leasing, self-employment and home-based businesses. European researchers have advanced 'precarious employment' as an alternative to non-standard employment by identifying four dimensions to establish whether a job is precarious (Vosko et al., 2003). The four dimensions include the level of certainty of continuing employment, presence or absence of a trade union, regulatory protection for the worker by a union or labour laws, and finally whether the income is sufficient to support the employee and any dependents he or she may be financially responsible for (Rodgers, 1989). Hence there is a general consensus among the global north community regarding the definition of precarious work.

In the process of achieving flexibility, employers have created an increased partitioning of their workforce into core and periphery sectors (Kalleberg, 2003; Atkinson, 1984). This labour market segmentation, argues Kalleberg (2003), has thus created "a division between organizational insiders and outsiders" (Kalleberg, 2003). These outsiders include both highly skilled, well-paid workers as well as those employed in low-skilled low-paid labour (Kalleberg, 2003). Unfortunately due to cultural and language challenges; along with lack of credential recognition, many Canadian newcomers fall into the outsider category. It is within this context that I will examine the extent of Canadian immigrants' participation in varying types of precarious work in Canadian labour markets. This examination will include both at the individual level and CMA level across Canada. In addition I will utilize a theoretical framework guided by the principles of dual labour market theory and the scholarship on immigrant integration in the work place to contextualize Canadian immigrant labour market participation in precarious work.

Although current Canadian labour market research views precarious work as a vital part of that country's employment outlook (see Krahn, 1995; Vosko et al, 2003; Goldring, 2009; Kapsalis and Tourigny 2004; Zeytinoglu and Cooke 2005) just one Canadian study examines immigrants employed in this type of work (Godin and Renaud, 2005). As a result, the present study is unique in examining immigrant participation in non-standard work within Canadian labour markets and therefore offers an inter-disciplinary investigation including the perspectives of both sociology and economics. This analysis is especially important as Canada accepts more and more highly educated and highly skilled newcomers from non-European countries who bring with them their unique cultural challenges to their host country.

1.1 Canadian Context

The need for increased flexibility and decreasing costs has led many Canadian companies to employ workers in non-standard work. Although some economists tout the benefits of non-standard work for students and others desiring the flexibility of part-time or temporary work, many dispute these benefits by citing less job security, lower pay and fewer if any benefits (Krahn, 1995). Therefore, Krahn (1995) argues, labour market inequality is inadvertently affected due to this escalation in non-standard jobs.

According to a recent study, today's immigrants are much more likely to encounter labour market difficulties in Canada's "new" economy, regardless of their education, pre-migration work experience and language skills (Goldring, 2009). This researcher argues that Canadian immigrants today face precarious employment, income deterioration, and lower probabilities of occupational mobility long term. She further states that this assertion is in line with the views of many academics and policy experts who allude to the disparity between the

education and skills of immigrants and available employment across Canada. In addition, the above study highlights the increasing earnings gap between immigrants and native-born workers "with comparable human capital", along with "the racialization of income disparities and of poverty (Goldring, 2009)." These assertions are a good starting point for the study of immigrant labour market participation; however, it is also important not to categorize all immigrants as having a similar experience. Therefore, it is vital that country of origin differences be taken into account, since they affect the labour market experiences of Canadian newcomers.

Non-standard work in Canada is defined as: part-time employment; temporary employment, including term or contract, seasonal, casual, temporary agency, and all other jobs with a specific pre-determined end date; own account self-employment (a self-employed person with no paid employees); and multiple jobholding (two or more concurrent jobs) **(**Krahn 1995). According to Kapsalis and Tourigny (2004) the rise in non-standard work in recent years has drawn more attention to some of the possible negative consequences of such work. These negative outcomes include employment insecurity, lower earnings, little or no employer benefits, and lack of social programs (Kapsalis and Tourigny 2004). Since non-standard employment in Canada accounts for approximately two in five workers aged 16 to 69, these researchers associate nonstandard work with low pay and low-income families. Moreover, non-standard employees are also at a greater risk of unemployment and have access to fewer employer or government benefits. A growing concern among researchers is the persistence of nonstandard employment among the people who hold these jobs. For instance, half of the five million Canadians in non-standard jobs in 1999 remained in such jobs throughout the following two years (Kapsalis and Tourigny 2004).

With respect to another aspect of non-standard work, Harvey Krahn (1995) reports that part-time work has been increasing since the middle of the century. Furthermore, this upward trend accelerated during both the 1981-82 recession and the recession that began in the early 1990s (Krahn, 1995). The concern for the present study is not those who choose to work part-time for its flexibility to fit their lifestyle such as students and retirees but those who have no choice but to work at these positions. Therefore, a challenging labour market forces many to take such jobs involuntarily (Noreau, 1994). As Krahn argues the advantages of non-standard work are frequently outweighed by less job security, lower pay and fewer benefits if any (Krahn, 1992).

In 1983, The Wallace Report documented a thorough analysis of working conditions in part-time work across Canada (Zeytinoglu and Cooke 2005). Part-time work was the only non-standard work viewed as increasing in the early 1980s. Findings from this investigation accuse both governments and other employers of excluding part-time workers from benefits and pensions. From the early 1980s to the end of the 1990s, many researchers report the expansion of both part-time and temporary work (Tabi and Langlois, 2003; Vosko et al., 2003). Thus, a flexible workforce was created within Canadian labour markets (Zeytinoglu and Cooke 2005). Zeytinoglu and Cooke further developed the Wallace Report analysis to include other types of non-standard employment. The results of their study found that there is concern regarding many employees being trapped in non-standard jobs that in turn will undoubtedly affect both current and future employment conditions (Zeytinoglu and Cooke, 2005). Moreover, Zeytinoglu and Cooke maintain that, similar to the results of the Wallace Report, those employed in non-standard work continue to receive little or no non-wage benefits. Zeytinoglu and Cooke (2005) examine whether there has been improvement in benefits coverage for non-standard workers

since the Wallace Report in 1983. Using Statistics Canada's Workplace and Employee Survey (WES) 1999 data, these researchers find that since the Wallace Report findings, there has been little improvement in benefits coverage for non-standard workers. Therefore, they continue to be comparatively disadvantaged in contrast to their regular full-time counterparts.

Vosko et al. (2003) report that full-time permanent work became less and less common as it decreased from 67% in 1989 to 64% in 1994 and 63% in 2002. Within this decrease in full-time positions and corresponding increase in non-standard work, in 2002, women accounted for over 6 in 10 of those with part-time temporary jobs or part-time self-employment and for nearly three-quarters of part-time permanent employees (Vosko et al., 2003). According to these researchers, 27% of part-time workers were working part-time due to poor business conditions or they were unable to secure full-time work. Furthermore, reports Vosko, although the absolute decline in full-time permanent wage work was somewhat higher for males, males were still more likely than females to be permanently employed in 2002.

1.2 Canadian Immigrants and Precarious Employment

According to Godin and Renaud (2005), the Quebec labour market over the last two decades has mirrored other economies with the rise in non-standard employment. In their study, Godin and Renaud investigate the stability of such positions, especially when the majority of non-standard employment involves immigrants. They examine whether new immigrants achieve stability in the labour market upon arrival in Quebec. Although most immigrants, especially those from Western European countries, experienced employment stability over time in the present study, there were certain groups who did not fare as well. For example, respondents from Africa, the Middle East, East Asia, and the Pacific experience difficulty securing

employment over time. For North Africans, these differences were present throughout the observation period (Godin and Renaud, 2005). The lowest long-term labour market participation rates were among immigrants from Africa and the Middle East. These researchers conclude that the persistence of labour market inequalities suggests the prevalence of discrimination or prejudice.

1.3 International Perspective on Precarious Employment

Audrey Freedman coined the term "contingent employment arrangements" in 1985 and asserted that these new relationships between the firms and employees were both "conditional and temporary". Hence this lack of attachment between the contingent worker and the firm raises legitimate concerns regarding job security. Changing market conditions in the 1980s forced companies to gain greater control over their labour costs by adjusting their work force accordingly (Nardone and Polivka, 1989). The benefits certainly favour the firms, as many contingent workers face reduced wages, few or no benefits, loss of job security, and an overall weaker standing in the labour market (Nardone and Polivka, 1989).

According to Tilly (1998), part-time work taps into a "much broader and deeper anxiety about job quality". Tilly explains that the number of hours worked is not the main concern. Tilly agrees with other economists and researchers, stating that worker trepidation lies in lower wages, little to no benefits, and loss of job security.

The expansion of temporary work is evident in the twenty-fold increase of employment in temporary agencies since the early 1960s (Tilly, 1998). Tilly reports that Manpower Inc. employs more people yearly than any other private employer in the country. Most importantly, argues Tilly, the majority of temporary workers, in contrast to their part-timer counterparts, are

involuntary. Hence these workers would prefer permanent work if it was available to them (Tilly 1998).

In an earlier article, Tilly (1991) argues that involuntary part-timers, the workers who would prefer full-time jobs, account for most of the growth in part-time employment since 1970. Tilly further indicates that the proportional rise of these workers may be a result of employer demand for scheduling flexibility and a work force that commands lower compensation (Tilly 1991). Part-time employment, as in many other countries, makes up a mounting portion of jobs in the United States. Tilly sides with many sociologists and other researchers who contend that not all part-time work is a result of employers accommodating the wishes of housewives, students, retirees, and others who seek out this type of employment. Again, argues Tilly, since 1969, part-time jobs have increased largely because more employers see them as a way to cut labour costs. Accordingly, those who work part-time as a necessity rather than as a choice account for most of the growth in part-time employment's share of the work force since 1969.

As in other more-developed countries, Buchtemann and Quack (1990) report that since the early 1980s, 'non-standard' forms of employment have increased tremendously in both absolute and relative terms in most European countries. Conversely, regular full-time work with full benefits is declining. This pattern of increasing non-standard employment is not expected to reverse any time soon as most Western European governments in recent years have introduced various measures in order to promote non-standard forms of employment (Buchtemann and Quack 1990). The policy makers accomplish this either by directly deregulating legal standards in labour law and social security or by providing incentives for both employers and workers to engage in atypical work. For example, in West Germany this was done mainly by the highly

controversial Employment Promotion Act (Beschaftigungsfoerderungsgesetz) of 1985 (Buchtemann and Quack 1990). According to Buchtemann and Quack (1990), government policies eased legal burdens on small businesses, lessened the legal restrictions on temporary employment contracts and introduced new regulations designed to make part-time work more attractive for employers as well as employees. Opponents of these policies warn against the dangers of non-standard employment and its exclusion from protective regulations involving labour law and social security (Buchtemann and Quack 1990). Therefore, argue Buchtemann and Quack, non-standard work is generally held to be precarious.

Crompton (2001) claims that the European labour markets have given way to 'market forces' resulting in an increase in non-standard work. She defines standard work as full-time employment in which a worker engages over a working-age lifetime. Conversely, states Crompton, non-standard work is casual, part-time, and short contract working, and self-employment. This type of employment thus leads to increased flexibility for the employers and exemplifies economic competitiveness. Given the economic advantage and labour flexibility, non-standard work is viewed in a positive light by governments and policy makers. In fact, non-standard work has been endorsed in the European Commission White Paper (1994), a document on European social policy published by the European Union. Not unlike many other researchers, Crompton (2001) highlights the negative aspects of non-standard work. She cites low wages and lack of job security which ultimately lead to an increase in social exclusion.

1.4 Historical and Theoretical Background

1.4.1 Organizational Restructuring and Flexible Employment

David Harvey (1990) argues that economic post-modernism resulted from the shift from Fordism to a more flexible form of capital accumulation. Harvey highlights the broad transformation in political, economic, and cultural practices, involving the surfacing of a new postmodern awareness in varying disciplines during the 1970s. Ford recognized that mass production meant mass consumption, which would ultimately lead to cultural commodification (Harvey, 1990). Furthermore, mass production also ultimately resulted in the restructuring of: the reproduction of political power, politics of labour control and management, and aesthetics and psychology (Harvey, 1990). Fordism materialized with Henry Ford providing workers with adequate income and free time to consume the products they produce. With the deployment of state powers resolved, argues Harvey, Fordism became a "distinctive regime of accumulation" and formed the basis for a post-war boom that lasted until the 1973 recession (Harvey, 1990: 129).

According to Harvey (1990), this system of production and consumption was too inflexible and eventually gave way to post-Fordism and it's more complex and market-yielding economic structure. The rigidities of Fordism in due course led to what Harvey refers to as "flexible accumulation". The flexibility includes labour processes, labour markets, products and patterns of consumption (Harvey, 1990). Flexible accumulation, contends Harvey, entails high levels of 'structural' unemployment, fast skill annihilation and restoration, few to no gains in wages, and a reduction in trade union power. Henceforth, employers benefited from decreased union power and successfully attained flexible work schedules and labour contracts. This ultimately resulted in a shrinking of a core group of workers who enjoyed full-time permanent

high paying jobs and a simultaneous increase in a peripheral group. The peripheral group is divided into two sub-groups to include full-time employees with skills that are readily available in the labour market and those workers who are part-timers (usually involuntary), casual and sub-contractors (Harvey, 1990). This researcher argues that lack of insurance coverage and pensions, along with low wages and no job security, simultaneously result in worker dissatisfaction.

Labour market research shows that work not only locates the worker within the country's stratification system, but also links individuals to each other and, as Kalleberg (2008) argues, is "central to individual identity." Hence work is a key component of the Canadian immigrant experience and subsequent economic integration into Canadian society. As argued by many economists and sociologists (Rubin 1995, Cappelli 1999, Standing 1999, Standing 2009) beginning in the 1970s, deteriorating economic conditions created an aura of financial uncertainty that led countries, organizations, and workers to search for greater flexibility in employment. Consequently, this resulted in the deterioration of the existing employer/employee relationship (Rubin 1995, Cappelli et al 1997, Cappelli 1999). Consequently, globalization and flexible labour markets have increased insecurity and inequalities among the workers (Standing 1999). Furthermore, the 1970s global economic changes not only increased competition and uncertainty among organizations but also pressured them to foster higher profit margins while ensuring flexibility with their employees and consumer demands (Kalleberg, 2008). Kalleberg argues that social, economic and political forces worldwide are concurrently responsible for making work more precarious.

Some explanations offered for the need for flexibility include technological advances and globalization. The improvements experienced in the realm of technology allow governments,

firms, and temporary employment agencies to pool potential employees with specific skills to engage in contractual work either as a group or as individuals (Lee, 1996). Given that advances in technology help to decrease the cost of responding to consumers through this flexibility, states Lee, "the intensifying competitive pressure from an increasingly global economy ensures that surviving firms will be more focused and flexible (Lee, 1996)." The processes necessary for the global competitiveness of organizations necessitating employment flexibility affects immigrant labour market participation and subsequent socio-economic integration into Canadian society. Therefore it is vital that the present study examine not only the extent of immigrant participation in precarious work but also how this is embedded in a context of global competitiveness.

Standing (2009) maintains that globalization has induced class fragmentation. In particular, the old working class, which Standing considers as the backbone of labour regulations and "social protection systems", has become a declining minority (Standing, 2009). Standing identifies the majority of modern workers as forming a "precariat". He asserts that future policies and institutions will have to be designed to the needs of the precariat in order for the global economy to function. This assertion is vital for the future of the Canadian immigration to offset the ongoing challenges faced by newcomers' economic integration.

Statistics Canada reports that in 2009, 1.8 million Canadians, or 1 in 8 paid workers, had some form of temporary employment (Galarneau, 2010). In addition, temporary labour market engagement grew rapidly from 1997 to 2005 in the form of contract positions, seasonal employment or casual work. Subsequently, asserts Galarneau, this increase resulted in worker anxiety of corrosion in labour market conditions. This, according to Statistics Canada, is especially worrisome for a segment of Canadians who are aware that temporary jobs pay lower wages and provide fewer or no benefits than permanent jobs (Galarneau, 2010). This report

further asserts that these temporary positions are seldom unionized and are part-time more frequently than permanent positions (Galarneau 2005, Kapsalis and Tourigny 2004, OECD 2002 and Krahn 1995). Again, since many newcomers are employed in such positions, an analysis of these conditions is necessary for the future of Canada and its immigration policy.

The financial consequences of precarious work are a major concern for many Canadians employed in such positions. Kapsalis and Tourigny (2004) state that not only do those employed in precarious work engage in fewer hours of work , they earn considerably lower hourly wages, and are employed for shorter durations than permanent employees. Therefore, the economic instability not only arises from lower wages and fewer hours worked but also from the inability to access employment insurance because of short employment durations (Kapsalis and Tourigny, 2004). Moreover, financial uncertainty is further exacerbated if precarious workers go from one temporary job to another and never have the chance to build up retirement funds (Kapsalis and Tourigny, 2004). Given that newcomers to this country face challenges of not only language and cultural barriers but also lack of credential recognition by Canadian employers, it is vital that immigrants be singled out among the precarious workers employed in Canadian labour markets.

1.5 Theories of Labour Market Participation

Human capital theory asserts that labour markets "reward those individuals who have the greatest *human capital"* (Lowe and Lehmann, 2009, p.135). Human capital, an assumption of this theory, is measured by education, training, experience and ability, thereby ignoring "issues of class and power" (Lowe and Lehmann, 2009, p.135). What makes this theory especially problematic is that not everyone with similar abilities, education and experience attains the same jobs. In fact, many highly qualified individuals, such as many immigrants, often "end up

working in low-status jobs, such as taxi drivers or security guards" regardless of their qualifications (Lowe and Lehmann, 2009:135). Therefore, a more suitable theory to address such disparities is labour market segmentation theory (Kalleberg, 1988) .

A major variant of labour market segmentation theory, called dual labour market theory divides labour markets into two largely non-overlapping sectors identified as primary and secondary sectors. A primary market consists of jobs that offer "high wages, good working conditions, employment stability and job security, and chances for advancement" (Snyder, Hayward, Hudis, 1978, p.709). The secondary sector, according to Piore, has jobs with low wages, poor working conditions, considerable variability in employment, "harsh and often arbitrary discipline", and not much opportunity for advancement (Piore, 1970, p.55). Piore also suggests that complex factors generate the dual market structure. Important to the present study is what Piore refers to as behavioural traits such as race, demeanour, accent, and educational credentials. This researcher refers to these traits as being statistically correlated with job performance but not causally related to it. Therefore, argues Piore, many qualified individuals are rejected because they possess these negative traits (Piore, 1970). Since these traits are not causally correlated to job performance, asserts Piore, many qualified applicants are therefore rejected because they possess the wrong "traits". As such, primary sector jobs require employment stability, and some workers are therefore excluded because of unstable behaviour. There is a "fit" between job and worker characteristics in both segments. However, many persons qualified for primary employment are confined to secondary jobs because of attributes (especially immigrants) that employers associate with unstable work (Snyder, Hayward, Hudis, 1978, p.709).

Beyond these studies, Hodson and Kaufman (1982) argue that the dual economy perspective stresses the distinction between core and periphery industries. Again, a sizeable number of better jobs are found in the core which includes large corporations and government (Lowe and Lehmann, 2009). For example, large corporations provide high-quality careers for their workers, and subsequently subcontract services to smaller firms where both wages and working conditions are poor (Lowe and Lehmann, 2009). Additionally, movement to a better or *primary* labour market segment from a worse or *secondary* segment is often difficult (Lowe and Lehmann, 2009). This is especially apparent as many positions are subcontracted by the primary labour market and create nonstandard positions.

As Kalleberg (2009) argues, nonstandard employment is a shift away from standard work arrangements making labour markets and organizations more flexible. Although this flexibility has positively affected many families, it has also created exclusion of many workers who otherwise may have enjoyed "social protections previously available to them through the standard employment relationship" (Kalleberg, 2009:562). Kalleberg **(**2009) further argues that the use of nonstandard work has important implications for labour markets, including employment security, quality of jobs, and training and mobility opportunities (Kalleberg, 2009, p.563). All three traits are important for immigrants as they settle into their host country. Employment insecurity is detrimental to an immigrant's successful integration into Canada. This is especially true of immigrants with families who uprooted their established lives in their home countries to position themselves as viable citizens of Canada. Furthermore, immigrants require job quality which, along with training and mobility opportunities, will provide the necessary environment for successful integration.

