

OPEN ACCESS

ISSN 2280-4056

*E-Journal of
International and Comparative*

LABOUR STUDIES

Volume 5, No. 3 September-October 2016



ADAPT
www.adapt.it
UNIVERSITY PRESS

ADAPT *International School of Higher Education in Labour and Industrial Relations*

Scientific Directors

Lauren Appelbaum (USA), Greg Bamber (Australia), Stuart M. Basefsky, (United States), Daria V. Chernyaeva (Russia), Richard Croucher (United Kingdom), Maurizio del Conte (Italy), Tomas Davulis (Lithuania), Tayo Fashoyin (Nigeria), József Hajdu (Hungary), Ann Hodges (USA), Richard Hyman (United Kingdom), Maarten Keune (The Netherlands), Chris Leggett (Australia), Guglielmo Meardi, (United Kingdom), Shinya Ouchi (Japan), Massimo Pilati (Italy), Valeria Pulignano (Belgium), Michael Quinlan (Australia), Juan Raso Delgue (Uruguay), Raúl G. Saco Barrios (Peru), Alfredo Sánchez Castaneda (Mexico), Malcolm Sargeant (United Kingdom), Jean-Michel Servais (Belgium), Silvia Spattini (Italy), Michele Tiraboschi (Italy), Anil Verma (Canada), Stephen A. Woodbury (USA)

Joint Managing Editors

Malcolm Sargeant (Middlesex University, United Kingdom)
Michele Tiraboschi (University of Modena and Reggio Emilia, Italy)

Editorial Board

Lilli Casano (Italy), Francesca Fazio (Italy), Emanuele Ferragina (United Kingdom), Antonio Firinu (Italy), Valentina Franca (Slovenia), Maria Giovannone (Italy), Erica Howard (United Kingdom), Karl Koch (United Kingdom), Lefteris Kretsos (United Kingdom), Attila Kun (Hungary), Felicity Lamm (New Zealand), Cristina Lincaru (Romania), Nikita Lyutov (Russia), Merle Muda (Estonia), Boaz Munga (Kenya), John Opute (UK), Eleonora Peliza (Argentina), Daiva Petrylaite (Lithuania), Ceciel Rayer (The Netherlands), Aidan Regan (Ireland), Marian Rizov (United Kingdom), Salma Slama (Tunisia), Francesca Sperotti (Italy), Araya Mesele Welemariam (Ethiopia), Barbara Winkler (Austria), Machilu Zimba (South Africa)

Language Editor

Pietro Manzella (ADAPT Senior Research Fellow)

Book Review Editor

Chris Leggett (James Cook University, Australia)

*E-Journal of
International and Comparative*

LABOUR STUDIES

Volume 5, No. 3 September-October 2016

@ 2016 ADAPT University Press

Online Publication of the ADAPT Series
Registration No. 1609, 11 November 2001, Court of Modena
www.adaptbulletin.eu

The articles and the documents published in the *E-Journal of International and Comparative LABOUR STUDIES* are not copyrighted. The only requirement to make use of them is to cite their source, which should contain the following wording: **@2016 ADAPT University Press.**

Unions and Traditionally Disadvantaged Workers: Evidence from Union Wage Premiums in Canada 2000 to 2012

Rafael Gomez and Danielle Lamb*

Abstract. It is well documented that unionised workers earn significantly more than their non-union counterparts. However, over the last three decades, the union wage premium along with overall union coverage has fallen in most industrialized economies. Though the principal causes are still under dispute, the effects of technological change, managerial opposition, globalization and other factors have clearly lessened the bargaining power of labour with respect to employers. Given the commensurate rise of non-standard work and inequality in most developed nations, this paper examines the extent to which unions can still provide some immunity against the pressures of these “new labour market realities”. Using data from the Canadian Labour Force Survey for the years 2000 – 2012 inclusive, we estimate union wage premiums amongst historically disadvantaged groups: i.e., youth, women, low wage workers, immigrants, Aboriginals and workers in non-standard jobs. The results suggest that across almost every dimension of vulnerability or disadvantage used in the paper, unions are associated with a larger than average positive impact on workers’ earnings. The findings support the powerful redistributive role that unions still play in contemporary economies especially for the most vulnerable.

Keywords: *Unions, Wage differentials, Vulnerable Workers*

1. Introduction¹

It is well known that workers *gain* by being a member of a trade union. This advantage has been traditionally expressed in the form of a *wage premium* that union members (and those covered by a collective agreement) receive after controlling for all other observable factors that impact earnings. Historically, the union wage advantage has been large and significant but since the 1980s has been falling (along with overall union density) for most workers.² Though the reasons for this decline are varied, the effects of economic restructuring, technological change, globalization and managerial opposition have clearly lessened the bargaining power of workers with respect to employers. Conterminously and perhaps relatedly, earnings have become more dispersed, employment relationships less standardized and work itself increasingly more precarious.³

Despite these well noted declines in overall union density, lower wage premiums and less standardized employment for the workforce as a whole, what is not as well documented is the extent to which unions have

* Rafael Gomez, Centre for Industrial Relations and Human Resources (CIRHR) University of Toronto, Toronto. Email ralph.gomez@utoronto.ca. Danielle Lamb, Human Resources and Organizational Behaviour, Ted Rogers School of Management, Ryerson University, Toronto. Email: danielle.lamb@ryerson.ca.

