

# Mind the Gap

**Gender-Based Income Disparities Among Recent Canadian PSE Graduates** 

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# **Executive Summary**

Progress towards closing the gender wage gap has spurred skepticism about its continued presence within contemporary labour markets. Moreover, evaluations of the gender pay disparities are often criticized for their simplistic use of: (1) unadjusted pay differentials; and (2) comparisons of dissimilar groups of men and women.

Through this report we draw on the **2018 National Graduates Survey** (NGS) to perform an analysis of gender-based income differentials which is responsive to much of the above mentioned skepticism. We do so by utilizing various statistical techniques to estimate the adjusted gender income gap among recent Canadian graduates, and through performing a series of sub-sample analyses to make more "apples-toapples" comparisons.

Our findings demonstrate that, far from being "a thing of the past," net differences in the income of recent male and female PSE graduates are highly robust to sub-sample analyses and model specifications. Indeed, we see no indication of waning gender effects vis-a-vis recent work in this area with the NGS or other Canadian data sources.

We utilize these findings to reflect on ongoing discourses about genderbased labour market disparities in western nations like Canada. In particular, we take the opportunity to highlight directions for future research and provide direction for future policymaking in this space.

## Introduction

Gender-based labour market discrimination serves as a serious impediment to the prosperity of both individual women, the organizations they work for, and the societies that they live in. There is growing recognition that gender pay equity is not just a social justice issue, but rather, an issue that is intricately tied to the economic performance of jurisdictions. In Ontario, research commissioned by the provincial government has suggested that closing the gender wage gap (GWG) could add up to \$18 billion to the gross domestic product (GDP) of the province<sup>1</sup>. Meanwhile, the McKinsey consulting group has argued that progress on gender equity could help fuel the economic growth of Canadian and global economies.<sup>2,i</sup> This growing consensus over the relationship between gender pay equity and macro-economic development has re-invigorated efforts to close the GWG, progress on which has slowed or stalled across many countries.3

These recent efforts include new legislation implemented by the Canadian federal government - which came into effect in the summer of 2021 - that aims to promote a more "proactive pay equity regime" across federally regulated economic sectors.4 Broader efforts are also being made to support women's success in industries where they have traditionally been marginalized, including through Innovation, Science and Economic Development Canada's (ISED) Women Entrepreneurship Strategy," and to improve their representation across corporate leadership - something being actively promoted through the federal government's "50-30" challenge. 5 Lastly, we have also seen strategic investments in programs that will facilitate women's labour force participation and reduce unpaid work (e.g., subsidized child care).6

Despite the above-mentioned momentum, and growing commitment by various governments and corporate entities to improve gender pay equity, skepticism towards the existence and likely root causes of gender pay gaps are routinely expressed in popular media,7 as well as more quietly within "pockets" of academia and government. Typically, we have seen skepticism tapping into one or both arguments sketched out below:

i In 2017, McKinsey estimated that closing the gender pay gap could help add \$150 billion to Canada's GDP by 2026. McKinsey similarly estimated in 2015 that faster progress towards gender equity could add roughly \$12 trillion to the global economy by 2025. Similar estimates have been provided in the United States, where the Institute for Women's Policy Research (2017) has argued that closing the GWG could add over \$500 billion in wages to the American economy. ii The WES is a multi-faceted \$6 billion investment by the federal government which aims to improve financial support for women-owned businesses, as well as facilitate their access to the networks and expertise they require to grow.

- The Need for Fair Comparisons. First, skeptics often suggest that broad comparisons of men and women are misleading.8 Instead, they suggest that comparisons be made between as homogenous a group of men and women as possible--preferably those within the same industry or occupational categories and life circumstances. They suggest that the result of these more focused comparisons is that the pay gap is shrunk, or even reversed, in some scenarios. 9 Such heterogeneities in the gender pay gap have traditionally led some to conclude that existing disparities may be "almost entirely the result of the individual choices" that one makes with respect to training and employment.10
- Raw Differences in Earnings are Misleading. Second, and as noted by Gould et al. (2016) in the American context, many suggest that focusing on raw differences in the median earnings of men and women is misleading. 11 For example, in an article published by Time Magazine in 2014, American scholar and political commentator Christina Hoff Sommers<sup>12</sup> argued that "the wage gap narrows to the point of vanishing" when relevant factors are statistically controlled for, including education, profession, and hours worked. This view persists in GWG discussions to this day, with some suggesting that "life is much more complicated than a simple set of averages." 13

Through this study, we draw on the 2018 National Graduates Survey (NGS) to address these concerns which fuel skepticism about the GWG. We do so not as activists - with the explicit intent of countering the points raised by skeptics - but rather, as empirical researchers interested in testing whether we can indeed "break" gender income disparities by i) using a series of statistical techniques to estimate the adjusted gap, net of available controls, and ii) performing an array of sub-sample analyses of relatively more comparable men and women.