The core-periphery view also recognizes the existence of a binary employment structure within employing organizations (Zeytinoglu and Cooke 2005). Hence the primary labour market working conditions benefit regular full-time workers as the 'core' group. Conversely, part-time workers along with other non-standard workers exist in the 'periphery' of the organization working under secondary labour market conditions. As indicated by existing research, in order to lower labour costs and achieve flexibility, employers sought to hire non-standard workers (Kalleberg et al., 1997; Tilly, 1992; Zeytinoglu, 1991, 1992). Furthermore, several studies suggest that immigrants arriving during a recession take longer to find a job and earn lower wages throughout their careers compared to their Canadian-born counterparts (Picot, 2008; LaRochelle-Côté and Gilmore, 2009).

Local labour markets depict varying immigrant experiences depending on the type of industry that is predominant within that province. For example, Alberta is known for its oil and gas industry, forestry, and agriculture, while eastern Canadian provinces incorporate the majority of manufacturing industries. In fact, according to Citizenship and Immigration Canada (CIC, 2011)), Ontario and Quebec together produce more than three-quarters of all Canadian manufactured goods. Unfortunately, underutilization of a highly educated and highly skilled immigrant workforce is preventing Canada from replacing its "near retirement" workers whose number is growing at a rapid pace (Lochhead and Mackenzie, 2005). In fact, 90 percent of business heads describe Canada's impending labour shortage problem as either moderate or serious (Lochhead and Mackenzie, 2005). Therefore, the present study will examine the effects of characteristics of labour markets, operationalized as Census Metropolitan Areas, using percent immigrants in their population, percent unemployment, percent jobs in trades, and lastly, average

annual wages of precarious workers to provide a more comprehensive representation of immigrant labour market experience.

Immigrant labour market participation is also affected by when the newcomer arrives in his or her host country. For instance, newcomers entering Canada during the early 1970s, 1980s or 1990s would have experienced not only cultural barriers but also economic difficulties compounded by recessions faced by Canadian labour markets during this time period (Picot and Manser, 1997). Consequently, a more robust market is expected to provide immigrants with more lucrative and permanent employment. In either circumstance, how the newcomer fares in the labour market may depend on the economic condition of the host country's financial condition.

Along with where the newcomers reside and when they arrive in their host country, how much they earn from their employment also impacts their economic integration. Immigrant wages are particularly vital within precarious employment. For instance, wages represent not only whether the newcomers can provide for themselves and their families but also whether they earn enough for their retirement and for educating their offspring. Although many studies show that the wage gaps between immigrants and their Canadian-born counterpart are reduced over time, immigrants earn significantly less upon arrival (Gilmour, 2008). For example, the 2008 Labour Force Survey indicates that immigrant employees from sizeable periods of landing and working groups had hourly wage rates well below those of comparable Canadian-born employees. Gilmour reports that this wage disparity decreased for immigrants who arrived in Canada more than a decade earlier (Gilmour, 2008).

I combine the above mentioned theoretical perspectives and will pursue the following research questions that will be addressed in the three subsequent papers:

1. Are there differences between recent immigrants, established immigrants and their Canadian-born counterparts with respect to involuntary part-time work, multiple job holders and temporary employment?
2. How are the differences in question 1 portrayed at the individual level and the CMA (census metropolitan area) level?
3. How are immigrant wages affected by precarious employment?

1.6 Methodology

1.6.1 Data

The Labour Force Survey (LFS) is a monthly survey involving approximately 56,000 Canadian households. The goal of the survey is to provide a detailed, current picture of the labour market across the country. It is fitting to use the LFS for the present study as it provides rich and informative data regarding the immigrant experience within the Canadian labour markets.

The LFS is the only Statistics Canada source of current, monthly estimates of total employment (including self-employment) and unemployment. Many people know it as the source of the unemployment rate, but LFS data are also used to produce other standard labour market indicators, such as the employment rate and the participation rate. Along with these popular measures, the LFS also provides employment estimates by industry, occupation, hours worked and much more, all cross-classifiable by a variety of personal characteristics. For employees, wages, union status, job permanency and workplace size are also available.

1.6.2 Sample

The present study will use the LFS from 2006 to 2012 for the month of March for respondents age 20-59. The month of March is significant as this is the time of year when very few workers are on holidays or in the process of changing jobs. Given the LFS did not start asking immigrant status questions until 2006, the data are restricted to respondents surveyed from 2006 to 2012. The target population covered by the survey corresponds to all persons aged 15 years and over residing in the provinces of Canada, with the exception of the following: persons living on Indian reserves, full-time members of the regular Armed Forces, and persons living in institutions (for example, inmates of penal institutions and patients in hospitals or nursing homes who have resided in the institution for more than six months) (LFS, 2010).

1.6.3 Variables

1.6.3.1 Dependent Variable:

As previously mentioned, precarious work encompasses several different types of employment. In the present study I will establish precarious work as the dependent variable and draw on a specific definition of precarious work to include: temporary (includes sub-classification of temporary jobs into four groups: seasonal, temporary, term or contract, including work done

via a temporary help agency; casual job; and other temporary work), multiple job holders, and involuntary part-time work. I will commence with the present study by running separate models for each of these dimensions of precarious employment.

1.6.3.2 Independent Variables:

Immigrant status is one of two focal variables of the present study. This investigation will define immigrants as those born outside Canada. The second focal variable that will be

examined with respect to the present study is sex. As mentioned earlier, by Vosko Zukewich and Cranford (2003), the majority of workers in the part-time forms of paid work are women. In fact, in 2002, women made up the majority of casual temporary employees, most of whom work part time, while men dominated seasonal forms of temporary paid work, most of which is fulltime (Vosko Zukewich and Cranford 2003). Therefore, it is vital to include women in this analysis by running all models separately by sex.

Given family reunification is a significant component of the Canadian immigration policy, it is important to include the respondent's marital status as a key component of that individual's economic integration into the host society and labour market outcomes. Hence, the extent to which an individual is affected by the precariousness of his or her employment varies with how many individuals he or she is financially responsible for.

In addition to marital status, I will also include other socio-demographic variables such as age of respondent and education. The respondent's age is an important socio-demographic variable and is a key component to the present study as it situates the respondent within the working age milieu. The level of education an individual has typically translates into the type of occupation that he or she may be employed in. This is not the case for many immigrants due to lack of credential recognition by their host countries. Subsequently, including country of birth in this analysis along with where the respondent acquired the highest level of his or her education may reveal significant clues to the variability of immigrant integration and precarious employment. As existing research illustrates, not all immigrants fare well in terms of integrating into Canadian society. Given immigrants represent a diverse group of individuals and collectively strive to overcome barriers and integrate into Canadian society, many are not

successful. Therefore, research must account for and acknowledge differing immigrant experience within the host country.

For the purposes of depicting immigrant employment experiences regarding local labour markets, I will also include CMA (Census Metropolitan Area) as a contextual variable in the model. CMA will allow for a regional representation of immigrant labour market integration with respect to precarious employment. Furthermore, identifying immigrant residence in different parts of the country will showcase autonomous immigrant decisions to seek out and locate in regions with labour shortages to not only secure their own futures, but also ensure higher learning and subsequent gainful employment opportunities for their children.

Following where immigrants decide to reside within Canada, when they landed is also a vital aspect of examining immigrant labour market participation. The year of landing for newcomers will aid the present study by depicting the period of arrival, which likely influences their economic opportunities. According to existing immigrant research and the immigration policy of 1967, when the immigrant arrived will likely coincide with which region they immigrated from. For example, prior to 1967, the majority of newcomers to Canada emigrated from predominantly European countries.

Finally, an overall depiction of Canadian immigrants in the labour markets is best represented by the LFS variables: *Class of Worker, Job Permanency, Union status, Earnings,* and *Hours Worked per Week.* These variables are important to the present study as they will enable us to better locate immigrant workers in Canadian labour markets. For example, not only do these variables depict whether certain work is precarious or not, but also enable an examination of immigrant earnings and occupational milieu.

1.6.4 Research Design

I propose to construct a sequence of cross-sections from the Canadian Labour Force Survey (LFS) for the month of March from 2006-2012. Using sex as a focal variable will allow the present study to highlight which countries are represented in precarious work and whether this depiction corresponds with the over-representation of female immigrants from many Asian countries. Controlling for education, both level and country of highest level of education, is pertinent to the present study as it will allow for assessing credential recognition issues which may lead to precarious employment among newcomers. Both CMA and country of birth will allow for a representation of immigrant distribution across Canada and controlling for these variables may lead to valuable insights into immigrant preference for varying places to live and work. Finally, age and marital status provide this research with important socio-demographic information and are vital to precarious work assessment.

1.6.5 The Basic Models

I examine the LFS for immigrant employment outcomes by using several statistical methods. First, I will conduct the descriptive analysis using cross-tabulation. Second, I will run binary logistic regression models with each of the dimensions of precariousness. Third I will use multilevel models to ascertain how the traits of Canadian labour markets affect precarious work. I will make certain to include Canadian-born respondents in all models for benchmarking purposes. Finally, I will ascertain whether effects differ for males and females via interactions with sex. If these effects do differ between the sexes I will run separate models for each group.

1.7 Implications of the Study

If immigrants are over-represented in precarious work within Canadian labour markets, policies designed for successful economic integration of newcomers will have to be revisited. In the process of trying to succeed in their new country, immigrants exude resilience and determination that sets them apart from their Canadian-born counterparts. It is important to study immigrants independent of their Canadian-born counterparts as immigrants not only represent a possible solution for labour force shortages for the Canadian economy but also, because they are younger, hence providing potential growth for Canada's aging workforce. Furthermore, immigrants represent a diverse group of individuals with a common goal of successfully integrating into Canadian society, an endeavour not needed by the host population. Therefore, immigrants will collectively strive to overcome barriers and integrate into Canadian society. This communal struggle includes autonomous immigrant decisions to seek out and locate in regions with labour shortages to not only secure their own futures, but also ensure higher learning and subsequent gainful employment opportunities for their children.

The Canadian government's current stance on favouring university educated immigrants may no longer be viable given the predicted shortage of trades workers by many economists. In this case, Canada's current point system (Economic class) and its focus on university education will also have to be re-assessed if Canada wishes to fulfill labour market demands. This is especially true in trades-intensive industries, such as the Alberta oil sands. Although current policies allow provinces to participate in the immigrant selection process, the point system may still be in need of modification to include other forms of training and education.

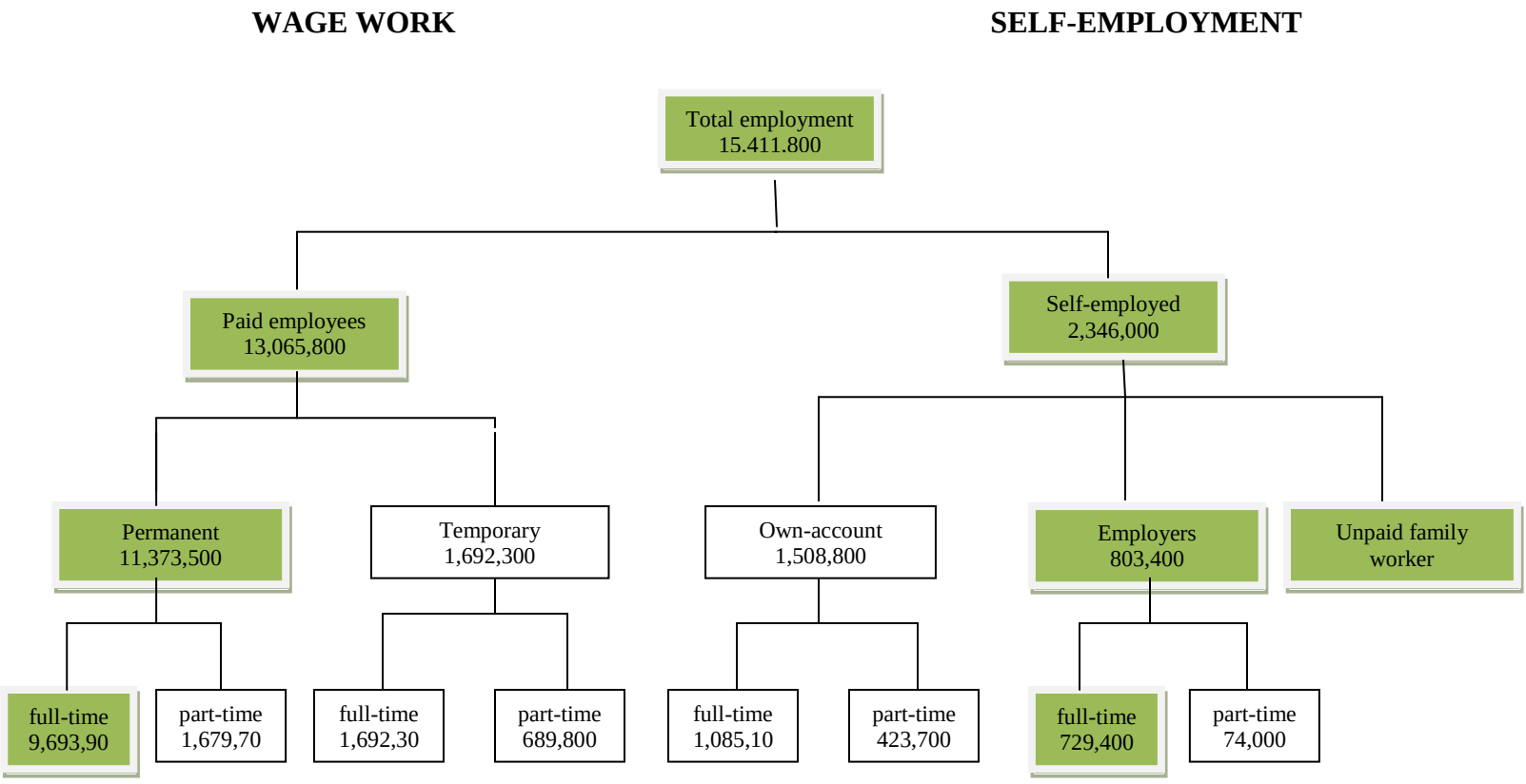
The present study will contribute to the developing literature on immigrant labour market participation by focusing on job traits. A sizeable amount of existing research utilizes wages or

occupational group membership as defining factors of job quality. In the present study, I will instead concentrate on an under-examined but equally important dimension of job quality, its precariousness.

Table 1.1 Variables and Coding Key

Variable	Coding	Variable Name
Immigrant Status	Dichotomous 1=yes	Derived Variable
Country of Birth	Canada United States United Kingdom Germany Italy Poland Portugal China (People's Republic of) Hong Kong India Philippines Vietnam Other	IMM_Q01
Country of Highest Education	Same as Country of Birth	CHE_Q01
Landed Immigrant Status	Dichotomous 1=yes	IMM_Q02
Date of Landed Immigrant Status	Year	IMM_Q03
Marital Status Married, common law, widowed, separated, Divorced, single, never married	Dichotomous 1=yes	MARSTAT
Education	Less than High School High School Trades Some University University Degree (ref group)	Derived Variable from: ED_Q02 ED_Q03 ED_Q04
Age	20-29 years 30-39 years 40-49 years 50-59 years (ref group)	ANC_Q03
Sex	Male=1	SEX_Q01
Class of Worker	Employee Self-employed Working in a family business without pay	LFI_Q320 LFI_Q300
Job Permanency	Seasonal job Temporary, term or contract job (non-seasonal) Casual job Other - Specify	LFI_Q240 LFI_Q241
Occupation (Based on NOC codes)		
Union Status		LFI_Q220 LFI_Q221
Type of Work Sought	Full-time Part-time	
Earnings		LFI_Q200; LFI_Q202 ; LFI_Q204 ; LFI_Q205; LFI_Q207; LFI_Q208 ; LFI_Q209
Hours Worked Per Week	<30 hours ≥30 hours	LFI_Q137 / LFI_Q177
CMA (Census Metropolitan Area	CMA	St. John's , Halifax, Moncton, Saint John, Saguenay, Quebec , Sherbrooke, Trois-Rivières, Montreal, Gatineau, Ottawa, Kingston, Oshawa, Toronto, Hamilton, St. Catharines – Niagara, Kitchener, Brantford, Guelph, London, Windsor, Greater Sudbury, Thunder Bay, Winnipeg, Regina, Saskatoon, Calgary, Edmonton , Abbotsford, Vancouver, Victoria

Figure 1.1 Classifications of Mutually Exclusive Employment Forms, Canada 2002 (Vosko, 2003)



Chapter Two: **Immigrants and Precarious Work in Canada: Trends, 2006-2012**

2.1 Abstract

Using the Canadian Labour Force Survey for March of 2006 through 2012, the present study examines precarious employment and trends over time between immigrants (recent and established) and their Canadian-born counterparts. The regression models are run separately for males and females as existing research shows that many precarious jobs are occupied predominantly by women. The findings of the present study show recent immigrant males and females (respondents in the sample who have lived in Canada for five years or less) are overrepresented in involuntary part-time work and this trend is increasing over time. The pattern is not as pronounced for multiple job holders nor for temporary job holders.

Keywords: Immigrants, precarious work, Canada

2.2 Introduction

Whether it is referred to as precarious, non-standard, or contingent, employment in the secondary labour market evokes images of economic struggle among members of the labour force. Work not only locates the worker within the country's stratification system, but also links individuals to each other and, as Kalleberg (2008) argues, is "central to individual identity." Many studies have highlighted the steady increase of precarious work in Canada (Vosko, Zukewich and Cranford 2003; Fudge and Vosko 2001; Shellenberg and Clarke 1996). As Canadian companies adapt to changing global economies and a subsequent increase in the diversity of labour markets, work has become flexible and therefore precarious. Existing immigrant labour market outcomes research also cites immigrant wages, discrimination and

credential recognition as critical in Canadian newcomers lagging in economic integration behind their Canadian-born counterparts. What these studies don't explicitly address is the prevalence of Canadian immigrants, especially recent immigrants, employed in precarious jobs. Additionally, there is little research showing possible trends of immigrant employment in precarious work over time.

The present study will address precarious employment among Canadian immigrants and contribute to the literature in several ways. First, it identifies three specific types of precarious employment (involuntary part-time work, multiple job holders and temporary job holders) and measures labour market participation trends over time (2006-2012) for immigrants in these three work categories. Second, the timeline used in the present study includes the recession of 2008-2009 as well as the continued influx of highly educated immigrants arriving in Canada.

As reported by LaRochelle and Gilmore (2009), Canada's economy enjoyed high employment levels until a sudden downturn in the world's economy in late 2008. As such, there was a widespread loss of jobs for the first time since the last recession of 1990-1992. Although Canada was also affected, it did not suffer as severely as the United States of America and a majority of other countries around the world. Therefore, whether recent and/or established newcomers employed in precarious jobs are over-represented or under-represented in comparison to their Canadian-born counterparts will help Canadian policy makers better understand immigrant labour market outcomes and subsequently plan and implement future immigration selection policies.

2.3 Explaining the Persistence of Immigrant Economic Disadvantage in Canada

2.3.1 Wages

Currently, a majority of research on economic outcomes among Canadian immigrants focuses on wages, credential recognition and discriminatory hiring practices (Aydermir and Skuterud, 2005; Bannerjee, 2009; Frenette and Morrisette, 2005; Boyd and Thomas 2001 and 2002). Hence, these researchers argue that lack of credential recognition and discriminatory hiring practices lead to low wages. I maintain that, it is being employed in precarious jobs that in part create an immigrant earnings deficit; although I also recognize that the combination of discriminatory hiring practice and discounting foreign education and work credentials may lead to precarious work, which in turn leads to low wages.