¹ This research was supported by the Centre for Labour-Management Relations (CLMR), Ryerson University. This research was also supported by fund to the Canadian Research Data Centre Network (CRDCN) from the Social Science and Humanities research Council (SSHRC), the Canadian Institute for Health Research (CIHR), the Canadian Foundation for Innovation (CFI) and Statistics Canada. Although the research and analysis are based on data from Statistics Canada, the opinions expressed do not represent the views of Statistics Canada or the Canadian Research Data Centre Network (CRDCN). We would also like to thank those who provided comments during the 5th International Conference on Precarious Work and Vulnerable Workers held on June 13-14, 2016 at Middlesex University, London (UK), in particular Richenda Power, David Bensman and Sanjukta M. Paul. Any errors or views expressed in this paper are solely those of the authors and do not represent the opinions of the CLMR or Statistics Canada.

² D. Blanchflower and A. Bryson (2010). The Wage Impact of Trade Unions in the UK Public and Private Sectors, *Economica*, 77(305), 92-109; K. Thorpe (2012). *The State of the Unions in 2012*. Ottawa: Conference Board of Canada. <http://www.conferenceboard.ca/insideedge/2012/feb2012/feb7-unions.aspx> (accessed Aug. 22, 2016).

³ W. Lewchuk (2013). Has There Been a She-covery? The Financial Crisis of 2008 and Its Impact on the Ontario Labour Market. *Relations Industrielles/Industrial Relations*, 68(1), 25-45.

buffeted the pressures of these “new labour market” realities for historically disadvantaged⁴ groups (i.e., youth, women, low wage workers, immigrants, Aboriginals and workers in non-standard jobs). As noted by Blackburn,⁵ the decline in union wage premium for the overall labour market obscures the fact that union wage effects have been found to differ according to characteristics of the worker (e.g., education and gender). This is an important observation not only because of what it implies for present-day labour markets but because the union advantage for workers may not be as obvious as it first appears.

The predominant view of modern trade unionism as a progressive societal force aimed at advancing the *common rule* belies the early history of trade unions as fairly rigid member-based associations restricting entry and enshrining (rather than advancing) labour market advantages. Just as the twin objectives of advancing rights for the weakest by “clearing markets of all particularistic obstructions...[and protecting]...worker[s] from the destructive effects of unregulated competition”⁶ have been long-standing goals of the modern-day labour movement, the tendency for unions to focus on a narrower view of dues-paying bargaining agency has been an equally compelling counter-narrative⁷. Beginning with pre-industrial European craft guilds and early associations of skilled tradesmen all the way to present-day associations of professional workers that include athletes, doctors and lawyers, there is a clear pattern of unionism enshrining privilege rather than extending it. The move of trade unions away from craft-based solidarity (or labour cartels) towards social justice and broad-based representation for the least skilled is, at least when viewed over a longer historical backdrop, a relatively recent phenomenon. In North America, unions as late as the 1930s were still divided as to whether they should admit “industrial” workers into their associations.

⁴ We deploy the term disadvantaged worker – rather than vulnerable as found in M. Sargeant and E. Tucker (2009) Health and safety of vulnerable workers: case studies from Canada and the UK. *Policy and Practice in Health and Safety* 7(2) 51-73 - to signal that we are strictly referring to groups that have traditionally faced either wage discrimination in the labour market and/or for whom, historically at least, unemployment rates and wages have been lower (i.e., women, youth, immigrants) as compared to more advantaged groups (i.e., males, older workers, and native born workers).

⁵ M. Blackburn (2008). Are Union Wage Differentials in the United States Falling? *Industrial Relations*, 47(3), 390-418.

⁶ M. Poole (1981). *Theories of Trade Unionism; A Sociology of Industrial Relations*. London. Routledge & Kegan Paul, 82-83.

⁷ A. Fox (1975). Collective Bargaining, Flanders and the Webbs. *British Journal of Industrial Relations*, 13(2): 151-74.

According to labour historians there were always: “Two conflicting views of the trade-union movement that strove for ascendancy in the nineteenth century (America): One, the defensive-restrictive guild-craft tradition passed down through journeymen’s clubs and friendly societies...the other the aggressive-expansionist drive to unite all ‘labouring men and women’ for a ‘different order of things.’”⁸

It is against this historical backdrop that we seek to understand the modern role of unions in helping (or not helping as the case may be) those that have been traditionally viewed as most vulnerable in the labour market. In this regard, one could imagine two possibilities as work becomes increasingly non-standardized and the role of unions in regulating the labour market abets:

First, union decline is being disproportionately felt by traditionally disadvantaged workers; this is so because as union power has waned, *unions have consolidated around workers with more labour market advantages* (i.e., those facing less labour market discrimination, lower unemployment rates and most shielded from market pressures). This means a move towards even lower coverage and lower wage premiums for the least advantaged and most precarious of workers. This would be in keeping with the narrower view of trade unions “as securer of restrictive entry and guarantor of labour market privilege”⁹

A second scenario is that *unions have stepped up and are extending their more contemporary role as a ‘sword of justice’*¹⁰ *acting to maintain equity and fairness in the employment relationship, especially for the most vulnerable* as it pertains to wages and working conditions. This would mean equal or higher coverage rates and equal to greater wage gains for the least advantaged over time.

This study estimates the evolution of union coverage rates and trends in union wage premiums since 2000 as a test of these two scenarios. We begin in section 2 with a review of the wage premium literature in Canada and also where relevant globally. We end by stating our main research questions in this paper. In section 3 we discuss our data and methods. In section 4 we describe the results of our data analysis and detail the major implications for theory, policy and practice. In section 5 we offer some conclusions.

⁸ R. Leeson (1971). *United We Stand*. London: Adams & Dart Publishers, page 10

⁹ R. Leeson, page 12

¹⁰ Metcalf D., Hansen K., Charlwood A. (2001). Unions and the sword of justice: Unions and pay systems, pay inequality, pay discrimination and low pay. *National Institute Economic Review*, 176: 61-75.