Our extensive exploratory analyses of the 2018 NGS reveal that, though variation certainly exists in the estimated size of the gap across sub-groups, it remains remarkably robust to controls and statistically significant. We see no evidence that gender-based income disparities are a "myth." At the same time, the adjusted income differences we observe between men and women are much smaller than the commonly reported raw gaps. We utilize these findings to identify plausible policy solutions to address pay disparities in Canada and other countries with similar characteristics.

### Research on the Gender Wage Gap in Canada

Numerous studies have examined the gender pay gap in Canada using a range of available datasets, including the Census, 14 National Household Survey, 15 the Labour Force Survey, 16 the Survey of Labour and Income Dynamics, 17 and other sources. 18 Such research has routinely verified the existence of a significant pay gap between Canadian men and women. Indeed, we are not aware of any Canadian peer-reviewed research which has managed to estimate a null or reversed gender pay gap.

One notable advantage of the National Graduates Survey (NGS) over other datasets commonly used in the existing literature is that it affords access to detailed information on a large and, in some respects, relatively homogenous group of college and university graduates. 2018 NGS respondents are sampled from the 2015 graduating classes of all recognized and publiclyfunded post-secondary Canadian institutions. As such the NGS allows for more "applesto-apples" comparisons of individuals holding similar credentials at an early career and life stage. Canadian scholars have thus repeatedly drawn on this dataset to explore gender pay differentials. 19 The resulting work has produced relatively consistent findings as it pertains to the existence of a male earnings advantage. For example, using nine waves of the NGS (1988-2007), Boudarbat & Connolly (2013) found that female respondents earned 6-14% less than men-net of all available controls. Moreover, they found that personal and job attributes explained only a small portion of the observed gap. Drawing on four NGS cohorts (1986-2000), Smith et al. (2017) observed that the gender pay gap among college graduates increased from .08 to .15 log points across time. Similar trends were observed among university graduates in a followup study also drawing on the NGS.<sup>20</sup> Meanwhile, drawing on the more recent 2013 NGS, Jehn, Walters & Howells (2019) estimated that women earned approximately 10.5% less than men.

To date, however, the 2018 NGS—the most recent iteration of the survey—has yet to be used for gender pay gap analyses. iv This means that the most recently published studies 21 are drawing on data from respondents that graduated more than a decade ago. Patterns they have identified may not be representative of present-day trends.

In addition, there are two general deficiencies we have observed in recent NGS-based research exploring gender pay disparities. First, in studies like Jehn et al.'s (2019), scholars have excluded important controls, such as hours worked and industry employed in, from their statistical models. Both of these are important contributors to the gender income gap. Second, though efforts have been made to examine trends across cohorts or areas of the income distribution,<sup>22</sup> there has been only limited effort to model gender-based disparities across more homogenous subsets of recent graduates to limit both observed and (potentially) unobserved heterogeneity. Our aim through our exploratory analyses is to be sensitive to these issues.

iii It excludes graduates of private career colleges and apprenticeships, as well as those individuals that lived outside of the country at the time the survey was conducted.

iv The notable exception to this statement being a master's thesis (Ahmed, 2020) drawing on the public use files of this survey, which are limited vis-à-vis the master files in numerous ways. Most notably, it lacks a continuous measurement of income.

v Smith & Waite (2019) perform some sub-sample analyses by excluding graduates of professional programs. Meanwhile, Ahmed (2020) fitted separate models for individuals employed part-time.

## Plan for Analysis

Through this study, we leverage the most recent 2018 NGS to perform an extensive set of analyses of gender pay disparities (see Table 1). We begin by fitting an ordinary least squares (OLS) regression model of incomevi using the entire NGS sample, to get a sense of gender-based income differences across the broader population. The first iteration of this model (Model 1) contains only the gender "dummy" predictor. We subsequently add blocks of predictors into subsequent iterations of the models, including demographics (Model 2), education- (Model 3) and then work-related variables (Model 4). This strategy allows us to observe fluctuations in the estimated gender income gap as we account for more factors that could potentially explain differences in men and women's pay.vii