Existing discourse surrounding the economic integration disadvantages faced by Canadian newcomers identifies low immigrant wages as a probable outcome. In fact, a sizeable number of researchers recognize low income among Canadian newcomers as the key source of low economic integration among them. An extensive study using Canadian census data by Aydemir and Skuterud (2005) speaks to immigrant wage disparities across regions in Canada. Furthermore, Aydemir (2003) argues that not only have the earnings of newcomers been deteriorating, but so have their employment and labour force participation rates. As such, Aydemir states that, even though recent Canadian immigrants are more educated than previous cohorts, they are still not faring as well in Canada's labour markets (Aydemir 2003).

Immigrant wages are also examined by Bannerjee (2009), highlighting entry wage and ability to catch up to the wages of the Canadian-born. Bannerjee uses the Survey of Labour and Income Dynamics and finds that visible minority immigrants are unable to catch up to the earnings of Canadian-born respondents and therefore are disadvantaged economically.

According to Bannerjee, white immigrants do not face similar challenges and are able to catch up to their Canadian-born counterparts. Frennette and Morrisette (2005) discuss immigrant wages and whether they will reach parity with those of the Canadian-born. They conclude that immigrant earnings would have to grow at an "abnormally high rate" in order to reach parity with their Canadian-born counterparts (Frenette and Morrisette, 2005 pp. 249).

Finally, Pendakur and Pendakur (1998) examine earnings differentials between whites and visible minorities and find substantial earnings differentials both between and within the white and visible-minority groupings among males and females in the sample. Although visible minority status is not measured in the Canadian Labour Force Survey, the findings of the present study acknowledge that the visible-minority category is a useful indicator of economic discrimination. Hence, non-whites would be expected to earn less than their white counterparts.

2.3.2 Credential Recognition.

Much has been written about the lack of credential recognition experienced by newcomers upon arrival into their host country. This is also true of Canada. According to Houle and Yssaad (2010) and others (Boyd and Schellenberg 2007, Boyd and Thomas 2001 and 2002, and Wayland 2006), most recent immigrants possess both the most work experience and highest levels of education in Canadian immigration history. Although both characteristics should result in labour market success it does not appear to apply to newcomers to this country, as many employers fail to acknowledge immigrant credentials. Subsequently, these newcomers are underemployed and unable to benefit from the categories they were selected for (Houle and Yssaad, 2010).

Worswick (2004) cites lack of credential recognition as a cause of declining immigrant wages and subsequent lack of economic integration. Picot and Sweetman (2005) acknowledge

the persistence of this disparity despite the high average level of education among immigrants to Canada. Ferrer and Riddell (2008) echo this assertion and highlight the value of Canadian education and work experience over that obtained abroad with respect to earnings.

According to René Houle and Lahouaria Yssaad (2010), immigrants face challenges that may impede the recognition of their credentials as well as their work experience (Houle and Yssaad, 2010). This in turn, they argue, affects their labour market performance and economic integration into Canadian society. These researchers cite foreign education being viewed by Canadian employers as "less relevant to the needs of the Canadian labour market" (Houle and Yssaad, 2010). Newcomers, especially recent immigrants, therefore experience a higher rate of non-standard employment than established immigrants and Canadian-born workers.
Gilmore (2009) echoes Houle and Yssaad's finding that newcomers struggle with respect to gainful employment upon arrival to Canada. For example, Gilmore cites several difficulties that immigrants to Canada face in finding gainful employment. These include non-recognition of foreign credentials; comparative levels of education; degree and length of work experience; differences in quality of education; language barriers; differing strengths of social networks; and familiarity with the Canadian labour market (Gilmour, 2009). These issues are especially relevant, argues Gilmour, for immigrants who have arrived in Canada more recently (Gilmore, 2009). While Gilmour (2009) cites "similar employment quality characteristics" of involuntary part-time work and employment in multiple jobs among immigrants and their Canadian-born counterparts, he argues these similarities do not exist when "employment quality indicators" are taken into account. As a result, states Gilmour, immigrants had a higher proportion of involuntary part-time work, temporary jobs and are less likely to have an employer pension plan compared to their Canadian-born counterparts (Gilmour, 2009). He also acknowledged that the

disparities between these two groups were much smaller than those between recent newcomers and their Canadian-born counterparts (Gilmour, 2009).

Zietsma (2010) states that in 2006, university degrees among more recent immigrants have risen to 42% of those landing in Canada since 2001. This is a sharp contrast to only16% of Canadian-born during this time period having achieved parallel success (Zietsma, 2010). Additionally, argues Zietsma, not only are recent immigrants highly educated but they also possess foreign work experience. Unfortunately, this combination does not seem to be enough to get newcomers hired in positions that reflect their education and work credentials.

According to Houle and Yssaad (2010) within four years of residing in Canada, 28% of immigrants with foreign credentials had found acknowledgment of these credentials. Interestingly, within this cohort of four-year residency, women and older newcomers were less likely to have their work experience or credentials recognized compared to men and younger immigrants (Houle and Yssaad, 2010). Finally, Houle and Yssaad (2010) found that the source country from which the newcomers had received their education and work experience also played a significant role in credential recognition: immigrants who received their highest education level or were employed in either the United Kingdom or the United States were much more likely to have their credentials acknowledged.

2.3.3 Discriminatory Hiring Practices

Many studies have been conducted in the United States focusing on "black" sounding names and prejudicial hiring practices (Bertrand and Mullainathan, 2004). This is replicated in Canada for visible minorities by Philip Oreopoulos and Diane Dechief (2011) to measure the

prevalence of discriminatory hiring practices by Canadian employers. Oreopoulos and Dechief (2011) conducted a follow-up study to a previous investigation of discriminatory hiring practices by Oreopoulos in 2009. These researchers found sizable differences in an increase in callback rates from just changing an applicant's name. They combined findings from Toronto, Montreal and Vancouver, and found that resumés with English-sounding names are 35 percent more likely to receive callbacks than resumes with Indian or Chinese names (Oreopoulos and Dechief, 2011). According to this new study, the outcomes are "remarkably consistent" with earlier findings from Oreopoulos (2009) for Toronto in better economic circumstances.

Hence, low wages may be a result of lack of credential recognition and discriminatory hiring practices. It is the purpose of the present study, however, to recognize that newcomers employed in non-standard jobs possibly due to such circumstances may be the reason immigrants earn substantially less than their Canadian-born counterparts. Therefore, it is prudent to examine immigrant employment as a variant of the economic deficiencies experienced by newcomers. In this paper, I compare precarious employment among immigrants to that among native-born workers by using measures of involuntary part-time work, temporary job holding and multiple job holding.

2.4 Types of Precarious Work

Those employed in temporary work, involuntary part-time work and multiple job holders face varying but similar challenges. According to a *Globe and Mail* article, temporary work is growing at a faster pace than permanent jobs (Grant, 2013). The article states that there were 2 million temporary workers in Canada in 2012 and this type of precarious employment has grown at triple the rate of permanent positions (Grant, 2013). This is echoed by Tilly (1998) regarding a similar scenario in the United States. Tilly states that the expansion of temporary work is

evident in the twenty-fold increase of employment in temporary agencies since the early 1960s. Tilly reports that Manpower Inc. employs more people yearly than any other private employer in the U.S. Most importantly, argues Tilly, the majority of temporary workers, in contrast to their part-timer counterparts, are involuntary. Hence these workers would prefer permanent work if it was available to them (Tilly 1998).

In an earlier article, Tilly (1991) argues that involuntary part-time workers, who would prefer full-time jobs, account for most of the growth in part-time employment in the U.S. since 1970. Tilly further indicates that the proportional rise of these workers may be a result of employer demand for scheduling flexibility and a work force that commands lower compensation (Tilly 1991). Part-time employment, as in many other countries, makes up a mounting proportion of jobs in the United States. Tilly sides with many sociologists and other researchers who contend that not all part-time work is a result of employers accommodating the wishes of housewives, students, retirees, and others who seek out this type of employment. Again, argues Tilly (1991), since 1969, part-time jobs have increased largely because more employers see them as a way to cut labour costs. Accordingly, those who work part-time as a necessity rather than as a choice account for most of the growth in part-time employment's share of the U.S. work force since 1969.

Multiple job holders are also among many who hold employment out of necessity rather than choice. According to Gilmore, a 1995 survey revealed that almost 65% of Canadian multiple-job holders were engaged in such employment to supplement their income, assist with debt repayment, or save for the future. Kimmel and Powell (1999) refer to multiple job holders as "moonlighters" and concur with Gilmore on the increase in this form of employment in both Canada and the United States. Kimmel and Powell (1999) assert that Canadians engaged in

multiple jobs has increased by 50% over a decade and continues to climb steadily. Gilmore states that in 2008, newcomers were equally likely to be employed in multiple jobs as their Canadian-born counterparts (Gilmore, 2009). These similarities diminish with respect to the number of hours worked by each group. For example, immigrants were working 2.3 hours more per week than their Canadian-born counterparts regardless of when the immigrants landed in Canada (Gilmore, 2009).

Vosko et al. cite the continued presence of recent immigrants and other groups of young men are "experiencing downward pressure on earnings and conditions of work as they increasingly take jobs in occupations where women have traditionally been employed" (2003: 7). Therefore, argue Vosko et al (2003), a sex specific analysis of non-standard (precarious) work is warranted in examining precarious employment outcomes. The present study predicts significant sex differences in all three types of precarious work. In addition, coinciding with Statistics Canada reports (Yssaad 2012), the present study also hypothesizes that recent newcomers will be the most represented in precarious employment.

2.5 Data and Methods

2.5.1 Data and Variables

The present study uses data from the Canadian Labour Force Survey (LFS) master file from 2006 to 2012. The LFS is a monthly household survey carried out by Statistics Canada involving around 56,000 Canadian households. Statistics Canada added five questions to the LFS to identify the Canadian immigrant population. Therefore, prior LFS waves cannot be used to study the types of immigrant labour outcomes being examined in the present study. The five Canadian immigrant questions in the 2006 LFS included: country of birth of the respondent,

whether or not the respondent was a "landed immigrant", the month and year the respondent became a landed immigrant, and the country where the respondent received his or her highest level of education (Statistics Canada, 2013).

The analysis is restricted to the month of March for each survey year. The month of March is significant as this is the time of year when very few workers are on holidays or in the process of changing jobs. The present study's sample is restricted to respondents who are 20 to 59 years of age and either Canadian-born or landed immigrants. In order to further examine labour market differences between newcomers and their Canadian-born counterparts, I further divide immigrants into recent immigrants (immigrants who have resided in Canada for five years or less) and established immigrants (immigrants who have lived in Canada for more than five years). Although many studies show that the wage gaps between immigrants and their Canadian-born counterparts are reduced over time, immigrants earn significantly less upon arrival (Gilmour, 2008).

The three outcome variables in the present study (involuntary part-time work, multiple job holder, and temporary job holder) are measured dichotomously. Involuntary part-time work is defined as those seeking full-time employment but forced to work part-time. Involuntary part-time work is measured only among respondents who are employed in part-time jobs. The second outcome variable, multiple job holders, includes respondents who are employed in more than one job. The final outcome variable recognizes those respondents who are employed in temporary jobs and includes seasonal, temporary, term or contract employment, including work done via a temporary help agency, a casual job, and other temporary work. All three variables are coded as dummy (indicator) variables. If a respondent held these types of employment the variables equal one, if not they equal zero.

The explanatory variables in the present study include immigrant status (as the focal variable), survey year, sex, age, education, number of children, and marital status. Immigrant status, as mentioned above, is measured by two dummy variables, one equalling 1 if an immigrant has been in Canada five years or less, the other equalling one if an immigrant has been in the country for more than five years. Canadian-born is the reference category. Education is divided into six categories: less than high school (used as reference category), high school graduate, some post-secondary education, trades, bachelor's degree, and graduate degree. Marital status is coded as: married (married and common-law), single and other (single, widowed or divorced) with other as the reference category. Additionally, the number of children is coded as: no children (reference), 1-2 children, and 3 or more children. Survey year is a continuous variable included to capture any linear increase over time in the likelihood of respondents working in precarious jobs.

2.5.2 Methods

The present study examines how several factors add to the change in immigrant and Canadian-born participation in the types of precarious work by grouping the data for both immigrant and Canadian-born respondents in the survey periods. Subsequently, a baseline logistic regression model is constructed separately for each outcome variable using dummy variables for both established immigrants and recent newcomers. Then additional models are constructed using explanatory variables and interaction terms again separately for each outcome. All models in the present study are run separately for males and females. Data from the pooled survey years from the LFS for the month of March are used to estimate the following models:

(Base Model: Model 1) $\text{logit}\,(Y) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$

Y=the log odds of a respondent employed in (Involuntary part-time work, multiple jobs, temporary work) precarious employment[2]

X_1= recent immigrants (immigrants residing in Canada for five years or less)

X_2= established immigrants (immigrants residing in Canada for more than five years)

X_3 = survey year

This model shows the odds of precarious employment among recent immigrants and established immigrants with respect to the Canadian-born.

(Model 2) $\text{logit}(Y) = \alpha + \beta_1X_1 + \beta_2X_2 + + \beta_3X_3 + \Sigma\beta_kX_k$

Model 2 represents model 1 plus all additional explanatory variables.

(Model 3) $\text{logit}(Y) = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + + \Sigma\beta_kX_k + \beta_kX_1*X_3 + \beta_kX_1*X_3$

Interaction terms are added to Model 2 to determine if a possible linear trend in precarious employment differs among recent immigrants, established immigrants, and the Canadian born.

The weighting of the data in the Labour Force Survey proved to be challenging as Statistics Canada did not provide either bootstrap weights or sufficient information regarding weighting the survey data in general. As argued by Wanner (2013), the present study does not use the regression composite method only available through Statistics Canada. Therefore, as the present study does not use monthly data points but rather one month (March) per each year of the survey the regression composite method is not necessary (Wanner 2013).

In order to identify primary sampling units, strata, clusters, and sample weights, the present study uses information provided in the Labour Force Survey Guide (Statistics Canada 2012) and Methodology documents (Statistics Canada 2008). One assumption made here is that

[2] The results will be reported as odds ratios.

the primary sampling unit (PSU) is a cluster (Wanner 2013). The clusters are sampled before sampling households and then are aggregated into strata (Wanner 2013). The analysis in the present study uses the survey system in Stata to adjust for weighting and sample design. As such, the design is represented in the svyset command (StataCorp 2013). This command identifies the data as complex survey data. Hence, this includes variables representing the PSU, sample weight, and details of the design (Wanner 2013).

In addition, probability weights are used to account for the fact that, even though a random sampling method was used, cases may have unequal probabilities of being selected (Wanner 2013). According to Wanner (2013) these weights normally equal the inverse of the probability of selection. It should be noted that the basic sample weight variable in the LFS is *subwt*. These weights are calculated to provide sample estimates that more closely correspond to census population values for certain variables. Furthermore, they adjust for nonresponse and coverage error. The final weight (*finalwt*) is further adjusted using the calibration method. Calibration is unwarranted in the present study as it uses surveys six months of more apart. Therefore, the present study will use *subwt*[3]. Nevertheless, just using *subwt* as a p-weight will produce frequency counts that approximate population totals. Thus, for purposes of statistical inference, these weights must be normalized so that their mean equals 1 (Wanner 2013). Hence, the frequency counts will take on sample rather than population values. This is accomplished by dividing the weights by their mean.

[3] According to Wanner (2013) In the March 2007 LFS the correlation between *subwt* and *finalwt* is approximately 0.97 and regression coefficients estimated using the two weights are equal to the fifth decimal point. Therefore, they are virtually interchangeable.

2.6 Results

As illustrated in Figure 2.1, a cross tabulation of involuntary part-time work with year of survey and immigrant status shows that those (both males and females) who arrived within the last five years or less are over represented in terms of involuntary part-time employment, followed by immigrants who have lived in Canada more than five years with their Canadian-born counterparts being the least likely to be employed in this type of precarious work. The figure shows recently arrived males, between 2008 and 2010, having a much higher increase in involuntary part-time work compared to their female counterparts.

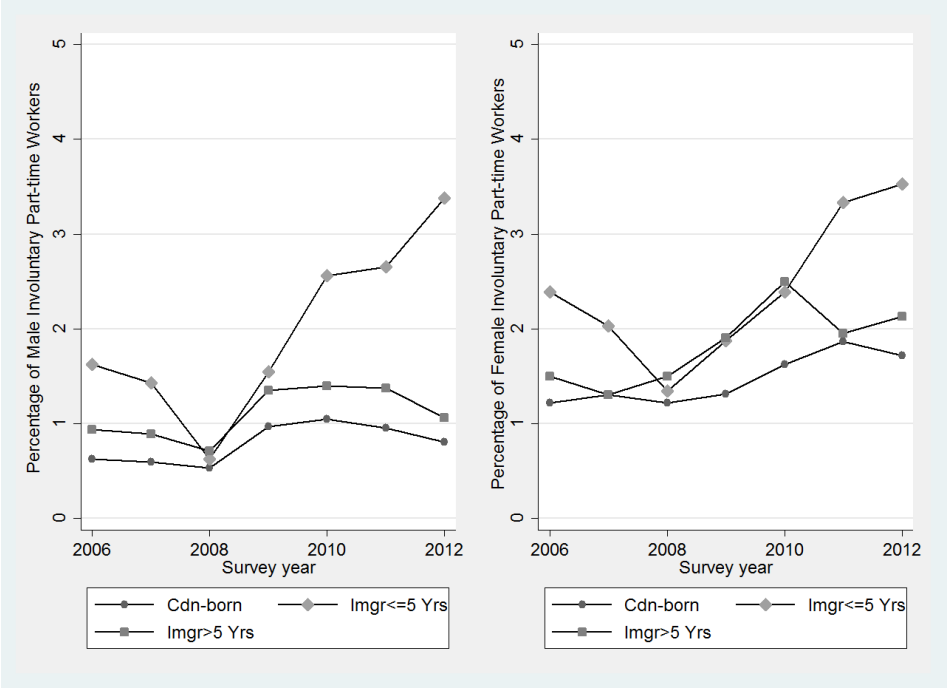


Figure 2.1 Involuntary Part-time Work by Year and Immigrant Status, Males and Females, 2006-2012, Canada

Moreover, the likelihood of recent immigrants employed in involuntary part-time work is increasing over time. This effect appears to be increasing across the survey years especially among recent immigrants. Hence, an investigation is needed to further examine this time trend.

Results from a cross-tabulation of multiple job holders by survey year and immigrant status illustrates an interesting and unexpected pattern. As indicated by Figure 2.2, male respondents who arrived within the last five years or less are more likely to be multiple job holders by a slight margin except for a sizeable increase between 2009 and 2011. The pattern for female newcomers is greatly different in terms of being employed in more than one job. Figure 2.2 illustrates a steep increase in recent immigrant females holding multiple jobs. Males, in contrast, show a steep increase only after 2011.