2. Related Literature

The present analysis examines union wage premiums in Canada leading up to and following the Great Recession of 2008 amongst historically disadvantaged groups. Unions in Canada raise wages primarily through collective bargaining and possibly through improved managerial practices, which raise both the productivity of the firm and the demand for union labour resulting in subsequently higher wages¹¹. It is conceivable that the fiscal and profit constraints imposed by the 2001 and 2008 downturns would have weakened labour's ability to negotiate wage gains and thus a narrowing of the union-non-union wage differential following the recession would be observed.

Analyses of public sector collective bargaining in the US following the financial crisis by Freeman and Han¹² found "a wide range of evidence that unions made substantial wage and benefit concessions to save jobs and preserve public services in the 2008-2011 period." On the other hand, if unions promote improved managerial practices,¹³ then it is also plausible that severe economic downturns would cause less productive firms to fail, leaving only top (mostly union) performers in a given industry, resulting in an even wider union-non-union wage gap. It should be noted that the ability of unions to 'shock' firms into ameliorated behaviour¹⁴ creates a spillover into non-unionized firms as well, thus creating a downward bias in the estimates of the true union wage premium.¹⁵

Fang and Verma¹⁶ track union-non-union wage differentials in Canada from 1984 to 1998 using a variety of statistical sources. The authors

¹¹ A. Bryson (2014). Union Wage Effects. What are the economic implications of union wage bargaining for workers, firms, and society? *IZA World of Labor*. 2014: 35

doi: 10.15185/izawol.35 <http://wol.iza.org/articles/union-wage-effects.pdf> (accessed Aug. 22, 2016); H. Drost and R. Hird (2006). *An Introduction to the Canadian Labour Market 2nd ed.* Toronto: Thompson Nelson.

¹² Freeman, R. & Han, E. (2012). The War Against Public Sector Collective Bargaining in the US. *Journal of Industrial Relations*, 54(3), 386-408, page 398.

¹³ A. Verma (2005). What Do Unions do to the Workplace? Union Impact on Management and HRM Policies. *Journal of Labour Research*, 26(3), 415-449.

¹⁴ S. Slichter, J. Healy and R. Livernash (1960). *Impact of Collective Bargaining on Management*. Washington: The Brookings Institute.

¹⁵ D. Benjamin, M. Gunderson and C. Riddell (2002). *Labour Market Economics 5th ed.* Toronto: McGraw-Hill Ryerson Ltd.

¹⁶ T. Fang and A. Verma (2002). Union Wage Premium. *Perspectives on Labour and Income*, 3(9) <http://www.statcan.gc.ca/pub/75-001-x/00902/4168247-eng.html> (accessed Aug. 22, 2016).

concluded that while wage gaps between the two groups generally narrowed, the year 1990 witnessed an above-average union wage premium of 20 percent. The authors conclude that, “this is not surprising, given that 1990 was a recession year, and the union effect on wages tends to be larger during recessions.”¹⁷ More recently, Walsworth and Long,¹⁸ studying the relationship between unionization and employment growth, find that the union wage premium in Canada has declined 4.5 percentage points from 2001 to 2006. Results further suggest a significant negative correlation between the magnitude of the union wage premium and employment growth, finding that employment suppression is more sensitive to wages in the service sector as opposed to manufacturing.¹⁹

Counter to the trend of declining union wage premiums noted in Canada, Blackburn in the US found a narrowing of the union-non-union wage gap for females from 1983 to 2005, but found that the trend among males is more complex and largely dependent on observable characteristics²⁰. “In particular, there is no apparent decline in the differential for a male worker with average union characteristics, though there is for a worker with characteristics of the overall sample of men.”²¹ In a comparative study of union density rates across OECD countries, Blanchflower²² finds the probability of being a union-member is related to personal characteristics such as gender, age, race and level of education. A follow up study using UK data finds the union pay premium (inclusive of benefits) though down from post-war highs is still significant²³. While we have witnessed a modest decline in overall union density rates in Canada, roughly 30 percent of the Canadian work force still remains unionized. In the private sector, however, union density rates reached a historical low in 2012 at 15.9 percent.²⁴

¹⁷ T. Fang and A. Verma, page 2.

¹⁸ S. Walsworth and R. Long (2012). Is the Union Employment Suppression Effect Diminishing? Further Evidence from Canada. *Relations Industrielles/Industrial Relations*, 67(4), 654-680.

¹⁹ S. Walsworth and R. Long

²⁰ M. Blackburn

²¹ M. Blackburn, page 416.

²² D. Blanchflower (2006). *A Cross-Country Study of Union Membership*. Bonn, Germany: IZA Discussion Paper 2016. <http://ftp.iza.org/dp2016.pdf> (Accessed Aug. 22, 16).

²³ D. Blanchflower and A. Bryson

²⁴ K. Thorpe.

In a detailed review of the union impact in North America, Peter Kuhn²⁵ writes, “the union wage effect is one of the most-studied questions in the history of labour economics.” From the influential work of Lewis²⁶ to that of Kuhn²⁷ as well as others, estimates of the union-non-union wage differential for workers in North America have been relatively consistent, finding the average wage premium to be around 15 percent²⁸. As noted above, the most recent of these studies finds union wage premiums have declined from 15.6 percent in 2001 to 11.1 percent in 2006.²⁹

To our knowledge, despite the large volume of union wage premium research, no study has estimated the union vs. non-union wage differential in Canada since the Great Recession. This is an important gap (no pun intended) especially in light of the dislocation caused by that event and the push for wage restraint in many jurisdictions. Moreover, no study has yet looked in depth at the subcategories of workers that some might deem vulnerable³⁰ or as we term “traditionally disadvantaged” with respect to wages and union representation. Much work in this well-studied area therefore still remains.