Table 1. Plan for analysis using 2018 NGS sample

#### OLS among entire sample Model 1 Model 2 Model 3 Model 4 Gender Gender Gender Gender "dummy" pre-"dummy" pre-"dummy" pre-"dummy" predictor dictor dictor dictor **Demographics Demographics Demographics** Education Education Work-related

- Refit OLS on various graduate sub-samples Step 2
  - Single/married
  - With or without children
  - Racialized/White
  - Work more/less than 40 hours a week
  - Industry
  - Fields of study

After running this initial model, we refit it on various graduate sub-samples, including those respondents who i) are single/married, ii) have children or not, iii) identify as racializedviii or white, and iv) work more/less than 40 hours a week. Our goal through these sub-sample analyses is to estimate the income gap across more homogenous groups of men and women. This approach is meant to directly address criticisms that researchers are not comparing "apples-to-apples" when looking at gender pay differences. In addition to sub-sample analyses, we experiment by running additional iterations of our saturated model utilizing key interactions between gender and industry of employment, field of study, race and disability status. This allows us to further explore the intersections of gender and numerous other variables that prompt inequality within the labour market.ix

vi Given the skewed distribution of income, we utilize the natural logarithm of annual income in all analyses.

vii We compare the results of our saturated OLS model to those applying the Heckman (1979) correction to account for sample selectivity, given that our dependent variable (income) may not be randomly observed.

viii While Statistics Canada uses the term "visible minority", we use the term "racialized" to recognize the ongoing process of power relations from which these categories are constructed.

ix In addition to our OLS modeling, we re-run our analyses using the Oaxaca-Blinder (OB) decomposition method using all

### **Summary of Findings**

Through this section we provide what is meant to be a brief and accessible summary of the seven primary findings (see Table 2) produced through our analyses. As this report is designed to be easily digested by a policy audience, the body of this section focuses solely on estimated raw (Model 1) and adjusted (Model 4) gender differences in income. We invite interested readers to consult those, along with our regression tables in Appendix 1.

Table 2. Male earnings advantage (%) across sub-samples, by model

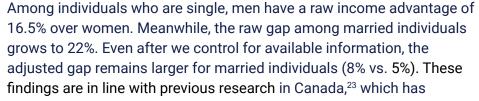
	Model 1 "Raw"	Model 4 "Adjusted"	
Full sample	17.5	6.3	
Single people	16.5	5.0	
Married people	22.0	8.0	
With children	33.2	12.4	
Without children	14.9	4.8	
White	19.8	7.7	
Racialized	17.2	6.4	
Working 40 or more hours	9.6	10.0	
Working less than 40 hours	11.4	7.0	



The raw income gap shrinks considerably after controls. Our initial model (Model 1) fitted on the entire NGS sample shows that there is a sizable raw income gap, with men earning 17.5% more than women. However, once we account for all available information (Model 4), this gap shrinks all the way down to 6.3%. We interpret this to mean that the majority – almost two thirds – of the gender income gap in our sample is attributable to observable differences between men and women. As such, we can safely conclude that simply adjusting for some of the most pertinent demographic, educational and work characteristics does not make the gap disappear, as some commentators suggest.

the predictors in our saturated OLS model. Additionally, we refit our main models utilizing a Heckman correction to evaluate if our findings were unduly influenced by sample selectivity (e.g., selection into the labour force). We run these as robustness checks of sorts, and do not cover them at length within the text. However, interested readers are free to consult the results in Appendix 1. This combination of methods allows us to examine the gender pay gap from various vantage points, and in accordance with standards across various disciplines. While in Canadian sociology (e.g., Davies et al., 1996; Jehn et al., 2019) standard OLS models - otherwise dubbed the "dummy variable approach" (Preston & Birch, 2018, p. 629) - have often sufficed, economists rely on other techniques (e.g., Schirle, 2015). Our combination of these methods is in line with empirical studies in Canada and elsewhere (e.g., Aslam, 2009; Waite, 2017) that use multiple estimation strategies.





The income gap is smaller among single women, but only slightly.

observed that the GWG is smaller among individuals who are young and unmarried. However, our findings do not support assertions made by American conservative commentators, like Thomas Sowell, that young, single women with comparable work experience "earned slightly more than men of the same description".24 Indeed, the opposite appears to be the case.