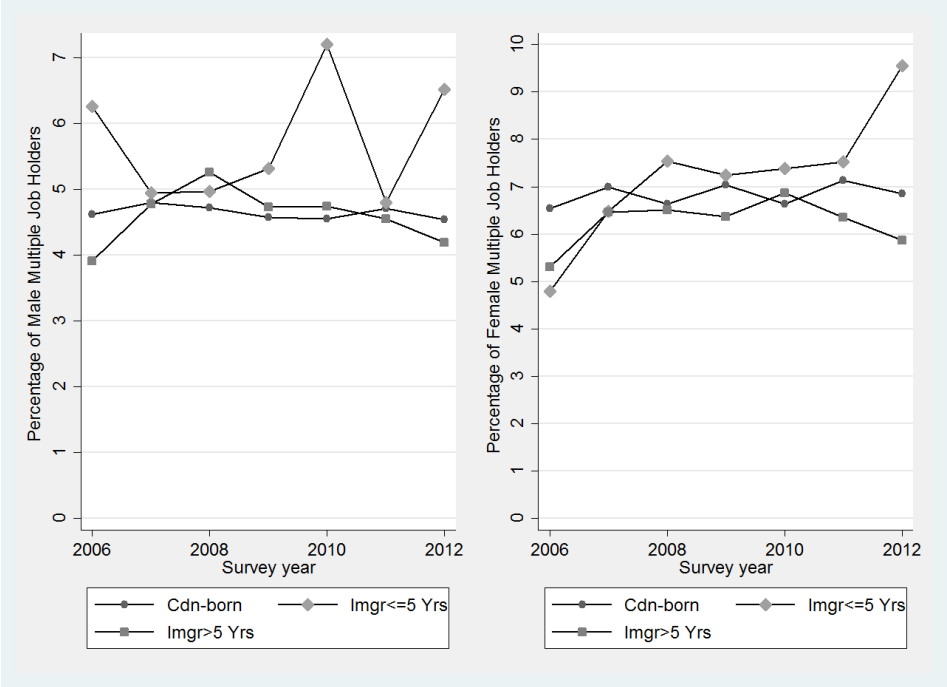


Figure 2.2 Multiple Job Holders by Year and Immigrant Status, Males and Females, 2006-2012, Canada

The final graph, Figure 2.3, depicts results from a cross-tabulation of temporary job holders by survey year and immigrant status. Figure 2.3, hence, shows male and female respondents who arrived within the last five years or less are considerably over represented in temporary

employment, particularly females. In addition, there is very little difference between the established immigrants and the Canadian born.

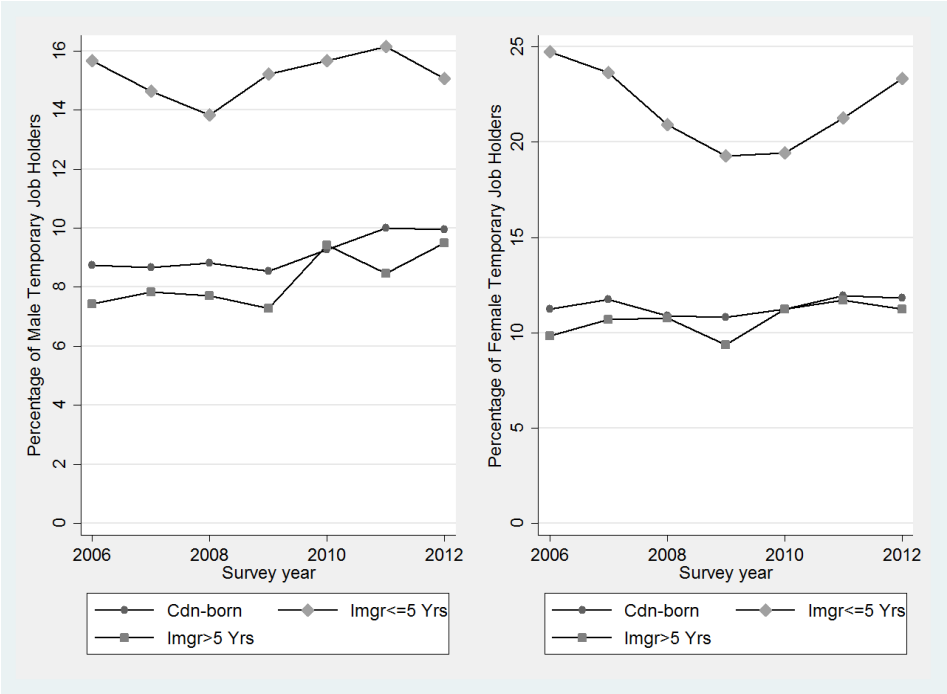


Figure 2.3 Temporary Job Holder by Year and Immigrant Status, Males and Females, 2006-2012, Canada

It is important to note that all three graphs indicate an effect for 2008-2009 representing the downturn in employment due to a recession in Canada. According to Cross (2010), the economy declined in 2008 and 2009 and labour productivity fell slightly (Cross 2010).

Table 2.1 Logistic Regression Models Predicting Involuntary Part-time Work, Canadian Part-time Employees 2006-2012, Males and Females (Base Model)

	Male	Female
Recent Immigrant	2.332***	2.078***
	(-5.41)	(-5.98)
Established Immigrant	1.407***	1.648***
	(-4.11)	(-8.35)
Survey Year	1.088***	1.099***
	(-5.35)	(-7.88)
Number of Cases	11999	11987
F-adjusted test statistic	F(8,10930) = 55.541 ***	F(9,10917) = 7.547 ***

Exponentiated coefficients; standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

According to Table 2.1, recent male and female immigrants (immigrants who have resided in Canada for five years or less) are more likely to be employed in involuntary part-time work than their Canadian-born counterparts. For immigrant males the odds are more than twice as likely and for immigrant females the effect is slightly less at approximately 2.1 times.

Table 2.2. Logistic Regression Models Predicting Involuntary Part-time Work, Canadian Part-time Employees2006-2012, Males and Females (with Explanatory Variables and Interactions)

	Male	Female	Male	Female
Recent Immigrant	2.094***	1.903***	1.644	2.126*
	(-4.69)	(-5.1)	(-1.19)	(-2.26)
Estab Immigrant	1.326***	1.690***	1.676**	2.084***
	(-3.37)	(-8.56)	(-2.67)	(-5.07)
Survey Year	1.088***	1.097***	1.098***	1.110***
	(-5.31)	(-7.75)	(-5.26)	(-7.98)
20-29	1.145	1.808***	1.15	1.813***
	(-1.17)	(-6.38)	(-1.21)	(-6.41)
30-39	1.589***	1.964***	1.595***	1.966***
	(-4.23)	(-7.82)	(-4.27)	(-7.83)
40-49	1.594***	1.953***	1.604***	1.960***
	(-4.44)	(-9.06)	(-4.5)	(-9.1)
Married/Com-law	0.771	0.547***	0.775	0.547***
	(-1.96)	(-8.18)	(-1.92)	(-8.18)

single	0.689*	0.627***	0.688*	0.627***
	(-2.55)	(-4.79)	(-2.55)	(-4.79)
1-2 Children	1.117	0.685***	1.114	0.686***
	(-1.16)	(-5.97)	(-1.13)	(-5.95)
≥3 Children	1.378	0.491***	1.375	0.490***
	(-1.85)	(-6.62)	(-1.83)	(-6.64)
HS Graduate	0.807	0.820*	0.808	0.821*
	(-1.94)	(-2.17)	(-1.93)	(-2.17)
Trades Training	0.973	1.021	0.974	1.02
	(-0.23)	(-0.2)	(-0.22)	(-0.19)
Some PSE	0.550***	0.746***	0.550***	0.746***
	(-5.59)	(-3.43)	(-5.60)	(-3.43)
Bachelor's Degree	0.710**	0.966	0.708**	0.966
	(-2.70)	(-0.38)	(-2.72)	(-0.38)
Graduate Degree	0.607**	0.987	0.610**	0.987
	(-3.11)	(-0.11)	(-3.09)	(-0.11)
cyearxnewImmgr			1.056	0.975
			(-0.64)	(-0.37)
cyearxImmgr			0.946	0.953
			(-1.34)	(-1.58)
Number of Cases	11999	11987	11999	11987
F-adjusted test statistic	F(9,10929) = 79.990	F(9,10917) = 4.922	F(9,10929) = 75.962	F(9,10917) = 5.339

Exponentiated coefficients; standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001
♠Coefficients between males and females are significantly different at p<0.05

This significant outcome for recent immigrant males and females shown in Table 2.1 decreases only slightly once the control variables are added to the model (Table 2.2). Additionally, male immigrants residing in Canada for more than five years also show a significant although a smaller likelihood of being employed in involuntary part-time jobs in comparison to those respondents born in Canada. Conversely, immigrant females who have resided in Canada for more than five years are more likely to be employed in involuntary part-time work than immigrant males in the same cohort.

There are several outcomes worth noting in Table 2.2. For instance, both sexes are slightly more than one and a half times more likely to be employed in involuntary part-time work with the exception of married women. Married women are more than half as likely to be working part-time when they would rather have full time employment. This appears to be also true for single men and women and women with one or two children. The effect is more pronounced among women with three or more children. The interaction terms between survey year and immigrant status do not yield significant results for either sex.

Table 2.3. Logistic Regression Models Predicting Multiple Job Holders, Canadian Employees 2006-2012, Males and Females (Base Model)

	Male	Female
Recent Immigrant	0.88	0.751
	(-0.54)	(-1.96)
Established Immigrant	0.758**	0.703***
	(-2.71)	(-5.66)
Survey Year	0.948**	1.01
	(-3.13)	(-1.01)
Number of Cases	11999	11987
F-adjusted test statistic	F(9,10929) = 4.283***	F(8,10918) = 1.796***

Exponentiated coefficients; standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

According to Table 2.3, established Canadian immigrants are less likely to be holding multiple jobs than the Canadian born (about 0.80 times less likely for men and approximately 0.70 for women) but not as large as those employed in involuntary part-time work.

As shown in Table 2.4, both sexes of recent and established immigrants are about half as likely to be employed in multiple jobs. Furthermore, married and single women show significant results in terms of holding more than one job. For example, married and single women are more than half as likely to be working in multiple jobs compared to their widowed, divorced and

separated counterparts. This is also true for women with one-two children. The men, on the other hand, are more than one and a half times as likely to be employed in multiple jobs in comparison to men without any children. Interestingly, as education levels increase so does the likelihood of being employed in multiple jobs.

There is a slight increase for males with 3 or more children and a sizable increase for education. These results indicate that both males and females with a trades diploma are almost twice as likely to be employed in multiple jobs as respondents with a less high school education. This trend is also reflected in both sexes with community college credentials as well as those with a bachelor's degree and those with graduate degrees. As Table 2.4 shows, females with graduate degrees are more than three times as likely to be employed in multiple jobs as those with less than high school education. This outcome is even more pronounced for males with graduate degrees as they are more than four times as likely to have more than one job compared to the respondents with less than high school.

Table 2.4 Logistic Regression Models Predicting Multiple Job Holders, Canadian Employees 2006-2012, Males and Females (with Explanatory Variables and Interactions)

	Male	Female	Male	Female
Recent Immgr	0.597*	0.653**	1.403	0.558
	(-2.07)	(-2.85)	-0.69	(-1.52)
Estab Immigrant	0.624***	0.667***	0.8	0.645**
	(-4.46)	(-6.40)	(-1.04)	(-3.08)
Survey Year	0.948**	1.004	0.964*	1.002
	(-3.12)	-0.4	(-2.00)	-0.19
20-29	1.071	1.159*	1.071	1.159*
	-0.59	-2.2	-0.59	-2.19
30-39	1.389**	1.296***	1.392**	1.296***
	-2.77	-3.68	-2.78	-3.68
40-49	1.458**	1.445***	1.457**	1.444***
	-3.23	-6.01	-3.22	-6.01

Married/Com-law	1.113	0.655***	1.115	0.655***
	-0.66	(-6.45)	-0.67	(-6.45)
single	0.864	0.721***	0.866	0.721***
	(-0.84)	(-3.97)	(-0.83)	(-3.96)
1-2 Children	0.983	0.792***	0.985	0.792***
	(-0.16)	(-4.36)	(-0.14)	(-4.37)
≥3 Children	1.579**	0.756***	1.567**	0.756***
	-2.66	(-3.36)	-2.63	(-3.36)
H S Graduate	1.920***	1.417***	1.912***	1.417***
	-4.18	-3.78	-4.16	-3.78
Trades Training	2.009***	1.829***	2.006***	1.829***
	-4.08	-5.97	-4.07	-5.96
Some PSE	2.233***	2.038***	2.225***	2.038***
	-5.6	-8.31	-5.57	-8.31
Bachelor's Deg	3.344***	2.725***	3.352***	2.725***
	-7.75	-10.85	-7.76	-10.84
Graduate Degree	4.174***	3.189***	4.164***	3.189***
	-8.04	-10.75	-8.01	-10.75
cyearxnewImmgr			0.794*	1.037
			(-2.22)	-0.46
cyearxImmgr			0.938	1.008
			(-1.33)	-0.26
Number of Cases	11999	11987	11999	11987
F-adjusted test statistic	F(9,10929) = 22.625***	F(9,10917) = 3.070***	F(9,10929) = 22.849***	F(9,10917) = 3.128***

* p<0.05, ** p<0.01, *** p<0.001, Exponentiated coefficients; standard errors in parentheses
♠Coefficients between males and females are significantly different at p<0.01

According to Table 2.5, only recently immigrating females are more than one and a half times more likely to be employed in temporary jobs than their Canadian-born counterparts.

Table 2.5. Logistic Regression Models Predicting Temporary Job Holders, Canadian Employees 2006-2012, Males and Females (Base Model)

	Male	Female
Recent Immigrant	1.082	1.691***
	(-0.54)	(-5.07)
Established Immigrant	0.977	1
	(-0.30)	(-0.01)
Survey Year	1.002	1.023**
	(-0.17)	(-2.71)
Number of Cases	11888	11752
F-adjusted test statistic	F(8,10822) = 65.042***	F(8,10683) = 8.848***

Exponentiated coefficients; standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

The significant effect of recent female immigrants employed in temporary positions is reduced only slightly when controls are added to the model. Similar odds are reflected for the 20-29 year old respondents for both sexes. With respect to education, males with a university certificate are more than one and a half times as likely to be employed in temporary jobs and females are slightly less than one and a half times as likely. The trend continues with males and females with a bachelor's degree and is most pronounced in those with graduate degrees. For instance, males with graduate degrees are more than two and a half times as likely to be employed in temporary jobs and females with similar credentials are also more than twice as likely. Finally, Table 2.6 illustrates a similar trend to Table 2.4 in terms of education and temporary employment.

Table 2.6 Logistic Regression Models Predicting Temporary Job Holders, Canadian Employees 2006-2012, Males and Females (with Explanatory Variables and Interactions)

	Male	Female	Male	Female
Recent Immigrant	0.989	1.596***	0.651	1.954*
	(-0.07)	(-4.26)	(-1.14)	(-2.48)
Established Immgr	0.936	1.043	1.014	1.117
	(-0.82)	(-0.8)	(-0.08)	(-0.93)
Survey Year	1.003	1.015	1.003	1.019*
	(-0.21)	(-1.7)	(-0.17)	(-2.04)

20-29	1.284**	1.561***	1.288**	1.564***
	(-2.67)	(-7.97)	(-2.7)	(-8)
30-39	0.929	1.069	0.931	1.07
	(-0.70)	(-1.08)	(-0.68)	(-1.1)
40-49	0.955	1.019	0.962	1.021
	(-0.44)	(-0.34)	(-0.38)	(-0.37)
Married/Com-law	0.875	0.876*	0.878	0.876*
	(-0.92)	(-2.00)	(-0.91)	(-2.00)
Single/Nvr Mar	0.994	1.270**	0.995	1.268**
	(-0.04)	(-3.14)	(-0.04)	(-3.13)
One to Two Kids	1.079	0.885**	1.074	0.886**
	(-0.8)	(-2.69)	(-0.75)	(-2.68)
≥ 3 Kids	0.94	1.009	0.94	1.009
	(-0.34)	(-0.12)	(-0.35)	(-0.12)
High School Grad	0.895	1.082	0.896	1.082
	(-1.09)	(-1.04)	(-1.08)	(-1.04)
Trades Training	1.132	1.205*	1.131	1.206*
	(-1)	(-2.09)	(-1)	(-2.09)
Some PSE	1.054	1.309***	1.053	1.308***
	(-0.56)	(-3.78)	(-0.55)	(-3.76)
Bachelor's Degree	1.623***	1.980***	1.618***	1.980***
	(-4.25)	(-8.84)	(-4.23)	(-8.83)
Graduate Degree	2.512***	2.297***	2.520***	2.297***
	(-6.58)	(-8.8)	(-6.6)	(-8.8)
cyearXnewImmgr			1.104	0.954
			(-1.25)	(-0.84)
cyearXImmgr			0.98	0.984
			(-0.49)	(-0.63)
Number of Cases	11888	11752	11888	11752
F-adjusted test statistic	F(9,10821) = 51.561***	F(9,10682) = 5.369***	F(9,10821) = 51.059***	F(9,10682) = 6.613***

* p<0.05, ** p<0.01, *** p<0.001

♠Coefficients between males and females are significantly different at p<0.05

2.7 Conclusions and Discussion

The present study examines the involvement in precarious employment of recent Canadian immigrants compared to their Canadian-born counterparts within Canadian labour markets. This is a timely analysis as one of the most notable shifts in Canadian immigration over the past few

decades has been an influx of well-educated newcomers to this country. Moreover, from the early seventies onward, the Government of Canada has aimed its immigration policies to reflect labour market conditions, particularly occupational demand, as well as "characteristics that are deemed important for long term success of immigrants" (Aydemir, 2002). Therefore, it is important to recognize labour market participation among Canadian immigrants as an integral part of immigrant employment outcomes. Even though those entering under the point system possess predominantly university credentials, the present study demonstrates increasing precarious employment trends over time among Canadian immigrants. However, the economic stream now includes those who may not previously have had a chance to enter Canada, such as trades people. These individuals are those recruited through the Provincial Nominee Program (PNP). The PNP was created between the provincial and federal governments to address labour shortages and shifted the type of immigrant entering Canada. This program allows participating provinces to recruit and nominate potential immigrants who are likely to meet provincial labour requirements (Pandey and Townsend 2011). Persons who immigrate to Canada under the Provincial Nominee Program have the skills, education and work experience needed to make an immediate economic contribution to the province or territory that nominates them. They are ready to establish themselves successfully as permanent residents in Canada (CIC, 2012).

The results of the present study indicate that the odds of recent immigrants being employed in involuntary part-time work are much higher than their established immigrants and Canadian-born counterparts for both sexes. For example, recent immigrant males' odds are more than twice as high and for recent immigrant females the effect is slightly less than double relative to the Canadian-born. This significant outcome decreases only slightly once the control variables are added to the model and actually increases with the addition of interaction terms.

Accordingly, recent immigrant males are more than three times as likely to be employed in involuntary part-time work in comparison to their Canadian-born counterparts. Recent immigrant females are almost two and a half times as likely to be employed in similar jobs. Furthermore, this trend of over-representation of recent immigrants is increasing over time. This is a compelling finding and provides evidence of why newcomers' wages may be lower as argued by Aydermir and Skuterud (2005). In fact, Aydemir (2003) contends that not only is there an earnings deficit among Canadian immigrants but also a decline in these individuals' labour market participation rates. Hence, the results of the present study support the contention that it is type of employment such as involuntary part-time work that leads to lower immigrant wages.

This trend of immigrants employed in precarious work continues as the analysis is expanded to respondents employed in multiple jobs. The effect is more pronounced in the outcomes of established Canadian immigrants. The most interesting, and subsequently policy-related, result of being employed in multiple jobs is associated with education. Results of the present study indicate that as education levels increase so does the likelihood of being employed in multiple jobs. Those with graduate degrees are more than three times as likely to be employed in multiple jobs as those with less than high school education. Again, type of employment among Canadian immigrants is clearly a precursor to lower immigrant wages. For instance, Bannerjee's study using the Survey of Labour and Income Dynamics, reveals the economic disadvantage faced by Canadian immigrants not only upon entry into that country but also their inability to ever catch up to the earnings of their Canadian-born counterparts. As such, many newcomers are compelled to take multiple jobs in order to meet their economic needs.