2.1 The Main Research Questions

Our principal concern in the empirical analysis that follows is to isolate the union wage premium for vulnerable workers that could in theory benefit the most from unionisation. This includes those with fewer labour market supports (i.e., those in non-standard employment) and those that have historically faced challenges in the labour market (i.e., women, youth, immigrants, and Aboriginals). We therefore address the following three questions:

Q1: What has happened to union coverage rates for workers in the Canadian labour market between 2000 and 2012 and have traditionally disadvantaged workers been underrepresented over time?

²⁵ P. Kuhn (1998). Unions and the Economy: What we Know: What we Should Know. *The Canadian Journal of Economics*, 31(5), 1033-1056, page 1036.

²⁶ Lewis, H. (1963). *Unionism and Relative Wages in the United States: An Empirical Inquiry*. Chicago: University of Chicago Press.

²⁷ P. Kuhn

²⁸ D. Benjamin, M. Gunderson and C. Riddell. A summary of studies to estimate union-nonunion wage differentials in Canada up to the late 1990s can be found in Benjamin et al (2002).

²⁹ S. Walsworth and R. Long

³⁰ M. Sargeant and E. Tucker.

Q2: Have union wage premium amongst traditionally disadvantaged groups in the labour market been disproportionately affected (in a negative way) between 2000 and 2012?

Q3: What implications do these findings have for both theory and policy?

3. Data and Methodology

The data for the present analysis is obtained from the master files of the Canadian Labour Force Survey (LFS) for the years 2000 to 2012 inclusive. The LFS is a nationally representative survey of Canadians living off reserves and outside of the Yukon, Nunavut and Northwest Territories.³¹ The methodology involves estimating a number of multivariate equations where individual worker earnings are regressed on a vector of wage determining characteristics for various groups at four-year time intervals (i.e. 2000, 2004, 2008 and 2012).³² For illustrative purposes, the estimation equation is:

$$(1) \quad LnW = a + \beta_1 U + \beta_2 X + \varepsilon,$$

where LnW is the natural log of weekly earnings and the focal independent variable, U , denotes a respondent's union status. We define union status to include all respondents covered by a collective agreement regardless of union membership. Previous studies have differentiated between union membership and union coverage, a specification that in some cases has been shown to have a significant impact on the magnitude of the associated wage premium.³³ In Canada, however, the vast majority of employees covered by a collective agreement are also *de facto* union members owing to the "agency shop" privileges that exist in every jurisdiction including federally regulated industries; as a result, we do not distinguish between union membership and union coverage in the paper.

³¹ Statistics Canada (2012) *Guide to the Labour Force Survey*. Catalogue No. 71-543-G. <http://www.statcan.gc.ca/pub/71-543-g/71-543-g2012001-eng.pdf> (accessed Aug. 22, 2016).

³² Andrews, M., Stewart, M., Swaffield, J & Upward, R. (1998). The Estimation of Union Wage Differentials and the Impact of Methodological Choices. *Labour Economics*, 5(4), 440-474.

³³ W. Koevoets (2007). Union Wage Premiums in Great Britain: Coverage or Membership? *Labour Economics*, 14(1), 53-71; M. Andrews, M. Stewart, J. Swaffield and R. Upward (1998). The Estimation of Union Wage Differentials and the Impact of Methodological Choices. *Labour Economics*, 5(4), 440-474.

The variable X denotes a number of observable wage determining characteristics that capture differences in human capital, job-type, firm size, industry and geography. Included in the human capital endowments are variables capturing a respondent's age, marital status and level of education. Variables related to the respondent's job include hours worked, tenure at the current job and whether the respondent's employment is seasonal, contract or casual. Indicators of the respondent's industry of employment are based on the 2007 North American Industry Classification System (NAICS). To account for regional differences in earnings, control variables for province as well as residence in a major urban centre (Toronto, Montreal or Vancouver) are added to the analysis. Finally, the models include a variable denoting whether or not the respondent was employed in the public (versus private) sector acknowledging that substantial wage premiums may exist for some public-sector employees.³⁴

3.1 Defining the "Disadvantaged" in our Sample

The sample is restricted to individuals over the age of 15 years who are employed and report positive (greater than zero) earnings from wages and salaries. Individuals who are self-employed are excluded from the analysis. Estimated union wage premium are first computed for the entire sample in each of the four periods considered in the analysis (i.e., 2000, 2004, 2008, 2012). Separate models are then estimated for each of our five categories of workers who have traditionally faced labour market impediments such as discrimination (i.e., women and Aboriginals) or a lack of domestic labour market experience (i.e., immigrants and youth). The within-group wage comparisons between union and non-union workers include: i) males vs. females; ii) those in standard (full-time, permanent positions) vs. those in non-standard employment relationships (part-time, temporary positions); iii) young vs. older workers; iv) immigrants vs. non-immigrants and, finally v) Aboriginal and non-Aboriginal persons.

In terms of how we define or identify these groups in the data, gender is obtained from a standard male or female identifier,³⁵ full-time permanent refers to respondents who have a permanent job working 30 or more

³⁴ M. Gunderson (1979). Earnings Differentials between the Public and Private Sectors. *Canadian Journal of Economics*, 12(2), 228-242.

³⁵ As of 2012, the Labour Force Survey did not contain more inclusive questions related to gender identity.

hours per week. We define non-standard employment to include anything other than the full-time permanent ‘standard.’ Specifically, this includes respondents whose main job is part-time, seasonal, casual or contract. We define young workers as those aged 15 – 29 years. Immigrants include any respondent who identified as being a landed immigrant (or permanent resident) regardless of the year he/she immigrated to Canada³⁶. An Aboriginal person is defined as any respondent within the appropriate sampling universe who self-identified as belonging to one or more Aboriginal groups. Note that union wage premium for immigrants and Aboriginal persons are only estimated for 2008 and 2012, as these variables were not available in the Labour Force Survey until 2006 and 2007 respectively.