WITH CHILDREN VS. WITHOUT CHILDREN **GENDER WAGE GAP** FOR WOMEN (ADJUSTED) The income gap is much larger for women with children. The raw difference between men and women with children (33.2%) is much larger than that observed among their counterparts without children (14.9%), as well as our broader sample (17.5%). Indeed, this is the largest gap we observe across any sub-sample analyses. Even after controls, the estimated income gap remains proportionally larger for women with children (12.4% vs. 4.8%). This is not a surprising finding, given that numerous studies have shown that having children more negatively affects women's earnings<sup>25</sup> and perceived employability.<sup>26</sup> However, once again, our findings stop well short of supporting claims in some popular media articles that "women in their 20s without children out-earn men".27

Whether you look at white or racialized individuals, the size of the gender income gap remains relatively similar. The raw gap for white respondents (19.8%) is slightly larger than that of racialized individuals (17.2%), with the difference shrinking even more once we introduce controls into our model (7.7% vs. 6.4%). These findings are somewhat in line with Canadian research<sup>xi</sup> which has found a slightly smaller gender gap among racialized men and women.

The raw gap shrinks when we focus on men and women with a similar **number of weekly hours worked.** While the raw gap in our broader sample is 17.5%, we see it shrink when we look at those who work fewer than 40 hours (11.4%) or 40+ hours (9.6%). The relatively greater parity we observe is in line with existing research which notes that the intensity of labour force participation is a major driver of gender disparities in the labour market.xii

FOR WOMEN (ADJUSTED)

WHITE VS. RACIALIZED **GENDER WAGE GAP** 

x While we would have liked to examine differences in the GWG for Indigenous men and women, it is important to note that the size of this group (670 respondents) is quite small given the number of controls in our model and therefore estimates would have had to be interpreted with caution.

xi See Schirle & Sogalu (2020), and Yap (2010).

xii Antonie, Gatto & Plesca's (2018) analyses of the Labour Force Survey (2000-2018) found that there was no statistically significant pay gap between women and men who worked part-time. In part, they

Indeed, Finnie & Wannell's (2004) analyses of earlier waves of the NGS (1982-1990) led them to conclude that the number of hours worked is the most influential predictor of the earnings gap for Canadian university graduates.<sup>28</sup> Once we add the relevant controls to these models, we see the adjusted gap among those that work more hours grow slightly (10%), and see more sizable shrinkage among those with fewer than 40 hours (7%).

The gap varies considerably across industry groups. Inserting an interaction between gender and industry group into our saturated OLS models allows us to see that men tend to have a pronounced earnings advantage across most industries. Their greatest observed advantage is in manufacturing, where men earn 13.8% more than women. But, their advantage is reduced in the arts/entertainment services (2.7%) and "other" (1.6%) categories, and slightly reversed in the education, health and social services (-1.8%) grouping.xiii As such, there we see evidence of heterogeneity in the gap across industry categories. This finding is in line with existing reports that break down gender-based disparities ross industrial sectors or occupational groups.xiv It is important to emphasize, however, that further work is necessary here to explore these gaps, as we are utilizing very broad industry groupings.

Table 3. Estimated male earnings advantage across sector

	% Difference	
Education, health, and social services	-1.8	
Other	1.6	
Arts and entertainment services	2.7	
Public administration	4.7	
Wholesale, retail, and transportation	9.4	
Primary industries	11.6	
Information/culture industries	12.1	
Manufacturing	13.8	

explained this as being due to the differential selection of more productive women into part-time employment. Lastly, Pelletier, Patterson, & Moyser's (2019) analyses, also of the Labour Force Survey (1998-2018), similarly found that part-time workforce status explained roughly 9.2% of the gender pay gap in

xiii To estimate these differences, we first utilized Stata's margins command to estimate the linear predictions from our interaction term - assuming the sample mean across all controls. Then, we subtracted the difference in the predicted income for men and women within each industry category. Using such an approach, we are not able to test whether differences are statistically significant and can only see if estimates for these groups overlap.

xiv Using Glassdoor salary data, Chamberlain (2016) observed that female social workers earned approximately 7.8% more than male counterparts. Meanwhile, in other categories, such as event coordinator logistics manager, the adjusted gap was near zero. Similar data has been published by the Institute for Women's Policy Research (2020) for occupational categories. These data show that across diverse categories such as registered nurses (96.9%), cashiers (97.8%) and bookkeeping, accounting and auditing clerks (97.4%) women's median earnings as a percentage of men's is close to 100%.