Another area identified by current labour market research involving Canadian immigrants is the lack of credential recognition faced by many newcomers to this country. Although the majority of the immigrants arriving in Canada hold high levels of education and extensive work experience they still struggle within the Canadian job markets. As cited earlier, Houle and Yssaad (2010) found that Canadian employers are refusing to acknowledge immigrant credentials. This failure to recognize immigrant education and work experience, leads to underemployment of Canadian newcomers and subsequently they are unable to benefit from the categories they were selected for (Houle and Yssaad, 2010). As a result, many Canadian immigrants are employed in temporary jobs. In the present study, however, the effect of immigrant status on temporary employment is not as pronounced as on the other two types of precarious employment. The effect was substantial in females as they were almost 1.4 times as likely to be employed in temporary jobs compared to their Canadian-born counterpart. Similar significant odds ratios greater than one were found for the 20-29 year old respondents for both sexes. With respect to education, males with a university certificate are more than one and a half times as likely to be employed in temporary jobs and females are slightly less than one and a half times as likely. The trend continues with males and females with a bachelor's degree and is most pronounced in those with graduate degrees. For instance, males with graduate degrees are almost three times as likely to be employed in temporary jobs and females with similar credentials are twice as likely.

There are several important policy implications arising from the present study. For example, immigration policies in terms of immigrant selection may need to consider credentials in addition to education. The current policy of admitting highly educated immigrants to Canada for the purpose of economic integration is falling short especially for recent immigrants. This

appears to be the case even with the introduction of the PNP in 1998. Furthermore, introducing job matching programs to coincide with education and work experience credentials may help offset newcomer struggles experienced in Canadian labour markets.

It is important to note that the present study does not examine the effects of specific labour markets, nor does it examine the implications of being employed in precarious work for wages. These will be addressed in the subsequent papers of this research program. The paper addressing specific labour markets will use multi-level models to study precarious employment among Canadian immigrants and their Canadian-born counterparts. Hence, the subsequent study measures employment effects at both the individual level as well as the Census Metropolitan Area (CMA) level. Finally, the last installment in this research program examines immigrant and Canadian-born wage outcomes using OLS (ordinary least squares) regression analysis.

My findings that recent Canadian immigrants are struggling within Canadian labour markets are based on the Canadian Labour Force Survey over seven years. While the LFS data allowed me to study labour market trends over time, I believe my conclusions would have been strengthened with access to a larger time span. In addition, using a measure of entry class, which is not provided in the dataset, would also have reinforced my findings. Hence, adding such variables to the LFS may allow for further exploration of immigration and precarious employment within Canadian labour markets.

Chapter Three: **The Effect of Labour Market Characteristics on Canadian Immigrant Employment in Precarious Work, 2006-2012**

3.1 Abstract

Using data from the Canadian Labour Force Survey for 2006 through 2012, I examine the effects of characteristics of Census Metropolitan Areas (CMAs) on the likelihood of recent and established immigrants and the Canadian born to be employed in precarious work. Using multi-level models, I find that employment in temporary jobs and multiple jobs by both recent and established immigrant males is affected by a CMA's median hourly earnings as well as the immigrant representation in a CMA. Also, cross-level interactions reveal recent male immigrants to be less likely to be employed in multiple jobs in CMA in which the median wage is higher.

Keywords: Immigrants, census metropolitan areas, precarious work, Canada, sex

3.2 Introduction

The labour force participation rate of a country reflects not only that nation's economic opportunities but also its ability to successfully integrate immigrants (both established and recent). Gainful employment, therefore, is a key component of economic integration into the host country. Unfortunately, individuals employed in precarious jobs often fall short of becoming economically viable. In this paper, I will highlight the shortcomings experienced by Canadian newcomers engaged in three types of precarious employment: involuntary part-time work, temporary job holders and multiple job holders and how they are affected by local labour market conditions.

Local labour markets determine varying immigrant experiences depending on the type of industry that is predominant within that Census Metropolitan Area (CMA) or province. For example, Alberta is known for its oil and gas industry, forestry, and agriculture, while eastern Canadian provinces incorporate the majority of manufacturing industries. In fact, according to Citizenship and Immigration Canada (CIC, 2011), Ontario and Quebec together produce more than three-quarters of all Canadian manufactured goods. Unfortunately, underutilization of highly educated and highly skilled immigrant men and women is preventing Canada from replacing its "near retirement" workers whose numbers are growing at a rapid pace (Lochhead and Mackenzie, 2005). In fact, 90 percent of business leaders describe Canada's impending labour shortage problem as either moderate or serious (Lochhead and Mackenzie, 2005).

In order to further address looming labour shortages in Canada, it is also imperative to highlight the existence of sex differences within precarious work. According to Fuller and Vosko (2007) existing research suggests that temporary employment is organized in highly

gendered and racialized ways in industrialized countries. Furthermore, Vosko, Zukewich, and Cranford (2003) contend that a majority of workers in the part-time forms of paid work are women. In fact, in 2002, women made up the majority of casual temporary employees, most of whom work part time, while men dominated seasonal forms of temporary paid work, most of which is full-time (Vosko et al. 2003). In addition, Vosko et al. (2003) identify "casualization" as a term to define the use of casual workers to replace permanent full-time labour. Vosko et al. further suggest that the casualization of the workforce results partly in young men, especially those who are immigrants or visible minorities, "experience[ing] downward pressure on earnings and conditions of work as they increasingly take jobs in occupations where women have traditionally been employed" (Vosko et al, 2003). Hence, it is vital to conduct a gender-based analysis of precarious work.

To facilitate an understanding of precarious jobs within the Canadian context, I utilize the theoretical approaches of labour market segmentation theory. A major variant of labour market segmentation theory, called dual labour market theory, divides labour markets into two largely non-overlapping sectors identified as primary and secondary sectors. A primary market consists of jobs that offer "high wages, good working conditions, employment stability and job security, and chances for advancement" (Snyder, Hayward, Hudis, 1978, p.709). The secondary sector, according to Piore, has jobs with low wages, poor working conditions, considerable variability in employment, "harsh and often arbitrary discipline", and not much opportunity for advancement (Piore, 1970, p.55). I focus on the secondary sector, identified by Piore as the arena where precarious employment flourishes. For example, involuntary part-time work provides many employees with low wages and little job security. Whereas multiple job holders earn more due to holding down more than one job but often have little job security or few company benefits,

including medical, dental and pension plans. The last outcome variable I examine, temporary job holding, is also found in similar working environments. Piore also suggests that complex factors generate the dual market structure and determine access to primary vs. secondary sector employment. Important to the present study is what Piore refers to as behavioural traits such as race, demeanour, accent, and educational credentials. He refers to these traits as being statistically correlated with job performance but not causally related to it. Therefore, argues Piore, many qualified individuals are rejected because they possess these irrelevant traits (Piore, 1970). Since these traits are not causally correlated with job performance, asserts Piore, many qualified applicants are therefore rejected because they possess the wrong "traits". As such, primary sector jobs require employment stability, and some workers are therefore excluded because of unstable behaviour. There is a "fit" between job and worker characteristics in both segments. However, many persons qualified for primary employment are confined to secondary jobs because of attributes (especially immigrants) that employers associate with unstable work (Snyder, Hayward, Hudis, 1978, p.709). Although I acknowledge that not all newcomers possess all of the traits Piore refers to, it is vital to recognize that the majority of immigrants arriving in Canada since the late 1960s have been from non-European countries and therefore may be rejected due to "irrelevant traits".

Beyond these studies, Hodson and Kaufman (1982) argue that the dual economy perspective stresses the distinction between core and periphery industries. Again, a sizeable number of better jobs are found in the core which includes large corporations and government (Lowe and Lehmann, 2009). For example, large corporations provide high-quality careers for their workers, and subsequently subcontract services to smaller firms where both wages and working conditions are poor (Lowe and Lehmann, 2009). Additionally, movement to a better or

primary labour market segment from a worse or *secondary* segment is often difficult (Lowe and Lehmann, 2009). This is especially apparent as many positions are subcontracted by the primary labour market and create nonstandard positions.

As Kalleberg (2009) argues, nonstandard employment is a shift away from standard work arrangements making labour markets and organizations more flexible. Although this flexibility has positively affected many families, it also has created exclusion of many workers who otherwise may have enjoyed "social protections previously available to them through the standard employment relationship" (Kalleberg, 2009:562). Kalleberg **(**2009) further argues that the use of nonstandard work has important implications for labour markets, including employment security, quality of jobs, and training and mobility opportunities (Kalleberg, 2009, p.563). All three traits are important for immigrants as they settle into their host country. Employment insecurity is detrimental to an immigrant's successful integration into the Canadian economy. This is especially true of immigrants with families who uprooted established lives in their home countries to position themselves as viable citizens of Canada. Furthermore, immigrants require quality jobs, which, along with training and mobility opportunities, will provide the necessary environment for successful integration.

The core-periphery view also recognizes the existence of a binary employment structure within employing organizations (Zeytinoglu and Cooke 2005). Hence primary labour market working conditions benefit regular full-time workers as the 'core' group. Conversely, part-time workers along with other non-standard workers exist in the 'periphery' of the organization working under secondary labour market conditions. As indicated by existing research, in order to lower labour costs and achieve flexibility, employers seek to hire non-standard workers (Kalleberg et al., 1997; Tilly, 1991; Zeytinoglu, 1991, 1992). Furthermore, several studies

suggest that immigrants arriving during a recession take longer to find a job and earn lower wages throughout their careers compared to their Canadian-born counterparts (Picot, 2008; LaRochelle-Côté and Gilmore, 2009).

Therefore, I will examine the effects on precarious work of characteristics of labour markets, operationalized as Census Metropolitan Areas, using percent immigrants in their population, percent unemployment, percent employed in managerial and professional occupations, and lastly, median annual wages of all workers to provide a more comprehensive representation of the immigrant labour market experience. As argued by Harvey (1990), the system of production and consumption of the post-war boom was much too rigid and led to what Harvey refers to as "flexible accumulation". This flexibility includes, among other factors, labour processes and labour markets (Harvey, 1990). The post-war boom ended in 1973, benefiting employers with decreased union power, flexible work schedules and temporary labour contracts. As such, many first world labour markets experienced a shrinking core and a simultaneous increase in periphery jobs. The majority of low paying and short-term jobs are concentrated in the periphery and are usually the first to be lost during economic downturns. Therefore, a higher unemployment rate would lead to even fewer positions which in turn would lead to individuals engaging in precarious employment. This is also true of the percentage of immigrants residing in a CMA, as well as the percent of managerial and professional occupations. Therefore using the above mentioned labour market characteristics will allow for a better understanding of the immigrant employment experience within Canadian CMAs.

Immigrant labour market participation is also affected by when the newcomer arrives in his or her host country. For instance, newcomers entering Canada during the early 1970s, 1980s

or 1990s would have experienced not only cultural barriers but also economic difficulties compounded by recessions affecting Canadian labour markets during this time period (Picot and Manser, 1997). For example, Canada's economy benefitted from high employment levels until a sudden downturn in the world's economy in late 2008 (LaRochelle and Gilmore, 2009). Hence, the outcome was a widespread loss of jobs for the first time since the last recession of 1990-1992. Consequently, a more robust market is expected to provide immigrants with more lucrative and permanent employment. In either circumstance, how the newcomer fares in the labour market may depend in part on the economic conditions of the host country.

Along with where the newcomers reside and when they arrive in their host country, how viably they are employed also impacts their economic integration. A previous study (Hira-Friesen, 2014), shows that the odds of recent immigrants being employed in involuntary part-time work are much higher than that of their Canadian-born counterparts for both sexes. In fact, recent immigrant males are more than three times as likely to be employed in involuntary part-time work in comparison to their Canadian-born counterparts, and recent immigrant females are almost two and a half times as likely to be employed in similar jobs. Furthermore, this trend of over-representation of recent immigrants is increasing over time. I include labour market characteristics along with individual characteristics to determine the extent to which the place chosen by immigrants to settle influences their risk of being relegated to precarious employment.

3.3 Data and Methods

3.3.1 Data and Variables

I use data from the Canadian Labour Force Survey (LFS) master file from 2006 to 2012. It is worth noting that Statistics Canada did not add questions to the LFS to identify the Canadian

immigrant population until January 2006. Therefore, prior LFS waves cannot be used to study precarious labour market outcomes among immigrants and their Canadian born counterparts. The five Canadian immigrant questions in the 2006 LFS included: country of birth of the respondent, whether or not the respondent was a "landed immigrant" (i.e. permanent resident), the month and year the respondent became a landed immigrant, and the country in which the respondent received his or her highest level of education (Statistics Canada, 2013).

I have chosen to restrict the analysis to the month of March for each survey year (2006-2012). The month of March is significant as this is the time of year when very few workers are on holidays or in the process of changing jobs, making it the most stable month for labour market analysis. The LFS is a monthly household survey involving approximately 56,000 Canadian households. The sample used is restricted to respondents who are 20-59 years of age and either Canadian-born or landed immigrants. In order to further examine labour market differences between newcomers and their Canadian-born counterparts, I further divide immigrants into recent immigrants (immigrants who have resided in Canada for five years or less) and established immigrants (immigrants who have lived in Canada for more than five years).

The three outcome variables in this study (involuntary part-time work, multiple job holder, and temporary job holder) are measured dichotomously. Involuntary part-time work is defined as those seeking full-time employment but forced to work part-time. Involuntary part-time work is measured only among respondents who are employed in part-time jobs. The second outcome variable, multiple job holders, includes respondents who hold more than one job. Some studies also identify these individuals as “moonlighters” (Kimmel and Powell, 1999). The final outcome variable, temporary job holder, is comprised of employment in seasonal, temporary, term or contract employment, including work done via a temporary help agency, a casual job,

and other temporary work. All three variables are coded as dummy (indicator) variables. If a respondent held these types of employment they equal 1, if not they equal 0.

The explanatory variables at level 1 of the multilevel model used here include immigrant status (as the focal variable), survey year, sex, age, education, number of children, country of birth and marital status. Immigrant status, as mentioned above, is measured by two dummy variables, one equalling 1 if an immigrant has been in Canada five years or less, the other equalling one if an immigrant has been in the country for more than five years. Canadian-born is the reference category. Survey year is a continuous variable, assuming that any change over time in the likelihood of a respondent being in precarious employment is linear. Education is divided into six categories: less than high school (used as reference category), high school graduate, some post-secondary education, trades, bachelor's degree, and graduate degree. Marital status is coded as: married (married and common-law), single, never married and other (separated, widowed or divorced) with other as the reference category. Additionally, the number of children is coded as: no children (reference), 1-2 children, and 3 or more children. Finally region of birth is measured by means of a set of dummy variables, including indicators for birth in the US, Central or South America, the Caribbean, Europe, Africa, South Asia, the rest of Asia, and Oceania. The reference category is Canadian birth. Finally, the level-2 variables are characteristics of CMAs and consist of: percent immigrant, percent unemployed, median hourly wages, and percent occupations that are managerial or professional. The CMA-level variables were computed from the 2006 Canadian Census. Additionally, I added interaction terms of the immigrant dummy variables with each CMA characteristic as cross-level interactions which determine whether or not the CMA effects are different for recent and/or established immigrants.

I examine how several factors add to the change in immigrant and Canadian-born employment in the types of precarious work by appending the data from the March LFS in the 2006 through 2012 survey periods into one data file. The data are measured at two levels using level 1 (individual level) and level 2 (CMA level). Two models are estimated for each precarious employment outcome: one including all the background variables, immigrant dummies, and the CMA characteristics, and a second that adds cross-level interactions between the immigrant dummies and CMA characteristics, to test for differences in the effects of CMA among recent immigrants, established immigrants, and the Canadian born. All models are run separately for males and females.

3.3.2 Mixed Effects vs. Fixed Effects Only Models

Ideally, these multilevel models would be estimated by means of a mixed-effects estimator that separates fixed effects (the effects of the measured variables) from random effects (variances of the intercepts and selected slopes):

$$Y_{ij} = \underbrace{[\gamma_{00} + \gamma_{10}X_{ij} + \gamma_{01}W_j + \gamma_{11}W_jX_{ij}]}_{\textit{fixed effects}} + \underbrace{[u_{0j} + u_{1j}\,X_{ij} + r_{ij}]}_{\textit{random effects}}$$

In this model, Y_{ij} is the log odds of being employed in an involuntary part-time position, multiple jobs, or a temporary job, X_{ij} represents the individual-level variables, W_j the CMA level variables, and W_jX_{ij} the cross-level interactions. In all cases, γ represents the effects on the precarious employment dummy variables. In the case of the random effects,

r_{ij} = the traditional individual level error

u_{0j} is the variability of precarious employment between CMAs

u_{1j} is the variability of the relationship of immigrant status to precarious work between CMAs

However, under the mixed effects specification, all models showed very little variance in the slopes of the immigrant status dummy variables across CMAs. As a result, the Chi-square tests comparing the mixed effects models to ordinary logistic regressions (fixed effects only) failed to be significant, suggesting that the best model in each case left out the random effects. What this means in practice is that the fixed effects are very similar between the mixed-effects models and the models containing fixed effects only. Therefore Tables 3.2-3.4 show results for the latter models. One advantage of this is that I was able to use both probability weights and adjustments for sample design, which is not possible with mixed effects models given the current state of software development.

3.4 Results

Table 3.1 illustrates the characteristics of the CMAs I used. These include median hourly wages per CMA, as well as unemployment rates, the percentage of immigrants residing in each census metropolitan area and the percentage of managerial or professional jobs in the labour force of each CMA. These data show considerable variability in all these CMA characteristics, particularly in the immigrant percentage of the population, which varies from 1.2 percent in the Saguenay region of Québec to over 45 percent in the Toronto area.

Table 3.1. Characteristics of Census Metropolitan Areas (CMA) Used in Multilevel Model

CMA	Median Hourly Wage	Unemployment Rate	Percent Immigrants	Percent Managerial or Professional
St. John's	16.8	11.7	18.0	33.8
Halifax	17.1	7.6	7.4	44.4
Saint John	16.1	6.6	4.1	41.1
Saguenay	18.0	11.0	1.2	37.0
Québec	18.2	6.2	3.7	44.7
Sherbrooke	16.9	7.8	5.5	39.1
Trois-Rivières	17.3	9.3	2.2	22.2
Montréal	18.3	8.9	20.4	42.4
Ottawa-Gatineau	22.0	7.3	17.9	48.7
Kingston	18.9	8.3	12.1	42.4
Oshawa	21.7	8.1	16.3	37.3
Toronto	19.9	8.9	45.4	42.7
Hamilton	19.7	7.6	24.0	38.6
StCath-Niag	17.3	9.8	2.9	45.2
Kitchener-Waterloo	19.1	7.3	22.8	37.3
London	18.6	7.8	19.1	38.6
Windsor	20.5	10.3	23.1	32.9
Sudbury	19.2	9.6	6.6	38.9
Thunder Bay	19.1	9.4	10.3	38.3
Winnipeg	16.7	6.4	17.5	41.2
Regina	17.9	6.1	7.6	42.9
Saskatoon	16.8	9.0	7.6	38.7
Calgary	19.6	5.3	23.4	44.0
Edmonton	18.8	5.8	18.3	39.9
Abbotsford	17.4	6.8	23.3	30.6
Vancouver	19.2	7.3	39.3	42.2
Victoria	19.2	5.6	18.8	44.1

Source: Computed from 2006 Census of Canada microdata.

According to Table 3.2, recent immigrant females are almost three times as likely to be employed in involuntary part-time work and recent immigrant males are 2.2 times as likely compared to their Canadian-born counterparts. Established immigrant females are also much more likely than Canadian-born females to be employed in involuntary part-time work, but less

so than the recent immigrants. This table also shows that for every one dollar increase in median hourly earnings for a CMA, the odds of being employed in involuntary part-time work increases by a factor of approximately 1.10 ($p<0.001$) for both males and females. These results are mirrored in the unemployment rate. Specifically, for every 1 percent increase in unemployment rate for a CMA, the odds of being employed in involuntary part-time work increases by a factor of also approximately 1.11 for both sexes. There is little sign of any difference in the effects of the CMA-level variables between immigrants and the Canadian born, as reflected in the cross-level interactions in Model 2 for either men or women. Established immigrant men are less likely than the Canadian born to be in involuntary part-time work, but this effect is only marginally significant.