4. Results

4.1 Union coverage rates for Traditionally Advantaged and Disadvantaged Workers in Canada between 2000 and 2012

Table 1 top row displays the proportion of the sample covered by a collective agreement for all workers. Across all employees, union density rates have remained relatively stable over the twelve-year period with union coverage falling a modest 0.8 percentage points from 2000 to 2012. The highest rates of union coverage are observed among those with the highest levels of income. In 2012, for example, the proportion of individuals covered by a collective agreement with incomes above the median was nearly double that of those covered by a collective agreement with incomes below the median. This fact raises the familiar question of causation in union wage rates. It is well established that causality cannot be inferred from studies of this nature that employ only time series data, however, there is often at least an implicit tendency to argue that unions raise the wages of their members. It is important to bear in mind the reverse is also plausible, specifically, as discussed in our introduction concerning the historical role of unions as guarantors of labour market privilege, implying that higher earners are the ones who seek out

³⁶ A relatively small number of respondents identified as being born outside of Canada, however, they did not identify as being landed immigrants or permanent residents. These respondents were considered as part of the non-immigrant population.

unionization in part because they can afford the costs of such associations.

Table 1 also breaks down union coverage by the five traditionally disadvantaged sub-groups in both the beginning and end point periods considered in the study.

Unionization rates for women grew by 1.4 percentage points whereas for men they fell 2.9 percentage points. In fact, by 2012, women had greater union representation than men, reversing a long-standing historical inequity. Among employees with standard jobs (i.e., full-time, permanent employees) unionisation fell 1.8 percentage points from 2000 to 2012, while the proportion of non-standard workers covered by a collective agreement rose 2.2 percentage points in the same period. Young workers had the lowest rates of unionization among all the groups but the proportion of young workers covered by a collective agreement did rise from 19.1 percent in 2000 to 21.5 percent in 2012, while the proportion of unionised workers 30 years of age and older declined 2.6 percentage points in the same period. This trend may be indicative of overall demographic shifts in the workforce, growing demand for unions amongst youth,³⁷ union organizing efforts, or some combination of all three. Finally, while immigrants have unionization rates slightly lower than that of all employees they too grew by 1.1 percentage points, and a slightly higher proportion of Aboriginal workers versus non-Aboriginals were covered by a collective agreement by 2012, reflecting a 3.3 percentage point gain as opposed to a -0.2 percentage point drop for non-Aboriginals. It should be noted that these latter two figures reflect changes between 2008 and 2012 since the LFS data did not collect immigrant or Aboriginal status until after 2006 and 2007 respectively.

³⁷ R. Gomez, M. Gunderson and N. Meltz. (2002). Comparing youth and adult desire for unionization in Canada. *British Journal of Industrial Relations*. 40 (3): 521-542.

Table 1: Collective Agreement Coverage (%) in Canada, 2000-2012

	2000 (1)	2012 (2)	2012-2000 (2)-(1)
All Employees	32.3%	31.5%	-0.8%
Above Median Wage	43.6	40.9	-2.7
At or Below Median Wage	21.1	22.3	+1.2
Males	33.2	30.3	-2.9
Females	31.4	32.8	+1.4
Standard (Full-time Permanent)	34.7	32.9	-1.8
Non-Standard	25.4	27.6	+2.2
Mature Workers (30+)	37.9	35.3	-2.6
Young Workers (<30)	19.1	21.5	+2.4
Non-immigrant	32.5	32.8	+0.3
Immigrant ^a	25.6	26.7	+1.1
Non-Aboriginal	32.8	33.0	-0.2
Aboriginal ^{a b c}	30.8	34.1	+3.3
N	593, 020	645, 784	--

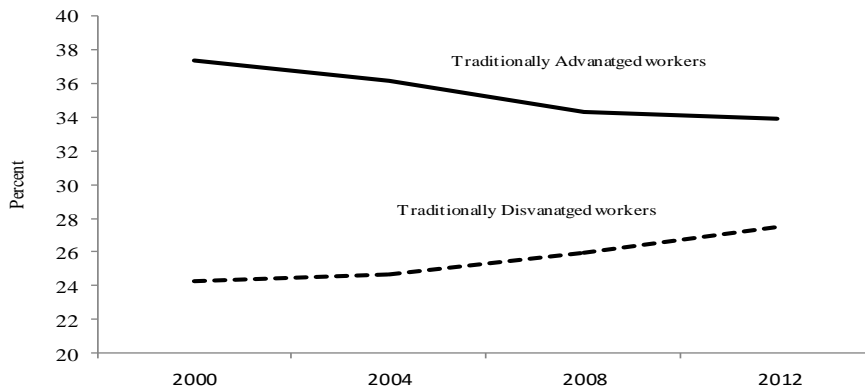
Source: Authors calculations based on Canadian Labour Force Survey data.³⁸

In short, as summarised in Figure 1, where we take the arithmetic average (i.e. this average does not weight components by the size of category)

³⁸ Table 1 Notes: ^a Variables indicating Immigrant Status and Aboriginal identity were not available in the Labour Force Survey until 2006 and 2007 respectively. We take the difference between 2008 and 2012 in these cases. ^b Sample sizes for the Aboriginal and non-Aboriginal populations do not sum to the total sample of all workers due to the fact that the Aboriginal identity question was only asked to respondents born in Canada, the United States or Greenland. Respondents born outside of these areas were coded as missing for the Aboriginal-non-Aboriginal indicators. ^c Proportions for the Aboriginal sub-group were estimated using a unique sampling weight specifically included in the Labour Force Survey to allow for comparisons to be made between Aboriginal and non-Aboriginal populations.

union coverage rates for all disadvantaged categories of workers found in Table 1 between 2000 and 2012 and compare that rate to the advantaged categories, we see that although unions are still more strongly represented amongst traditionally advantaged groups, the rates of unionisation between the disadvantaged and advantaged are converging, with rises in membership rates apparent in all categories of “vulnerability” observed in our study.