The income gap differs across fields of study. Again, as with industry groupings, men are observed to enjoy a significant earnings advantage across most areas. The largest advantage is in engineering, computer science and math (10.4%), followed by the "other" (9.2%) and business (8.6%) categories. The one exception is health, where men and women earn almost identical figures.xv Again, this is a finding that is in line with existing research, which has long appreciated the contribution of fields of study on the gender pay disparities in Canada. 29,xvi

Table 4. Estimated male earnings advantage across fields of study

	% Difference	
Health	0.3	
Science	2.1	
Liberal	5.6	
Education	5.9	
Business	8.6	
Other	9.2	
Engineering +	10.4	
Manufacturing	13.8	

xv To estimate these differences, as with industry groups, we first utilized Stata's margins command to estimate the linear predictions from our interaction term - assuming the sample mean across all controls. Then, we subtracted the difference in the predicted income for men and women within each field of

xvi Mean, age-adjusted annual earnings for men and women are known to differ greatly by field of study. At the one end of the spectrum, Frank & Frenette (2016) note that women with a B.A. in Social Work have a roughly \$300 advantage over men. However, they earn approximately \$40,000 less within the Geological and Earth Sciences. More broadly, estimates produced using the 1991 Census-Longitudinal Worker File suggest that cumulative earnings - over a 20-year period - for men and women differ greatly across fields of study, from \$191,800 among B.A. holders in the Fine and Applied Arts to \$872,400 among those with a B.A. in Engineering (Otrovsky & Frenette, 2014). Using the NGS, Boudarbat & Connolly (2013) estimated that fields of study account for roughly a third of the explained gender pay gap, at the conditional mean (p. 1054).

## Discussion

The patterns observed through this report provide evidence of a highly robust gender income gap among recent Canadian PSE graduates, one that survives both adjustment for an extensive set of confounders, as well as more "apples-to-apples" comparisons performed via several sub-sample analyses. In none of our models do we see evidence of a breakdown of statistically significant differences in income. The gender income gap proves to be far from a manufactured "myth." We are cautiously optimistic that this main finding should—we hope—quell some of the stubborn skepticism we see around discussions of gender disparities. Below, we take the opportunity to briefly discuss both the limitations and policy implications of our findings. We hope this discussion inspires inclusive dialogue about gender disparities in Canada and similar jurisdictions.

### Limitations

Though we are confident in the robustness of our findings, given both the extensive analyses we carried out and the general alignment between our findings and those with the existing literature, there are important limitations to our work that we must draw attention to. First, though we control for a host of important factors, the NGS lacks consequential groups of controls. It would be useful, for example, to have access to literacy and numeracy scores which are available in the Longitudinal International Study of Adults (LISA), but not in the NGS. As previous RIES reports<sup>30</sup> have shown, these metrics have great predictive power when it comes to predicting both income and employment status. Here, there may be future opportunities to draw on administrative linkages between the NGS and datasets within the Education and Labour Market Linkage Platform (ELMLP). The latter contain academic K-12 performance data (e.g., grades) in certain provinces which could serve as useful (albeit imperfect) proxies for ability. Second, the NGS contains no information that allows us to directly evaluate respondent's personalities or attitudes. European research has found that "Big 5" personality traits can explain more than 10% of the gender wage gap,31 and that men's lower fear of failure plays an important role in amplifying wage differentials.<sup>32</sup> Ideally, layering these two sets of controls into our models, alongside measures of familial responsibilities, could provide a more nuanced understanding of income differences between men and women.

A last limitation of the NGS is that, despite being a relatively large survey, it does not allow for more in-depth analysis of specific occupations or industry groups, as would be possible through the Labour Force Survey.

The above-mentioned limitations to the NGS have important implications for how we can interpret the gender income gaps estimated through this report. Most importantly, we cannot confidently attribute them solely to labour market discrimination. The 6.3% adjusted income gap we observe in our main saturated model will be a partial function of both the potential discrimination that goes on in labour markets, as well as unobserved differences between men and women. Further work is needed, particularly towards building more robust data sources, for us to produce estimates of gender pay disparities that we can attribute solely to discrimination.

One remaining important line for future, policy-relevant research entails looking at gender-based income disparities through a more explicitly intersectional lens. Recent work by the Labour Market Information Council<sup>33</sup> with the Labour Force Survey found that gender disparities in employment rates, for example, were small across White respondents, but i) amplified among those identifying as "Arabs" and ii) reversed among those identifying as Filipino. Similarly, foundational research in Canada<sup>34</sup> has found considerable heterogeneities in gender-based earnings differences across disaggregated ethno-racial groupings. Indeed, in some categories (like Canadian-born Latin Americans or West Asians) the gender wage gap was entirely reversed. Drawing on the 2011 National Household Survey, Houdon (2016) also estimated that unadjusted differences in earnings between racialized and non-racialized women decreased when moving from first to third generation Canadians.35 We are unable to engage in this disaggregation with the NGS, but future work with alternative data sources would do well to explore fluctuations of gender disparities in pay across other dimensions.