Table 3.2. Multilevel Logistic Regression Models Predicting Involuntary Part-time Work, Canadian Part-time Employees 2006-2012

	Female		Male	
	Model 1	Model 2	Model 1	Model 2
Age of respondent	0.995	0.995	1.012**	1.012**
	(-1.63)	(-1.64)	(3.07)	(3.12)
Recent Immigrant	2.830***	4.312	2.203*	102.6
	(3.67)	(0.52)	(2.22)	(1.70)
Established Immigrant	2.437***	1.656	1.236	51.71*
	(3.51)	(0.39)	(0.63)	(2.38)
Survey year	1.089***	1.088***	1.085***	1.084***
	(5.40)	(5.34)	(4.19)	(4.11)
One or two children	0.842*	0.843*	1.409**	1.420**
	(-2.18)	(-2.17)	(3.02)	(3.07)
Three or more children	0.640**	0.638**	2.064***	2.070***
	(-2.98)	(-3.00)	(3.29)	(3.35)
High school graduate	0.890	0.887	0.969	0.969
	(-1.36)	(-1.38)	(-0.29)	(-0.29)
Trades certificate	1.271*	1.273*	1.248	1.256
	(2.11)	(2.12)	(1.50)	(1.54)
Some post-secondary	0.411***	0.412***	0.512***	0.511***
	(-7.10)	(-7.07)	(-4.65)	(-4.66)
Bachelor's degree	1.158	1.160	0.899	0.898

	(1.80)	(1.81)	(-0.86)	(-0.86)
Advanced degree	1.143	1.150	0.828	0.809
	(1.12)	(1.17)	(-1.19)	(-1.34)
Married or common-law	0.671***	0.671***	0.937	0.943
	(-4.80)	(-4.79)	(-0.57)	(-0.51)
United States	0.598	0.615	0.663	0.636
	(-1.34)	(-1.24)	(-0.75)	(-0.85)
Central or South America	1.225	1.259	0.901	0.836
	(0.67)	(0.76)	(-0.25)	(-0.43)
Caribbean	0.752	0.759	1.053	1.013
	(-0.85)	(-0.82)	(0.11)	(0.03)
Europe	0.656	0.675	1.075	1.008
	(-1.57)	(-1.45)	(0.20)	(0.02)
Africa	1.069	1.123	1.396	1.233
	(0.22)	(0.38)	(0.90)	(0.57)
South Asia	1.389	1.407	1.301	1.379
	(1.38)	(1.42)	(0.86)	(1.07)
Rest of Asia	0.648	0.656	0.880	0.877
	(-1.77)	(-1.71)	(-0.41)	(-0.43)
Oceania	1.044	1.100	2.733	2.596
	(0.08)	(0.17)	(1.67)	(1.59)
CMA median hourly earnings	1.113***	1.123***	1.081*	1.135***
	(4.57)	(4.30)	(2.55)	(3.68)
CMA unemployment rate	1.119***	1.112***	1.069*	1.073*
	(5.09)	(4.26)	(2.29)	(2.04)
CMA % immigrants	0.997	0.996	1.006	1.010*
	(-1.11)	(-1.17)	(1.60)	(2.39)
CMA % managers or professionals	0.982**	0.980**	0.978*	0.976*
	(-2.58)	(-2.66)	(-2.53)	(-2.44)
Recent X CMA earnings		0.789		0.832
		(-1.45)		(-1.30)
Recent X CMA unemployment		0.802		1.028
		(-1.93)		(0.22)
Recent X CMA immigrants		1.020		0.994
		(1.34)		(-0.41)
Recent X CMA % man-prof		1.131		0.992
		(1.55)		(-0.15)
Established X CMA earnings		0.980		0.821*
		(-0.34)		(-2.41)
Established X CMA unemployment		1.069		1.014
		(1.18)		(0.18)

Established X CMA immigrants		1.001		0.985
		(0.20)		(-1.92)
Established X CMA % man-prof		1.004		1.010
		(0.22)		(0.43)
Number of Cases	22816	22816	8833	8833
Pseudo-R^2	0.0389	0.0398	0.0368	0.0392
Likelihood Ratio Chi^2	521.7	534.2	260.0	276.6

Exponentiated coefficients; t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 3.3 illustrates the outcomes for multiple job holders. For both men and women, as education level increases, so does the likelihood of being employed in multiple jobs. For example, females and males with advanced degrees are 1.3 times as likely to be employed in multiple jobs compared to those who never completed high school. Additionally, Caribbean born women are 1.7 times as likely to be employed in more than one job and males born in the United States are more than twice as likely to be employed in multiple jobs. Finally, Table 3.3 shows that for every 1 percent increase in the unemployment rate for a CMA, the odds of being employed in multiple jobs declines by a factor of 0.90 ($p<0.01$) for women and 0.96 ($p<0.001$) for men. For every one 1 percent increase of managerial and professional positions in a CMA, the odds of being employed in multiple jobs increases by a factor of 1.01 ($p<0.001$) for men and declines by a factor of 0.98 for women, though these are both quite small effects As for the cross-level interactions, recent immigrant men are nearly 28 percent less likely to hold multiple jobs for every one dollar increase in the average wage in their CMA of residence and are 9 percent more likely to hold multiple jobs for every one percent increase in managerial and professional jobs in their CMA. The only CMA effect for women involves a decline in multiple job holding related higher unemployment rate among established immigrants, but this is only marginally significant.

Table 3.3 Multilevel Logistic Regression Models Predicting Multiple Job Holders, Canadian Employees 2006-2012

	Female		Male	
	Model 1	Model 2	Model 1	Model 2
Age of respondent	0.989***	0.989***	0.987***	0.987***
	(-7.09)	(-7.10)	(-7.04)	(-7.01)
Recent Immigrant	0.804	0.897	1.027	5.542
	(-0.98)	(-0.04)	(0.13)	(0.92)
Established Immigrant	0.812	1.318	0.863	1.092
	(-1.08)	(0.37)	(-0.76)	(0.12)
Survey year	1.014	1.014	0.984	0.984
	(1.73)	(1.70)	(-1.71)	(-1.75)
One or two children	0.874***	0.873***	0.997	0.997
	(-3.47)	(-3.48)	(-0.06)	(-0.07)
Three or more children	1.039	1.038	1.101	1.102
	(0.49)	(0.48)	(1.16)	(1.17)
High school graduate	0.698***	0.699***	0.883*	0.884*
	(-7.01)	(-6.97)	(-2.10)	(-2.09)
Trades certificate	0.881	0.881	0.881	0.882
	(-1.86)	(-1.88)	(-1.89)	(-1.87)
Some post-secondary	0.912	0.913	1.057	1.056
	(-1.41)	(-1.40)	(0.78)	(0.76)
Bachelor's degree	1.116*	1.117*	1.282***	1.280***
	(2.43)	(2.46)	(4.41)	(4.38)
Advanced degree	1.359***	1.359***	1.330***	1.329***
	(5.37)	(5.37)	(4.14)	(4.13)
Married or common-law	0.703***	0.703***	0.921	0.922
	(-9.33)	(-9.34)	(-1.70)	(-1.67)
United States	1.542	1.541	2.305***	2.234**
	(1.73)	(1.70)	(3.31)	(3.17)
Central or South America	1.379	1.415	1.021	0.992
	(1.38)	(1.48)	(0.08)	(-0.03)
Caribbean	1.624*	1.708*	1.163	1.143
	(2.11)	(2.30)	(0.56)	(0.49)
Europe	1.152	1.172	1.248	1.216
	(0.70)	(0.77)	(1.08)	(0.95)
Africa	1.041	1.064	0.946	0.902
	(0.17)	(0.26)	(-0.23)	(-0.42)
South Asia	0.829	0.835	1.331	1.344
	(-0.99)	(-0.95)	(1.61)	(1.67)
Rest of Asia	1.197	1.186	1.094	1.075

	(0.92)	(0.87)	(0.49)	(0.39)
Oceania	1.365	1.299	1.613	1.583
	(0.91)	(0.76)	(1.31)	(1.26)
CMA median hourly earnings	1.003	1.002	0.969*	0.981
	(0.25)	(0.16)	(-2.21)	(-1.24)
CMA unemployment rate	0.926***	0.943***	0.958**	0.957**
	(-6.32)	(-4.44)	(-2.94)	(-2.85)
CMA % immigrants	0.999	0.999	0.997	0.998
	(-0.48)	(-0.44)	(-1.86)	(-1.04)
CMA % managers or professionals	0.981***	0.982***	1.011*	1.007
	(-4.81)	(-4.39)	(2.33)	(1.45)
Recent X CMA earnings		0.983		0.726***
		(-0.14)		(-3.36)
Recent X CMA unemployment		0.861		1.065
		(-1.95)		(0.77)
Recent X CMA immigrants		1.009		1.010
		(0.84)		(1.00)
Recent X CMA % man-prof		1.026		1.090*
		(0.66)		(2.08)
Established X CMA earnings		1.002		0.961
		(0.05)		(-1.08)
Established X CMA unemployment		0.912*		0.998
		(-2.55)		(-0.05)
Established X CMA immigrants		1.002		0.995
		(0.47)		(-1.21)
Established X CMA % man-prof		1.004		1.017
		(0.27)		(1.21)
Number of Cases	100387	100387	102633	102633
Pseudo-R^2	0.0135	0.0140	0.00858	0.00894
Likelihood Ratio Chi^2	646.5	670.9	326.3	340.0

Exponentiated coefficients; t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Finally, Table 3.4 shows that recent immigrant females are 2.5 times as likely to be employed in temporary jobs as Canadian-born women. Recent immigrant males are 1.5 times more likely in comparison to their Canadian-born counterparts, though this effect is considerably smaller than that for females The effect of education on precarious employment is also reflected

here, as education increases so does the chance of being employed in temporary positions. African and South Asian males appear to have the highest likelihood of being employed in temporary work among foreign born men in the sample compared to the Canadian-born. Males born in Central or South America are slightly less likely at 1.5 times to be employed in temporary work.

Finally, for every 1 percent increase in immigrants in a CMA, the odds of being employed in temporary jobs increases by a factor of approximately 1.1 for both males and females. In addition, for every one 1 percent increase of managerial and professional positions in a CMA, the odds of being employed in temporary jobs increases by a factor of 1.01 ($p<0.001$) for both sexes. Although the cross-level interactions exhibit no significant effects for women, there are several CMA characteristics that influence the effect on precarious employment of being a recent or established immigrant for men. Specifically, for each dollar increase in a CMA's median earnings, the likelihood that a recent immigrant will be holding a temporary job increases by a factor of 1.18, or about 18 percent. In contrast, for each one percent increase in the representation of immigrants in a CMA's population, the likelihood of a recent male immigrant holding a temporary job declines by a factor of 0.98. A similar, though smaller, effect is found for established immigrants.

Table 3.4 Multilevel Logistic Regression Models Predicting Temporary Job Holders, Canadian Employees 2006-2012

	Female		Male	
	Model 1	Model 2	Model 1	Model 2
Age of respondent	0.965***	0.965***	0.964***	0.964***
	(-26.18)	(-26.30)	(-21.07)	(-21.03)
Recent Immigrant	2.531***	0.224	1.536*	0.107
	(5.77)	(-1.15)	(2.55)	(-1.80)
Established Immigrant	1.318	0.347	0.947	0.857
	(1.80)	(-1.66)	(-0.33)	(-0.24)
Survey year	1.018*	1.019**	1.041***	1.041***
	(2.51)	(2.61)	(5.03)	(5.03)
One or two children	0.832***	0.833***	0.764***	0.763***
	(-5.67)	(-5.66)	(-6.29)	(-6.30)
Three or more children	1.071	1.074	0.798**	0.797**
	(1.07)	(1.11)	(-2.72)	(-2.75)
High school graduate	0.954	0.954	0.878**	0.879**
	(-1.09)	(-1.10)	(-2.75)	(-2.71)
Trades certificate	1.001	1.000	1.048	1.050
	(0.01)	(0.00)	(0.88)	(0.92)
Some post-secondary	1.288***	1.287***	1.368***	1.366***
	(5.23)	(5.21)	(5.74)	(5.71)
Bachelor's degree	1.348***	1.347***	1.166**	1.163**
	(7.83)	(7.80)	(3.27)	(3.22)
Advanced degree	1.699***	1.695***	1.781***	1.765***
	(10.93)	(10.84)	(9.77)	(9.62)
Married or common-law	0.762***	0.762***	0.671***	0.673***
	(-9.40)	(-9.39)	(-10.60)	(-10.53)
United States	0.818	0.814	1.381	1.305
	(-0.91)	(-0.93)	(1.27)	(1.04)
Central or South America	1.008	0.997	1.534*	1.474*
	(0.04)	(-0.02)	(2.24)	(2.02)
Caribbean	0.635*	0.622*	1.433	1.389
	(-2.33)	(-2.42)	(1.70)	(1.55)
Europe	0.787	0.779	1.158	1.103
	(-1.48)	(-1.55)	(0.83)	(0.55)
Africa	1.045	1.042	1.730**	1.625**
	(0.25)	(0.23)	(2.97)	(2.62)
South Asia	1.089	1.072	1.731***	1.735***
	(0.58)	(0.46)	(3.67)	(3.71)
Rest of Asia	0.887	0.890	1.248	1.227
	(-0.81)	(-0.78)	(1.43)	(1.32)

Oceania	0.978	1.016	0.559	0.553
	(-0.08)	(0.06)	(-1.19)	(-1.21)
CMA median hourly earnings	0.988	0.979*	1.004	0.994
	(-1.20)	(-2.00)	(0.33)	(-0.51)
CMA unemployment rate	1.070***	1.056***	1.083***	1.083***
	(6.84)	(5.08)	(7.40)	(6.71)
CMA % immigrants	0.991***	0.991***	0.990***	0.992***
	(-7.78)	(-6.56)	(-7.12)	(-4.59)
CMA % managers or professionals	1.016***	1.014***	1.009*	1.009*
	(4.76)	(4.00)	(2.28)	(2.13)
Recent X CMA earnings		1.035		1.182**
		(0.53)		(2.65)
Recent X CMA unemployment		1.090		1.067
		(1.62)		(1.24)
Recent X CMA immigrants		1.012		0.984*
		(1.92)		(-2.57)
Recent X CMA % man-prof		1.016		0.987
		(0.66)		(-0.52)
Established X CMA earnings		1.045		1.010
		(1.50)		(0.34)
Established X CMA unemployment		1.050		1.001
		(1.76)		(0.03)
Established X CMA immigrants		0.995		0.991**
		(-1.52)		(-2.69)
Established X CMA % man-prof		1.006		1.004
		(0.58)		(0.40)
Number of Cases	90549	90549	85998	85998
Pseudo-R^2	0.0436	0.0439	0.0508	0.0511
Likelihood Ratio Chi^2	2792.8	2817.9	2624.9	2638.0

Exponentiated coefficients; t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001

3.5 Conclusions and Discussion

A noteworthy change in Canadian immigration over the past few decades has been the arrival of increasingly well-educated migrants. This shift has transpired, in part, due to Canada's immigration policies adopted after 1967. This policy now allows primarily highly educated individuals, under the 'economic class', from non-European nations into this country. From that

time on, the Government of Canada aimed its immigration policies to reflect labour market conditions, particularly occupational demand, as well as "characteristics that are deemed important for long term success of immigrants" (Aydemir, 2002). Therefore, given that points are awarded for education in the Canadian 'point system' (a system employed by the federal government to determine applicant eligibility of newcomers), it is important to recognize labour market participation among Canadian immigrants over generations as an integral part of immigrant employment outcomes. Thus far, however, because successful economic assimilation of immigrants is dependent on their labour market outcomes, most researchers focus on newcomer earnings profiles rather than the types of employment in which many newcomers are engaged. Consequently, an examination of precarious employment and among newcomers may illuminate sections of Canadian labour markets that currently remain understudied.

It is worth mentioning that in the process of trying to succeed in their new country, immigrants collectively exude resilience and determination that sets them apart from their Canadian-born counterparts. Newcomers to Canada not only represent a possible solution for labour force shortages for the Canadian economy but also, because they are younger, they provide potential population growth for Canada's aging workforce. Furthermore, immigrants represent a diverse group of individuals with a common goal of successfully integrating into Canadian society, an endeavor not needed by the host population. Therefore, male and female immigrants will collectively strive to overcome barriers and integrate into Canadian society. This communal struggle includes autonomous immigrant decisions to seek out and locate in regions with labour shortages to not only secure their own futures, but also ensure higher learning and subsequent gainful employment opportunities for their children.

The results of this examination clearly indicate that male immigrants struggle the most in terms of economic integration through employment. Recent immigrant men are almost 28 percent less likely to hold multiple jobs for every one dollar increase in the average wage in their CMA of residence. Hence, it is possible that the more economically prosperous the CMA the better the odds of recent immigrant males in attaining core-type employment. Therefore, these individuals are less likely to be employed in multiple positions. The only CMA effect for women involves a decline in multiple job holding related to a higher unemployment rate among established immigrants, but this is only marginally significant. With respect to temporary employment, the cross-level interactions show that there are several CMA characteristics affect this form of precarious employment. For example, for each dollar increase in a CMA's median earnings, the likelihood that a recent immigrant will be holding a temporary job increases by a factor of about 18 percent. This may be attributed to contract work such as sessional and lecturer positions being the main hiring practices by universities and colleges. In contrast, for each one percent increase in the representation of immigrants in a CMA's population, the likelihood of a recent male immigrant holding a temporary job declines by a factor of 0.98. A similar, though smaller, effect is found for established immigrants. This decline may be the result of accumulated social capital as more and more residents choose to reside in Montreal, Toronto and Vancouver. These communities provide existing social programs and established immigrant communities which, in turn, may aid newcomers in seeking and obtaining more permanent employment.

This struggle is also apparent among recent immigrant women, namely those employed in involuntary part-time work and temporary jobs. As shown above, women who have been residing in Canada for five years or less are almost three times more likely to be employed in

involuntary part-time work than their Canadian-born counterparts. This effect is slightly less but still significant for immigrant women who have lived in Canada for more than five years. These labour market outcomes confirm what researchers have been arguing for in the examination of precarious work. As mentioned earlier, Vosko (2007) and Vosko et al. (2003) put forth the necessity of a gender based analysis of precarious labour. I also found that female recent immigrants are 2.5 times as likely to be employed in temporary work in contrast to Canadian-born females.

Immigrant men are also over represented in precarious jobs. The fact that recently arrived males are 1.5 times as likely to be employed in temporary jobs speaks to the challenges that continue to confront Canadian newcomers. Furthermore, males belonging to this category are more than twice as likely to be employed in involuntary part-time work. An interesting finding is that males who were born in Africa or South Asia are almost twice as likely to be employed in this type of work, whereas males born in Central or South America are slightly less likely at 1.5 times to be employed in temporary work in comparison to their Canadian-born counterparts. I also found it surprising that males born in the United States are more than twice as likely to be employed in more than one job.

The effect of education on precarious employment is also reflected in my results. I found that as education increases so does the chance of being employed in temporary positions as well as multiple jobs. It is possible that many individuals with graduate degrees are working as sessional instructors or research assistants. A well known fact regarding university and college hiring practices have shifted from tenure track employment to temporary work which includes sessional work as well as other forms of teaching. These new "flexible" positions allow higher learning institutions such as universities to employ individuals with graduate degrees without

having to offer them permanent full-time employment. These new positions fail to offer job security, health and dental benefits and pension plans making them the quintessential precarious jobs.