Figure 1: Unionisation (%) Rates for Traditionally Advantaged versus Disadvantaged Workers in Canada, 2000-2102



Source: Authors calculations from Table 1 figures based on Canadian Labour Force Survey (LFS) data³⁹.

4.2 Union Wage Differentials for Traditionally Advantaged and Disadvantaged Workers in Canada between 2000 and 2012

Table 2 compares raw mean weekly earnings, expressed in 2012 constant dollars, for all groups by collective agreement coverage for 2000 and 2012 respectively. All groups experienced earnings growth over the twelve-year period and in all cases, the mean wages for unionised workers were higher than those not covered by a collective agreement.

In 2012, the absolute raw union wage advantages were largest for non-standard workers followed by those for females, and young workers

³⁹ Note: Traditionally advantaged worker category includes the arithmetic average union coverage rate amongst high pay, male, standard employed, non-immigrant, mature and non-Aboriginal workers. Traditionally disadvantaged includes the average union coverage rate amongst low pay, female, non-standard employed, immigrant, youth and Aboriginal workers.

respectively. Conversely, raw union wage gaps were smallest among full-time permanent workers and males. The fact that the raw union wage differentials were smallest for males and full-time permanent workers -- groups that tend have high and relatively stable rates of union density and also tend to experience the highest earnings regardless of a collective agreement -- may point to spillover or 'threat' effects that unions have on non-unionized firms in a given industry or for a particular group where there exists a well-established union presence. The fact that some of the highest raw union wage gaps are observed among the most traditionally vulnerable groups, where union density tends to be lower, may also suggest an important role for unions in raising earnings of historically lower paid workers.

Table 2: Weekly Real Wages (\$) in Canada by Union Status, 2000-2012

	2000			2012			2012-2000
	Union (1)	Non-Union (2)	Union Gap Diff (U - NU) (3)	Union (4)	Non-Union (5)	Union Gap Diff (U - NU) (6)	Change in Gap Diff ¹² -Diff ⁰⁰ (6)-(3)
All Employees	\$911	\$726	\$185	\$ 982	\$814	\$168	- \$17
Males	1016	875	+141	1071	951	+120	-21
Females	791	570	+221	898	669	+239	+18
Standard	993	877	+116	1085	977	+112	-4
Non-Standard	578	336	+242	635	387	+248	+6
Mature Workers 30+	963	855	+108	1036	942	+94	-14
Young Workers <30	660	490	+170	745	534	+211	+41
Non-Immigrant ^a	n/a	n/a	n/a	992	817	+175	n/a
Immigrants ^a	n/a	n/a	n/a	931	802	+129	n/a
Non-Aboriginal ^a	n/a	n/a	n/a	996	823	+173	n/a
Aboriginal ^{a b}	n/a	n/a	n/a	942	724	+218	n/a
N	593,020			645,784			

Source: Authors calculations based on Canadian Labour Force Survey data.⁴⁰

⁴⁰ Notes: Weekly earnings are expressed in 2012 dollars using CPI information from: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ46a-eng.htm>
Variables indicating Immigrant Status and Aboriginal identity were not available in the Labour Force Survey until 2006 and 2007 respectively. These categories were left out of the analysis. ^a Immigrant and Aboriginal indicators were not available in the Labour

Interestingly, over time we see that despite rising density within these groupings, the union wage advantage has grown amongst the most traditionally vulnerable (i.e., women, non-standard workers and youth). This can be seen in columns 3 and 6 of Table 2 as well as the final column, which measures the change in the wage advantage (or union wage gap) in each period to see if the trend is one of growth in the positive union wage differentials or of decline. The results are abundantly clear: for non-union workers in the most vulnerable categories, a lack of unionisation implies a weekly earnings loss in real terms since 2000 of between \$41, \$18 and \$6 dollars respectively for young workers, females and those in non-standard jobs (see last column in Table 2). Conversely this implies equivalent gains of \$41, \$18 and \$6 for all the unionised workers in the traditionally disadvantaged sub-groups just mentioned.

The one exception appears to be immigrants. Not only do immigrants earn less than non-immigrants, the presence of unions appears to exaggerate this difference rather than narrow it (e.g., the union differential is \$61 weekly dollars in favour of non-immigrants whereas for non-union workers in the immigrant/non-immigrant category the non-immigrant advantage is only \$15), something not found for all other groups just mentioned. This finding is not a uniquely Canadian phenomenon but has been found in other countries as well.⁴¹

The raw gaps however could potentially be masking observable differences in the characteristics of union and non-union workers in all relevant groups, such as education or occupational status. As such, we should attempt to control for as many of these observable characteristics as possible before drawing any definitive conclusions. This is what we do in Table 3, which displays the estimated union wage premium, after controlling for individual and other observed characteristics that influence earnings, for the various groups considered in the analysis at four-year intervals from 2000 to 2012.

Force Survey in the year 2000. ^b Mean wages for the Aboriginal population were computed using a unique Aboriginal weight provided in the Labour Force Survey.

⁴¹ This is a finding also found in Irish data where Irish nationals appear to enjoy greater benefits from union membership than immigrant workers. See T. Turner, C. Cross, and M. O'Sullivan. (2014). Does union membership benefit immigrant workers in 'hard times?'. *Journal of Industrial Relations*. 56(5): 611-630.

For ease of interpretation, in Table 3 point estimates are displayed as percent increases in weekly wages for unionised relative to non-unionised workers.⁴²

With the exception of young workers -- where the estimated union wage premium rose slightly (0.2 percentage points) between 2000 and 2012 -- estimated union wage premium for all other groups either fell, or in the case of immigrant workers, remained the same, over the time period considered in the study. The decline was largest in absolute terms for Aboriginal workers, where the union wage premium fell 7.3 percentage points from 2008 to 2012. (As noted, data on Aboriginal persons was not available in the Labour Force Survey until 2007). Estimated union wage premia also fell by 6 and 3.9 percentage points for non-standard workers and females respectively.

Despite the declines, however, union wage premia remain the highest among non-standard and young workers at 18.6 and 14.1 percent respectively in 2012 and in every case but that of immigrants (where there is no statistical difference), unionised workers in traditionally disadvantaged categories enjoy a higher union wage advantage than their unionised advantaged counterparts. This is important as it speaks to the union role in narrowing the long-standing earnings gaps that exist between traditionally advantaged and disadvantaged groups in society.

As we did with union coverage, in Figure 2 we show this by displaying both levels and trends in union wage differentials by plotting the arithmetic average of the union wage premium for traditionally disadvantaged categories of worker for which we have consistent data from 2000 to 2012 (i.e., females, those in non-standard employment, and youth) versus their traditionally advantaged counterparts (i.e., males, those in standard employment, and older workers). Figure 2 clearly shows the larger wage premium achieved by traditionally disadvantaged labour market groups (top dotted line) over their more advantaged counterparts (bottom dark line) and the maintenance in the differential over time at roughly 10 percentage points.

⁴² It is not correct for point estimates to be automatically multiplied by 100 from dummy variables. This only works for continuous variables. The smaller the coefficient on a dummy variable the closer it is to the percentage change, but this is still only an approximation. We use a well-established formula from Halvorsen and Palmquist (1980) to convert the point estimates of union wage premium from dummy variables to the percentages found in Table 3.

Table 3 Estimated Union Wage Premium (%) in Canada, 2000-2012

	2000 (1)	2004 (2)	2008 (3)	2012 (4)	2012- 2000 (4)-(1)
All Employees	10.1%	8.0%	7.0%	6.9%	-3.2%
Males	7.0	5.9	4.9	5.4	-1.6
Females	11.5	8.8	8.5	7.6	-3.9
Standard (FT Perm)	4.0	2.7	1.5	1.7	-2.3
Non-Standard	24.6	20.3	20.3	18.6	-6.0
Mature Workers > 30	8.3	6.4	4.9	4.5	-3.8
Young Workers <30	13.9	12.5	12.5	14.1	+0.2
Non-immigrant	n/a	n/a	7.0	7.1	+0.1
Immigrant	n/a	n/a	6.7	6.7	0.0
Non-Aboriginal	n/a	n/a	6.6	7.0	+0.4
Aboriginal ^{a b c}	n/a	n/a	15.5	8.2	-7.3
N	593,020	593,208	643,460	645,784	

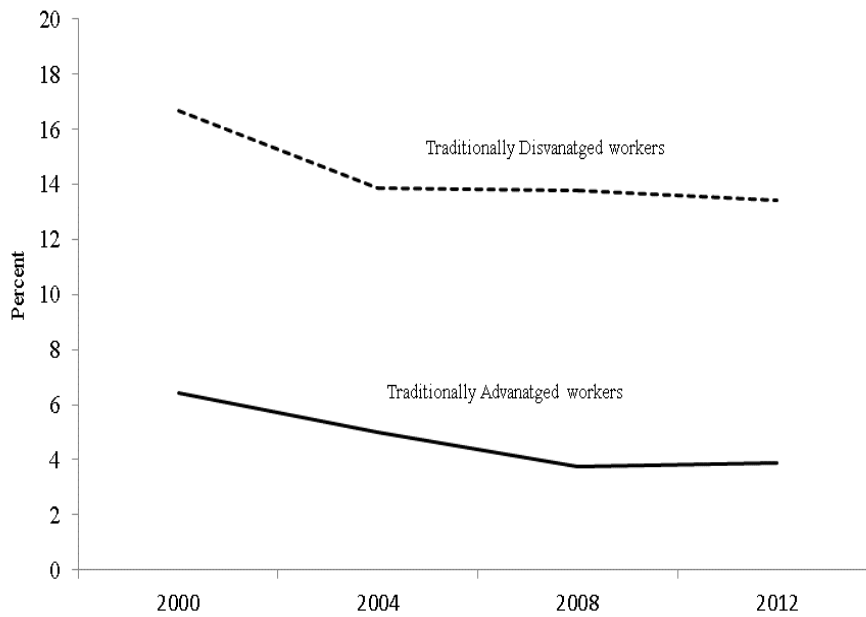
Source: Authors calculations based on Canadian Labour Force Survey data.⁴³

What is also important to note from Figure 2 is that *relative* to their traditionally non-disadvantaged counterparts, the decline in the wage premium has been slightly less severe amongst non-standard workers than

⁴³ Each cell represents the coefficient from a log wage estimate of union coverage expressed as the percentage wage gain for a worker in each category after having controlled for all variables mentioned in section 3. Conversions from point estimates to percentages were based on Halvorsen and Palmquist (1980). ^a Variables indicating Immigrant Status and Aboriginal identity were not available in the Labour Force Survey until 2006 and 2007 respectively. ^b Models for the Aboriginal sub-group were estimated using a unique sampling weight specifically included in the Labour Force Survey to allow for comparisons to be made between Aboriginal and non-Aboriginal populations. ^c Sample sizes for the Aboriginal and non-Aboriginal populations do not sum to the total sample of all workers due to the fact that the Aboriginal identity question was only asked to respondents born in Canada, the United States or Greenland. Respondents born outside of these areas were coded as missing for this variable only.

standard workers and in the case of youth the change in union wage premium between 2000 and 2012 is positive. In other words, on the whole, traditionally disadvantaged workers with access to unionisation are faring relatively better than their traditionally advantaged counterparts.