The results of the present study suggest some policy implications with respect to gainful fulltime employment for Canadian newcomers. Given that the majority of Canadian immigrants are highly educated and many have foreign work experience, the lack of credential recognition remains a critical determinant of immigrant economic success. Future immigration policies reflecting such programs or methods of testing might offset immigrant struggles to be employed in core rather than periphery jobs. Additionally, CMAs with prosperous economies may offset their own impending labour shortages by attracting and retaining new immigrants. This is supported by my finding that immigrant men are 28 percent less likely to be employed in precarious work if the CMA has higher median wages.

Chapter Four: **Does Employment in Precarious Work Lead to Wage Disparities For Canadian Immigrants?**

4.1 Abstract

Using data from the Canadian Labour Force Survey for March of 2006 to 2012, this paper examines how employment in precarious jobs may lead to lower earnings among Canadian newcomers. I find that recent immigrants are struggling financially due to wage disparities created by precarious employment. Both males and females experience an initial earnings disadvantage which is further exacerbated by being employed in involuntary part-time work, temporary work and multiple jobs.

Keywords: Immigrants, earnings, precarious work, Canada

4.1 Introduction

Labour force participation with an adequate income by all citizens of a country is fundamental to that country's economic success. With the increasing arrival of migrants from non-European countries, Canada's ethnic diversity appears to be expanding. According to a report by Statistics Canada (2013), over 1 million foreign-born individuals arrived in Canada between 2006 and 2011 making up 17.2 percent of the total foreign-born population in this country (Statistics Canada, 2013). The majority of these individuals arrived from Asia and are some of the most educated immigrants in Canada's history. Given that higher education is assumed to lead to better jobs with higher earnings, it is reasonable to assume that educated immigrants' earnings would equal those of Canadian-born individuals with similar credentials. This does not appear to be the case, as immigrants continue to lag behind their Canadian-born counterparts in terms of economic success. Based on this, Morissette and Picot (2005) state that although the workforce has become more experienced and better educated over the two decades leading up to their report the proportion of low-paid employees actually increased among certain groups such as recent immigrants. This assertion is also reflected in the work of Green and Worswick (2009) who found that sizeable reductions in returns to foreign work experience were paramount in declines in entry level earnings among Canadian immigrants.

Earning an adequate income is particularly problematic for immigrants engaged in precarious employment. For instance, earnings represent not only whether the newcomers can provide for themselves and their families, but also whether they earn enough to save for their retirement and to educate their offspring. The primary goal of this analysis, then, is to examine the role played by precarious work in making immigrant earnings lower than those of their

Canadian-born counterparts. This analysis is especially important as there is no previous research that looks at the role of precarious employment in determining the earnings of Canadian immigrants.

Currently, a majority of research on economic outcomes among Canadian immigrants focuses on wages (Aydermir and Skuterud, 2005; Bannerjee, 2009; Frenette and Morrisette, 2005). These researchers argue that lack of credential recognition and discriminatory hiring practices lead to low wages. I maintain that, in part at least, it is being employed in precarious jobs that create an immigrant earnings deficit. I also recognize the combination of discriminatory hiring practice and discounting foreign education and work credentials may lead to precarious work, which in turn leads to low wages.

Discourse surrounding the economic integration disadvantages faced by Canadian newcomers identifies low immigrant wages as a probable outcome. In fact, a sizeable number of researchers recognize low income among Canadian newcomers as the key source of low economic integration among them. An extensive study using Canadian census data by Aydemir and Skuterud (2005) speaks to immigrant wage disparities across regions of Canada. Furthermore, Aydemir (2003) argues that not only have the earnings of newcomers been deteriorating, but so have their employment and labour force participation rates. As such, Aydemir states that, even though recent Canadian immigrants are more educated than previous cohorts, they are still not faring as well in Canada's labour markets (Aydemir 2003).

Immigrant wages are also examined by Bannerjee (2009), highlighting entry wage and ability to catch up to the wages of the Canadian-born. Bannerjee uses the Survey of Labour and Income Dynamics and finds that visible minority immigrants are unable to catch up to the earnings of Canadian-born respondents and therefore are disadvantaged economically.

According to Bannerjee, white immigrants do not face similar challenges and are able to catch up to their Canadian-born counterparts. Frennette and Morrisette (2005) discuss immigrant wages and whether they will reach parity with Canadian-born. They conclude that immigrant earnings would have to grow at an "abnormally high rate" in order to reach parity with their Canadian-born counterparts (Frenette and Morrisette, 2005 pp. 249).

According to Green and Worswick (2010), recent immigrants to Canada are finding it increasingly difficult to economically integrate into Canadian society. These researchers assert that low-income rates among immigrants are evident shortly after these newcomers arrive in Canada (Green and Worswick, 2010). In fact, immigrants arriving in the 1980s saw their average earnings fall by more than 20 percent in the first year after arrival, and this number declined further among those arriving in the 1990s and in the early 2000s (Green and Worswick, 2010). Immigrant earnings are additionally examined by Bannerjee (2009), who highlights newcomers' earnings upon entering Canada and their subsequent inability to catch up to the earnings of the Canadian-born. Bannerjee cites the "entry effect" of immigrants as they enter the Canadian labour market and the "assimilation effect" as two possible factors hindering Canadian newcomers and therefore rendering them economically disadvantaged. Frennette and Morrisette (2005) conclude that immigrant earnings would have to grow at an extremely high rate in order to be equivalent to the earnings of their Canadian-born counterparts (Frenette and Morrisette, 2005 pp. 249). Therefore, while there is a sizeable amount of Canadian research addressing deteriorating immigrant earnings, little is known about the type of employment these newcomers are engaged in which subsequently leads to immigrant wage disparities with the Canadian born. The purpose of this analysis, then, is to examine immigrant earnings from the perspective of precarious employment.

4.2 Labour Market Segmentation and Precarious Work

Precarious employment in this analysis is defined as individuals employed in temporary jobs, multiple jobs and, finally, involuntary part-time work. According to a recent study, today's immigrants are much more likely to encounter labour market difficulties in Canada's "new" economy, regardless of their education, pre-migration work experience and language skills (Goldring, 2009). In addition, I highlight the increasing earnings gap between immigrants and native-born workers "with comparable human capital", along with "the racialization of income disparities and of poverty" (Goldring, 2009).

The financial consequences of precarious work are a major concern for many Canadians employed in such positions. Kapsalis and Tourigny (2004) state that not only do those employed in precarious work engage in fewer hours of work , they earn considerably lower hourly wages, and are employed for shorter durations than permanent employees. Therefore, the economic instability not only arises from lower wages and fewer hours worked, but also from the inability to access employment insurance because of short employment durations (Kapsalis and Tourigny, 2004). Moreover, financial uncertainty is further exacerbated if precarious workers go from one temporary job to another and never have the chance to build up retirement funds (Kapsalis and Tourigny, 2004). Given that newcomers to Canada face challenges of not only language and cultural barriers but also lack of credential recognition by Canadian employers, it is vital that immigrants' earnings be examined with respect to precarious employment.

As reported in a *Globe and Mail* article dated May 5 2013, "Canada's Shift to a Nation of Temporary Workers," there were 2 million temporary workers in Canada in 2012 and this type of precarious employment has grown at triple the rate of permanent positions (Grant, 2013). This is also true for individuals employed in more than one position. Multiple job holders are also

among many who hold employment out of necessity rather than choice. According to Gilmore, almost 65 percent of Canadian multiple-job holders were engaged in such employment to supplement their income, assist with debt repayment, or save for the future. Kimmel and Powell (1999) concur with Gilmore on the increase in this form of employment in both Canada and the United States. Kimmel and Powell (1999) assert that Canadians engaged in multiple jobs has increased by 50 percent over a decade and continues to climb steadily. A great number of immigrants face a mismatch between their educational credentials and available employment leading many to be employed in involuntary part-time work in the hopes of one day finding permanent positions reflecting their qualifications. Precarious employment inevitably leads to economic instability as newcomers struggle to obtain viable employment for successful economic integration and social cohesion in their host country.

4.3 Data and Methods

4.3.1 Data and Variables

In this analysis I use data from the Canadian Labour Force Survey (LFS) master file from 2006 to 2012. The LFS is a monthly household survey carried out by Statistics Canada involving around 56,000 Canadian households. Statistics Canada added five questions to the LFS to identify the Canadian immigrant population. Therefore, prior LFS waves cannot be used to study the types of immigrant labour outcomes being examined in this analysis. The five Canadian immigrant questions in the 2006 LFS included: country of birth of the respondent, whether or not the respondent was a "landed immigrant", the month and year the respondent became a landed immigrant, and the country where the respondent received his or her highest level of education (Statistics Canada, 2013).

Given the existing LFS files in the Research Data Centres (RDCs) do not provide the necessary tools to compute variances of the estimators from month to month, I can only use the month of March annual surveys (Wanner 2013). Essentially, this means that it is not possible for me to analyze the monthly data correctly as the required software for combining monthly data was not provided by Statistics Canada. However, monthly data is unnecessary for my study, as I am not interested in pursuing my research question using the rotating sample design. This type of sample design enables each household to remain in the sample for six months, and each month one-sixth of the households is rotated out of the sample and replace by a new subsample (Statistics Canada 2013). However, for this and similar studies, a time series of surveys six months or a year apart is sufficient (Wanner 2013). Hence, I merged the March surveys for each year from 2006 and 2012. The analysis is restricted to the month of March for each survey year. The month of March is significant as this is the time of year when very few workers are on holidays or in the process of changing jobs. The present study's sample is restricted to respondents who are 20-59 years of age and either Canadian-born or landed immigrants. In order to further contrast hourly wage outcomes between newcomers and their Canadian-born counterparts, this analysis further divides immigrants into recent immigrants (immigrants who have resided in Canada for five years or less) and established immigrants (immigrants who have lived in Canada for more than five years). Although many studies show that the wage gaps between immigrants and their Canadian-born counterparts are reduced over time, immigrants tend to earn significantly less upon arrival (Gilmour, 2008).

The outcome variable in this analysis is the natural log of hourly earnings and is measured as a continuous variable in the models. The explanatory variables in the present study include immigrant status, work experience (total and foreign), sex, age, education, number of

children, year of survey, and marital status. Immigrant status, as mentioned above, is measured by two dummy variables, one equalling 1 if an immigrant has been in Canada five years or less, the other equalling one if an immigrant has been in the country for more than five years. Canadian-born is the reference category. Total work experience is calculated using "age – years of schooling – 6" and is a continuous variable. This is only an approximation of actual experience, since many individuals will discontinue their education and enrol again later in life. Foreign work experience is calculated by subtracting Canadian work experience from total work experience[4]. Education is divided into six categories: less than high school (used as reference category), high school graduate, some post-secondary education, trades, bachelor's degree, and graduate degree. Marital status is coded as: married (married and common-law), single, never married, and other (widowed, separated or divorced) with other as the reference category. Also, the number of children is coded as: no children (reference), 1-2 children, and 3 or more children. Year of the survey, measured continuously, is included to assess the possible linear trend in wages over the study period. Finally, the models include three precarious employment variables: involuntary part-time work, multiple job holders and temporary job holders. Involuntary part-time work is defined as those seeking full-time employment but are relegated to work part-time. The second precarious work variable, multiple job holders, includes respondents who are employed in more than one job. The final precarious employment variable identifies those respondents who are employed in temporary jobs and includes seasonal, temporary, term or contract employment, including work done via a temporary help agency, a casual job, and other

[4] Total Work Experience = Age – Years of Schooling – 6; Canadian Potential Work Experience for Immigrants = Survey Year – Year of Landing (Year they landed in Canada); Foreign Work Experience = Total Work Experience – Canadian Potential Work Experience for Immigrants

temporary work. All three variables are coded as dummy (indicator) variables with employment in any of these types of precarious work as equal to one, if not they equal zero.

4.3.2 Methods

This analysis examines how several factors add to the disparities in immigrant and Canadian-born hourly earnings by combining the data for both immigrant and Canadian-born respondents from the 2006-2012 survey periods. The earnings in this analysis are not adjusted for inflation as I am interested in comparing actual wage trajectories between Canadian immigrants and their Canadian-born counterparts. I begin the analysis by constructing a baseline ordinary least squares regression model using the background explanatory variables with the log of hourly wages as the outcome (creating a semi-log model). Then I add the dummy variables measuring the three types of precarious work to the baseline model, followed by interaction terms between each immigrant dummy variable and types of precarious employment. These interactions will show if there are differences in the effects of precarious work between recent immigrants, established immigrants, and the Canadian-born. All models in this analysis are run separately for males and females, given the different labour force experiences they encounter. Data from the pooled survey years from the LFS for the month of March are used to estimate the following models:

(Model 1) $\ln Y = \alpha + \Sigma\beta_k X_k + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$

Model 1 includes:

lnY=the natural logarithm of a respondent's hourly earnings

(Model 2) $\ln Y = \alpha + \Sigma\beta_k X_k + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$

Model 2 include all predictors in model 1 plus:

X_3= Involuntary part-time job holder

X_4= Multiple job holder

X_5 = Temporary job holder

(Model 3) $\ln Y = \alpha\ \Sigma\beta_k X_k + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_k X_3 * X_1 + \beta_k X_3 * X_2 + \beta_k X_4 * X_1 + \beta_k X_4 * X_2 + \beta_k X_5 * X_1 + \beta_k X_5 * X_2$

To produce Model 3, interaction terms are added to Model 2 between each immigrant dummy variable and the precarious employment variables which will measure the differences in effects of precarious work between the two types of immigrant and the Canadian-born. The coefficients of these semi-log models, after one is subtracted from their anti-logs, can be interpreted as proportional effects on log earnings, or as percentage effects after they are multiplied by 100. In addition, I show the indirect effects of the background variables on earnings transmitted by the precarious work variables (involuntary part-time work, multiple job holder and temporary job holder). The indirect effects are calculated by subtracting the coefficients for the background variables in model 2 from corresponding coefficients in model 1. The precarious work variables act as mediators and transmit indirect effects from the background variables to log hourly earnings. I also report the Bayesian Information Criterion (BIC) which assesses the overall fit of a

model and compares nested and non-nested models. Accordingly, the model exhibiting the smaller BIC is the preferred model.

Weighting the data and adjusting for the complex sample design in the Labour Force Survey proved to be challenging, as Statistics Canada failed to provide either bootstrap weights or sufficient information regarding adjustment for sample design. As argued by Wanner (2013), I do not use the regression composite method only available to LFS researchers at Statistics Canada. However, as I do not use monthly data points but rather one month (March) per each year of the survey the regression composite method is not necessary (Wanner 2013).

In order to identify primary sampling units, strata, clusters, and sample weights I use information provided in the Labour Force Survey Guide (Statistics Canada 2012) and Methodology documents (Statistics Canada 2008). One assumption made here is that the primary sampling unit (PSU) is a cluster (Wanner 2013). The clusters are sampled before sampling households and then are aggregated into strata (Wanner 2013). My analysis uses the survey system in Stata to adjust for weighting and sample design. As such, the design is represented in the svyset command (StataCorp 2013). This command identifies the data as complex survey data. Hence, this includes variables representing the PSU, sample weight, clustering and stratification. (Wanner 2013).

Probability weights are used to account for the fact that, even though a random sampling method was used, cases may have unequal probabilities of being selected (Lohr 2010). According to Lohr (2010) these weights normally equal the inverse of the probability of selection and are calculated to provide sample estimates that more closely correspond to census population values for certain variables. Furthermore, they adjust for nonresponse and coverage error. The final weight (*finalwt*) is further adjusted using the calibration method. Calibration is unwarranted

in this analysis as it uses surveys six months of more apart. Therefore, I will use *subwt*[5]. For purposes of statistical inference, these weights must be normalized so that their mean equals 1 (Wanner 2013). The frequency counts will then take on sample rather than population values. This is accomplished by dividing the weights by their mean.

4.4 Results

Figure 4.1 illustrates the sizeable disparity in hourly earnings between recent Canadian immigrants and more established immigrants and the Canadian-born. The figure shows that both male and female recent immigrants are consistently earning less per hour with respect to both the established immigrants and Canadian-born males and females during the study period. It is worth noting that while the earnings of the Canadian born and established immigrants increase steadily during the period of the present study, the gap between these groups and recent immigrants appears to widen. Furthermore, the women's earnings are much lower than men's, regardless of immigrant status.

[5] According to Wanner (2013) In the March 2007 LFS the correlation between *subwt* and *finalwt* is approximately 0.97 and regression coefficients estimated using the two weights are equal to the fifth decimal point. Therefore, they are virtually interchangeable.

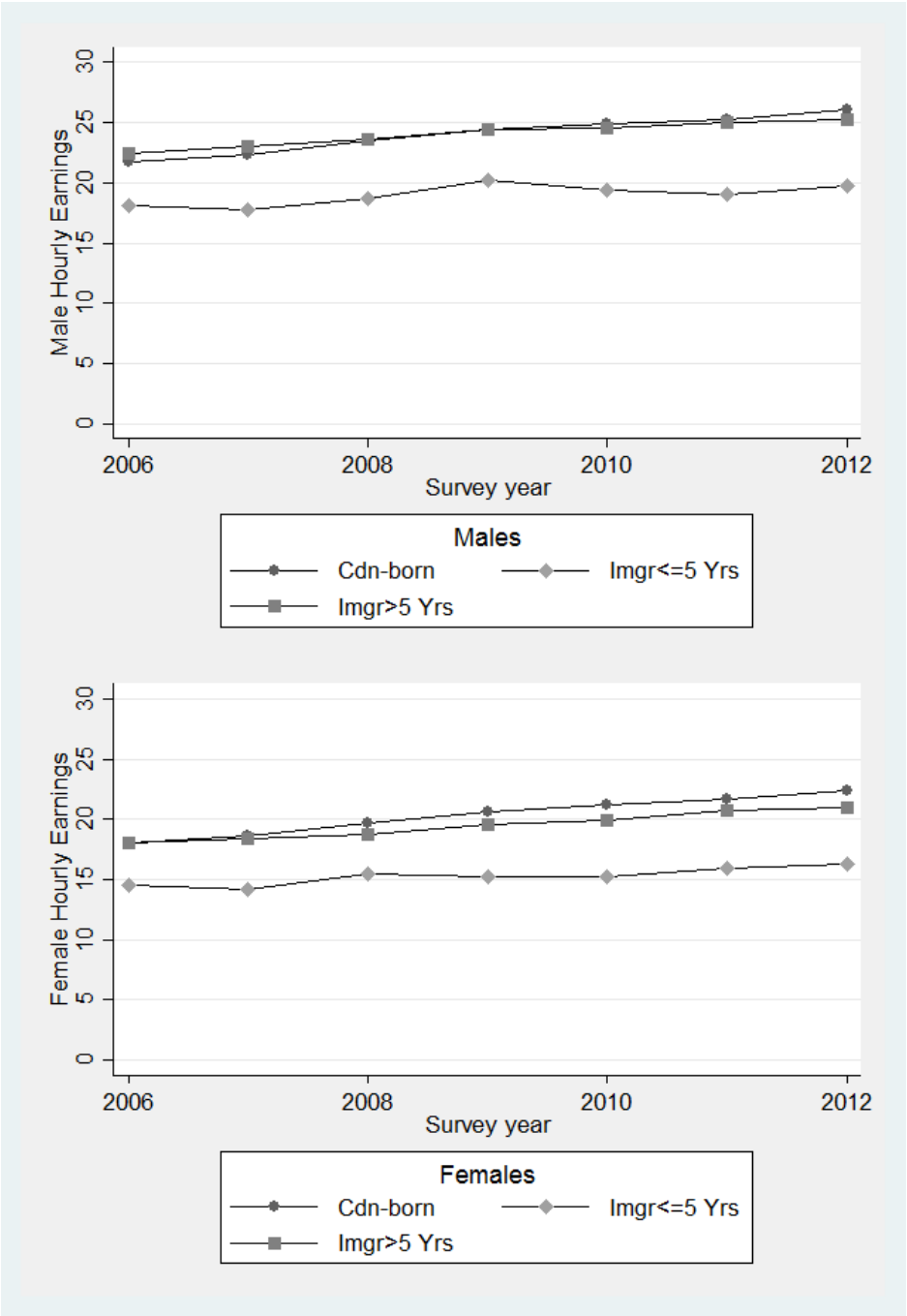


Figure 4.1. Hourly Earnings of by Sex, Year, and Immigrant Status

Although the focus of interest in this paper is on the role of precarious work in the earnings attainment process, Model 1 including only the background variables provides some

interesting results. For each one year increase in work experience for females results in a 1 percent increase in hourly earnings. However, for each one year increase in foreign work experience females earn 1.3 percent *less* in hourly earnings. The outcomes for Model 1 also show that as education increases so do hourly earnings. For instance, high school graduates can earn approximately 20 percent more in hourly earnings than non high school graduates whereas respondents with a graduate degree can earn almost 120 percent more than their counterparts who did not finish high school. Female recent immigrants earn 18 percent less than their Canadian-born counterparts and established immigrant females earn almost 6 percent less than the Canadian-born. It is also interesting to note that married females earn about 3 percent more than women who are widowed, separated or divorced while single women earn 4 percent less than this reference group. Finally, women with one to two children earn a little over 5 percent more than those without children and women with three or more children earn approximately 3.5 percent less. Finally, Model 1 shows that women who belong to labour unions earn about 23 percent more than those who are not union members.