Figure 2: Union Wage Premium (%) for Traditionally Disadvantaged versus Advantaged Workers in Canada, 2000-2012



Source: Authors calculations based on Canadian Labour Force Survey (LFS) data and Table 3 cell entries⁴⁴.

4.3 Implications for Traditionally Disadvantaged Workers

As described above we see that in almost every “dimension” of vulnerability or disadvantage used in the paper, unions appear to have a relatively larger positive impact on workers. For example, unions help those at the bottom of the pay scale much more than those at the top. They also especially help raise wages for: i) females relatively more than males; ii) young workers relatively more than older workers; and iii)

⁴⁴ Note: Traditionally advantaged worker category includes the arithmetic average union wage premium of male, standard employed, and mature workers. Traditionally disadvantaged worker category includes the average union wage premium of female, non-standard employed, and youth workers.

workers in non-standard jobs as compared to those working in standard ones. More recent evidence, since 2008, also shows that unions offer earnings boosts for Aboriginals that are greater than the effect for workers overall. In addition, despite the overall share of union coverage remaining roughly constant since 2000, the unionisation rate of those in traditionally disadvantaged groups actually rose, offsetting declines amongst traditionally advantaged groups.

For anyone concerned with the corrosive effects of increasing inequality on society and on the declining purchasing power of consumers required to stimulate private investment and jobs, these findings point to a very well known cure: by improving access to union membership for workers desiring voice and representation (something in keeping with recent Canadian Supreme Court rulings on access to Freedom of Association rights at work)⁴⁵, governments may well be inadvertently solving several other economic and social problems at once. Given the rise in inequality observed across most developed economies, these findings point to the powerful redistributive role that is still being played by organized labour.

Having said this, our findings are subject to the usual set of caveats in empirical work of this kind. First, the one exception in positive associations appeared to be for immigrants where the union wage premium was greater for non-immigrant unionists than immigrant unionists, exaggerating the earnings differential found between the groups already. Second, there are likely strong selection effects into both unionised jobs and into permanent full time work that are not being captured in our estimations. Third, though the LFS has the advantage of providing a large sample and many observed control variables, it does not contain information about non-wage benefits, which is where unions are likely shifting their influence as wage gains become harder to achieve. Finally, our models did not control for the presence of children in the household, a smaller point that could be fixed in future work and which may be significant for our estimates in the male and female models.

5. Conclusion

As noted in a recent survey of union wage effects: “Politicians on both sides of the Atlantic have recently called for the removal of bargaining

⁴⁵ Adams, Roy J., “Bringing Canada’s Wagner Act Regime into Compliance with International Human Rights Law and the Charter,” *Canadian Labour and Employment Law Journal*, (2016), 19:2 CLELJ 365.

rights from workers in the name of wage and employment flexibility, yet unions often work in tandem with employers for mutual gain based on productivity growth. If this is where the premium originates, then firms and workers benefit. Without union's bargaining successfully to raise worker wages, income inequality would almost certainly be higher than it is."⁴⁶ We are in agreement with Bryson's assessment and would add that based on Canadian data at least, unions appear to be mitigating the effects of greater polarization even more strongly for those traditionally seen as most vulnerable in the labour market.

Our data show that despite a general perception of declining bargaining power, unions continue to maintain representation rates overall and even appear to be gaining coverage amongst women, non-standard workers, youth and amongst Aboriginals (see Figure 1). Unions also generate a wage premium in Canada, one which again is relatively larger for traditionally disadvantaged labour market participants (see Figure 2). Taken together, the results of this study clearly suggest that in every dimension of vulnerability or disadvantage used in the paper, unions appear to have a positive impact on workers' earnings that is larger than that of the overall labour force. The findings support the powerful redistributive role that unions can still play in contemporary economies, albeit over a smaller share of the workforce in most countries.

Throughout the study we make the point that we are not testing (nor arguing) whether unions are the sole or "true cause" of higher wages, nor are we trying to ascribe how much of the union premium (based on controls for observable differences) is being captured by true "union effects" as opposed to unobserved differences amongst workers that we simply cannot capture and which may be correlated with unionization (i.e., individual productivity). Rather, we assume that any of these unobserved differences are not systematically related *within* groups of workers in our analysis but rather between individuals in each category (i.e., between young and old workers but not within each age group, after controlling for all observables etc.). In this way then, the differences in any wage premium observed within these groups can be more confidently ascribed to differential union influence.

⁴⁶ A. Bryson, p.10.

ADAPT International Network



ADAPT is a non-profit organisation founded in 2000 by Prof. Marco Biagi with the aim of promoting studies and research in the field of labour law and industrial relations from an international and comparative perspective. Our purpose is to encourage and implement a new approach to academic research, by establishing ongoing relationships with other universities and advanced studies institutes, and promoting academic and scientific exchange programmes with enterprises, institutions, foundations and associations. In collaboration with the Centre for International and Comparative Studies on Law, Economics, Environment and Work, (DEAL) the Marco Biagi Department of Economics, University of Modena and Reggio Emilia, ADAPT set up the International School of Higher Education in Labour and Industrial Relations, a centre of excellence which is accredited at an international level for research, study and postgraduate programmes in the area of industrial and labour relations. Further information at www.adapt.it.

For more information about the E-journal and to submit a paper, please send a mail to LS@adapt.it.