The results in Model 2 of Table 4.1 illustrate the hourly wage outcomes once the three precarious employment variables are added to Model 1. Females engaged in involuntary part-time work earn almost 20 percent less while multiple job holders earn 4 percent less and temporary job holders earn 9.5 percent less in hourly earnings. The final model depicted in Table 4.1 shows the results of the interaction effects between immigrants and precarious employment. Specifically, the table shows that recently arrived females who are also employed in multiple jobs earn approximately 10 percent more in hourly earnings whereas established female immigrants earn approximately 6 percent more. None of the other interaction terms is significant.

Table 4.1 OLS Regression Models Predicting Log of Respondents' Hourly Earnings for Females, 2006-2012

	Model 1	Model 2	Model 3
Work Experience	0.009***	0.009***	0.009***
	(0.000)	(0.000)	(0.000)
Foreign Work Experience	-0.011***	-0.011***	-0.011***
	(0.000)	(0.000)	(0.000)
High School Graduate	0.204***	0.202***	0.201***
	(-0.005)	(-0.005)	(-0.005)
Trades Training	0.252***	0.251***	0.250***
	(-0.006)	(-0.006)	(-0.006)
Some Post-Secondary Education	0.442***	0.436***	0.438***
	(-0.005)	(-0.005)	(-0.005)
Bachelor's Degree	0.855***	0.844***	0.852***
	(-0.006)	(-0.006)	(-0.006)
Graduate Degree	1.175***	1.164***	1.175***
	(-0.008)	(-0.008)	(-0.008)
Survey Year	0.029***	0.031***	0.030***
	(-0.001)	(-0.001)	(-0.001)
Immigrant 5 years or less	-0.180***	-0.161***	-0.185***
	(-0.013)	(-0.012)	(-0.014)
Immigrant more than 5 years	-0.058***	-0.052***	-0.062***
	(-0.005)	(-0.005)	(-0.005)
Married	0.030***	0.028***	0.027***
	(-0.004)	(-0.004)	(-0.004)
Single	-0.040***	-0.044***	-0.036***
	(-0.006)	(-0.005)	(-0.005)
1-2 Children	0.054***	0.051***	0.050***
	(-0.004)	(-0.004)	(-0.003)
3 or more Children	-0.036***	-0.023***	-0.036***
	(-0.007)	(-0.007)	(-0.006)
Union Member	0.230***	0.239***	-0.232***
	(-0.003)	(-0.003)	(-0.003)
Involuntary Part-time Worker		-0.187***	-0.193***
		(-0.008)	(-0.009)
Temporary Job Holder		-0.110***	-0.107***
		(-0.004)	(-0.004)
Multiple Job Holder		-0.033***	-0.046***
		(-0.005)	(-0.006)
Invol P/T * Recent Immgr			0.074

			(-0.038)
Invol P/T * Established Immgr			0.011
			(-0.022)
Multijob * Recent Immgr			0.095*
			(-0.040)
Multijob * Established Immgr			0.061***
			(-0.017)
Tempjob * Recent Immgr			0.034
			(-0.024)
Tempjob * Established Immgr			0.006
			(-0.012)
Number of Cases	348299	334004	348299
BIC'	-59987.96	-48857.867	-53083.728
Adjusted R^2	0.313	0.252	0.324

Coefficients for semi-log wage models equal ($e^{\beta} - 1$) which produce proportional effects. These are multiplied by 100 and reported as percentages in the text.
Exponentiated coefficients; standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 4.2 shows results for male respondents with respect to hourly earnings. For males, Canadian work experience translate into 1 percent higher earnings per year. However, males with foreign work experience earn approximately 1.5 percent less per year of experience. Similar to females in this analysis, as education increases so do male earnings. For example, males with a high school diploma earn 15 percent more than those who have not graduated from high school. The earning potential for males with graduate degrees is 85 percent higher in comparison to those without high school diplomas Also based on Model 1, recently arrived males earn about 16 percent less than their Canadian-born counterparts, while established immigrant males earn 6.5 percent less. In contrast to how well females fared with respect to earnings and union memberships, males belonging to unions earn about 11 percent more than non-union males.

Table 4.2 also reports the outcomes of Model 2 after the precarious employment variables are added to Model 1. Accordingly, male involuntary part-time workers earn almost 25 percent less, followed by multiple job holders earning approximately 8 percent less and temporary job holders earning 13 percent less than those not employed in these types of jobs. Finally, Table 4.2 (Model 3) shows the outcomes of adding interaction terms to Model 2 and there is only one significant result which shows established immigrants employed in temporary positions tend to earn almost 4% less. Model 2 is the preferred model, supported by the larger negative BIC' value. This supports my contention that involvement in precarious work is an important predictor of hourly earnings, regardless of immigrant status.

Table 4.2. OLS Regression Models Predicting Log of Respondents' Hourly Earnings for Males, 2006-2012

	Model 1	Model 2	Model 3
Work Experience	0.010***	0.010***	0.010***
	(0.000)	(0.000)	(0.000)
Foreign Work Experience	-0.014***	-0.014***	-0.013***
	(-0.001)	(-0.001)	(-0.001)
High School Graduate	0.147***	0.142***	0.141***
	(-0.005)	(-0.005)	(-0.005)
Trades Training	0.283***	0.280***	0.278***
	(-0.005)	(-0.005)	(-0.005)
Some Post-Secondary Education	0.292***	0.288***	0.289***
	(-0.005)	(-0.005)	(-0.005)
Bachelor's Degree	0.657***	0.644***	0.650***
	(-0.006)	(-0.006)	(-0.006)
Graduate Degree	0.850***	0.840***	0.850***
	(-0.008)	(-0.008)	(-0.008)
Survey Year	0.027**	0.028***	0.027***
	(-0.001)	(-0.001)	(-0.001)
Immigrant 5 years or less	-0.161***	-0.133***	-0.149***
	(-0.013)	(-0.013)	(-0.014)
Immigrant more than 5 years	-0.065***	-0.056***	-0.060***
	(-0.005)	(-0.006)	(-0.006)
Married	0.038***	0.041***	0.035***
	(-0.006)	(-0.006)	(-0.006)

Single	-0.095***	-0.096***	-0.089***
	(-0.007)	(-0.007)	(-0.007)
1-2 Children	0.080***	0.083***	0.076***
	(-0.004)	(-0.004)	(-0.004)
3 or more Children	-0.090***	-0.010***	-0.088***
	(-0.006)	(-0.007)	(-0.006)
Union Member	0.108***	0.115***	0.112***
	(-0.003)	(-0.003)	(0.003)
Involuntary Part-time Work		-0.249***	-0.251***
		(-0.014)	(-0.016)
Temporary Job Holder		-0.140***	-0.128***
		(-0.005)	(-0.005)
Multiple Job Holder		-0.078***	-0.074***
		(-0.007)	(-0.008)
Invol P/T * Recent Immgr			-0.003
			(-0.065)
Invol P/T * Established Immgr			0.022
			(-0.038)
Multijob * Recent Immgr			-0.030
			(-0.041)
Multijob * Established Immgr			-0.023
			(-0.021)
Tempjob * Recent Immgr			-0.016
			(-0.030)
Tempjob * Established Immgr			-0.038*
			(-0.017)
Number of Cases	334004	334004	334004
BIC'	-43807.177	-48857.867	-48576.128
Adjusted R^2	0.275	0.324	0.275

Coefficients for semi-log wage models equal ($e^{\beta} - 1$) which produce proportional effects. These are multiplied by 100 and reported as percentages.
Exponentiated coefficients; standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 4.3 reports the indirect effects of the background variables on earnings transmitted by precarious work variables for females in the sample. For instance, 0.1 percent of the effect of foreign work experience on hourly earnings is transmitted by the precarious employment variables. Additionally, the indirect effect transmitted by precarious employment variables

among recent immigrant females on hourly earnings is almost 2 percent. This effect is slightly lower for established immigrants at 0.6 percent. Individuals with graduate degrees show an indirect effect of 1.1 percent on hourly earnings transmitted by precarious work variables. Furthermore, Table 4.3 also depicts the total effects of each variable. For example, 12 percent of the total effect of being a recent immigrant female is transmitted by precarious employment variables and approximately 9 percent of the total effect of being an established female immigrant is transmitted by these variables. The largest direct effect transmitted by the precarious employment variables is 27 percent for respondents with three or more children.

Table 4.3 Indirect Effects of the Background Variables on Earnings Transmitted by Precarious Work for Females

	$(e^{\beta} - 1)_{\text{Model 1}} - (e^{\beta} - 1)_{\text{Model 2}}$	% Total Effect
Work Experience	0	0%
Foreign Work Experience	0	0%
High School Graduate	0.002	1%
Trades Training	0.001	0%
Some Post-Secondary Education	0.006	1%
Bachelor's Degree	0.011	1%
Graduate Degree	0.011	1%
Survey Year	-0.002	7%
Immigrant 5 years or less	-0.019	10%
Immigrant more than 5 years	-0.006	9%
Married	0.002	6%
Single	0.004	11%
1-2 Children	0.003	5%
3 or more Children	-0.013	27%
Union Member	-0.009	4%

Table 4.4 shows the indirect effects of the background variables on earnings transmitted by precarious work variables for males in the sample. According to Table 4.4, the indirect effect transmitted by precarious employment variables among recent immigrant males on hourly earnings is substantially lower than females at approximately 3 percent. Again, percent total

effect is reported in Table 4.4 for males in the sample. For example, 15 percent of the total effect of being a recent immigrant male is transmitted by precarious employment variables and approximately 12 percent of the total effect of being an established male immigrant is transmitted by these variables. Again, respondents with three or more children show a large 47 percent total direct effect as exhibiting by precarious employment variables.

Table 4.4 Indirect Effects of the Background Variables on Earnings Transmitted by Precarious Work for Males

	$(e^{\beta} - 1)_{\text{Model 1}} - (e^{\beta} - 1)_{\text{Model 2}}$	% Total Effect
Work Experience	0	0%
Foreign Work Experience	0	0%
High School Graduate	0.005	3%
Trades Training	0.003	1%
Some Post-Secondary Education	0.004	1%
Bachelor's Degree	0.013	2%
Graduate Degree	0.01	1%
Survey Year	-0.001	4%
Immigrant 5 years or less	-0.028	15%
Immigrant more than 5 years	-0.009	12%
Married	-0.003	9%
Single	0.001	1%
1-2 Children	-0.003	4%
3 or more Children	-0.08	47%
Union Member	-0.007	7%

4.5 Conclusions and Discussion

As shown above, interactions with immigrant status suggest, in the case of women, holding multiple jobs enhances the earnings of established immigrants, while for men, holding a temporary job reduces the earnings of established immigrants. Therefore, precarious work seems to operate uniformly to reduce earnings, regardless of immigrant status. The results also

indicate that recent immigrants continue to struggle financially as they try to integrate themselves and their families into Canadian society. For example, immigrant females earn substantially less in hourly earnings than their Canadian-born counterparts. Specifically, recently arrived females earn 18 percent less than Canadian-born females and established immigrant females earn 6 percent less. These findings coincide with those of Bannerjee (2009) as well as Green and Worswick (2010) who exposed the financial struggles experienced by Canadian immigrants shortly after arriving in this country. Another interesting outcome of this analysis is the earning power of individuals belonging to unions. Female union members earn 23 percent more than non-union females.

The disparity of hourly wage earnings of recently arrived males is somewhat lower than that of comparable females. I found that recently arrived males earn about 15 percent less than their Canadian-born counterparts, while established immigrant males earn 6 percent less. Furthermore, in contrast to how well females fared with respect to earnings and union memberships, males belonging to unions earn less than half that of females belonging to unions; about 11 percent more than non union males.

Precarious work variables act as mediating variables and transmit indirect effects from the background variables to hourly earnings. A notable finding in the present study is the indirect effects transmitted by precarious work variables from background variables such as foreign work experience, immigrant status and education credentials to hourly earnings. As shown above, the indirect effect of foreign work experience on hourly earnings is slightly higher for males than females as transmitted by the precarious employment variables. Additionally, the indirect effect is also evident among recent immigrants as well as established immigrants. Again

it appears to be substantially higher for males than females and this pattern continues for higher education.

These are interesting outcomes as they augment current research on diminishing immigrant earnings. Aydemir and Skuterude (2005) found a marked decrease in economic returns based on foreign labour market experience. They assert that this finding was most prevalent among males originating in non-European countries. Researchers continue to stress wage disparities between immigrants and the Canadian-born, however they have yet to link jobs with low earning potential with immigrant economic outcomes. Policy makers should note that attracting educated immigrants is not enough to boost the host country's GDP. Hence, the host country's government must also recognize credentials of newcomers and ensure gainful employment for all sexes of incoming migrants. It is this underutilization of educational and work experience credentials that is likely leading to newcomers' dismal economic plight. As shown above, although females with foreign work experience see an increase in hourly earnings, males with foreign work experience actually earn less. This earnings disadvantage faced by recent Canadian immigrants and less so by established immigrants warrants further exploration using longer time periods. The outcomes of this analysis may be even more pronounced if data were available for longer time periods allowing for a comparison across decades coupled with measures of precarious employment.

Chapter Five: **Conclusion**

The purpose of my research was to examine the extent of Canadian immigrants' participation in varying types of precarious work within Canadian labour markets and the implications of that participation for their earnings. Over the course of three separate papers, this question was explored using a theoretical framework guided by the principles of dual labour market theory and the scholarship on immigrant integration in the work place to contextualize Canadian immigrant labour market participation in precarious work. Although current Canadian labour market research views precarious work as a vital part of that country's employment outlook (see Krahn, 1995; Vosko et al, 2003; Goldring, 2009; Kapsalis and Tourigny 2004; Zeytinoglu and Cooke 2005), just one Canadian study examines immigrants employed in this type of work (Godin and Renaud, 2005). As a result, my research is unique in examining immigrant participation in non-standard work within Canadian labour markets and therefore offers an inter-disciplinary approach combining perspectives from sociology and economics. This analysis is especially important as Canada accepts more and more highly educated and highly skilled newcomers from non-European countries who bring with them their unique cultural obstacles to their host country.

Results shown in the first paper (Chapter 2) overwhelmingly indicate that the odds of recent immigrants being employed in involuntary part-time work are much higher than that of their Canadian-born counterparts for both sexes. As such, recent immigrant males are more than three times as likely to be employed in involuntary part-time work in comparison to their Canadian-born counterparts. Recent immigrant females are almost two and a half times as likely to be employed in similar precarious jobs. Furthermore, this trend of over-representation of

recent immigrants is increasing over time. Hence, the results of the present study contend that, in part, it is type of employment such as involuntary part-time work that leads to lower immigrant wages.

This trend of immigrants employed in precarious work continues as the analysis is expanded to respondents employed in multiple jobs. The effect is more pronounced in the outcomes of established Canadian immigrants. The most interesting result in the analysis of employment in multiple jobs is associated with education. Results of the present study indicate that as education levels increase so does the likelihood of being employed in multiple jobs. Those with graduate degrees are more than three times as likely to be employed in multiple jobs as those with less than high school education. Again, type of employment among Canadian immigrants is clearly a precursor to lower immigrant wages.

Another area identified by current labour market research involving Canadian immigrants is the lack of credential recognition faced by many newcomers to that country. Although the majority of the immigrants arriving in Canada hold high levels of education and have had extensive work experience they still struggle within Canadian job markets. Notably, recent female immigrants are much more likely to be employed in temporary jobs than their Canadian-born counterparts. With respect to education, males with a university certificate are more than one and a half times as likely to be employed in temporary jobs and females are slightly less than one and a half times as likely. For instance, males with graduate degrees are almost three times as likely to be employed in temporary jobs and females with similar credentials are twice as likely.

The second paper (Chapter 3) focusses on the effects of the labour market context on employment in precarious work among immigrants. This paper shows similar outcomes to

Chapter 2 with an emphasis on recent male immigrants. I found the outcomes of this chapter clearly indicate that male immigrants struggle immensely in terms of economic integration through employment. There does appear to be some optimistic results from CMAs with higher median wages. According to my findings, recent immigrant men are almost 28 percent less likely to hold multiple jobs for every one dollar increase in the average wage in their CMA of residence. Hence, it is possible that the more economically prosperous the CMA the better the odds of recent immigrant males in attaining core-type employment. Therefore, these individuals are less likely to be employed in multiple positions.

The propensity for Canadian immigrants to be employed in precarious work continues with the results of the final paper (Chapter 4) which show that precarious work seems to operate uniformly to reduce earnings, regardless of immigrant status. For example, immigrant females earn substantially less in hourly earnings than their Canadian-born counterparts. Furthermore, there is a substantial indirect effect via precarious work of recent immigrants on hourly wages. These findings coincide with those of Bannerjee (2009) as well as Green and Worswick (2010) who described the financial struggles experienced by Canadian immigrants shortly after arriving in this country. The disparity in hourly wage earnings of newly arrived males is even lower than comparable females. I found that recent immigrant males earn about 15 percent less than their Canadian-born counterparts, while established immigrant males earn 6 percent less. Another interesting outcome of this analysis is the earning power of individuals belonging to unions. Female union members earn 23 percent more than non-union females, while the comparable figure is half that for males.

There are several important policy implications arising from my research results. For example, immigration policies in terms of immigrant selection may need to consider credentials

in addition to education. The current policy of admitting highly educated immigrants to Canada for the purpose of economic integration is falling short, especially for recent immigrants. This appears to be the case even with the introduction of the Provincial Nominee Program in 1998. Furthermore, introducing job matching programs to coincide with education and work experience credentials may help offset the struggles newcomers experience in Canadian labour markets.

The Minister of Citizenship and Immigration for Canada, Chris Alexander, has recently announced a new program aimed at immigration reform called "express entry" (Mas 2014). This program, which launches January 1, 2015, will offer more rapid processing to skilled immigrants who want to immigrate to Canada as permanent residents. The purpose of this new program is to fill available positions where there are no available Canadian workers. According to a CBC news report, express entry could be offered to skilled immigrants who have put in an application through the federal skilled worker program (FSWP), the federal skilled trades program (FSTP), the Canadian experience class (CEC), and a portion of the provincial nominee program (Mas 2014).

The effectiveness of this new program remains to be seen, as the federal government has yet to address the existing precarious work predicament among existing Canadian immigrants of both sexes. The solutions to the overrepresentation of recent and established Canadian immigrants in precarious jobs may lie in programs and policies aimed at recognizing foreign credentials and cultural sensitivity training for prospective employers as the ethnic diversity of that country continues to expand.

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