### **Policy responses**

Universal or affordable childcare: A big step towards full labour market participation. Despite the above-mentioned limitations, our findings should provide food for thought when it comes to public and policy discussions around the gender pay gap. Our observation that this gap is far smaller for respondents without children could be interpreted as being a partial function of the structural disadvantages faced by mothers within contemporary labour markets. If we assume that the gender pay gap is amplified for mothers due to their inability to find suitable substitutes for their household labour, our findings support the provision of additional government support, via more affordable childcare, as one potential solution.

Similar conclusions have been reached by diverse entities, including the Canadian Union of Public Employees (2019), McKinsey & Company (2017), the National Farmers Union (2021), Ontario Coalition for Better Child Care (2018), the Public Service Alliance of Canada (2019), the United Food and Commercial Workers Union (2016) and the Young Women's Christian Association (Macleod, 2018),36 all of whom have agreed that a universalxvii child care system could play a key role in closing gender disparities by facilitating women's full labour market participation.

Outlining how this sort of solution could be implemented in Canada is certainly beyond the scope of this piece. Nevertheless, our work does provide preliminary evidence that there is merit to its exploration.

With respect to the narrower gap observed among single individuals, we reason that the uneven division of labour within the home may once again be the culprit producing additional "drag" on married women's professional success. It is therefore less clear how policy apparatuses could be effectively employed to promote the sort of cultural change required for men to increase their contribution to household labour. We would be remiss not to acknowledge recent empirical evidence that "fostering a husband's involvement in domestic chores is not a viable method of closing the gender wage gap at the population level or within a couple."37 Despite these entrenched household divisions, it would be worthwhile for future scholars and the broader policy community to consider what creative levers could be employed to promote the sort of cultural change required to disrupt the intra-household division of labour in Canada and similar nations. As Atoine et al. (2016) have noted, though decisions within the home "cannot be legislated with a heavy hand ...they can be incentivized" (p. 19).

Illuminate pay disparities in high-gap sectors; reinforce pipelines for women in sectors where gaps are smallest. Observed heterogeneity in the income gap across both industries and fields of study are also worth considering from both a research and policy standpoint. If there are indeed sectors of our economy where the gender pay gap narrows or grows, it is worth further studying the reason for such fluctuations.

In sectors where women are excelling, it may be worth examining whether this is attributable to distinct employer policies that can be diffused across the broader labour market via legislation, communicating best practices, or other creative means. An alternative approach could also entail developing strategies to facilitate women's entry into sectors where the gap remains smallest, while simultaneously engaging in efforts to minimize the gap in less egalitarian sectors.xviii

xvii Typically, "universal" is defined as being either free or accessible to any children despite their parent's economic resources. See Anderson, Ballantyne, & Friendly (2016).

xviii We make this recommendation with caution, as small earnings gaps between women and men do not necessarily correspond to equal workplaces. There are concerns that men in female-dominated industries and sectors experience a devaluation that reduces earnings to similar levels as women. These industries would not be considered equal, and instead are conventionally referred to as "pink ghettos". We therefore propose that caution be taken when differentiating sectors where the gender wage gap is small and advantageous to women from sectors where earnings are equally unfair.

Lastly, it would be worth considering how more proactive monitoring of gender pay disparities across employers (via pay audits) within problematic sectors could help to close the pay gap. Again, providing a detailed accounting of such strategies is beyond the scope of this piece. However, it is plausible that mandating public reporting on pay gaps within problematic sectors could effectively shame employers into providing more equitable compensation for women.

At this point, it is important to re-emphasize that these observed gaps (and fluctuations across groups) are only suggestive of some potential causal mechanisms being at play, and further research is required to better understand how these processes play out within the contemporary Canadian context. This will be key to informing the development of effective policies.

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## **Endnotes**

- 1 See Deloitte (2016).
- 2 See McKinsey & Company (2015) and McKinsey & Company (2017).
- See England, Levine, & Mishel (2020a), England, Levine, & Mishel (2020b), and Moyser 3 (2019).
- 4 See Government of Canada. (2020).
- 5 For details on the 50-30 challenge, see https://www.ic.gc.ca/eic/site/icgc.nsf/ eng/07706.html
- 6 See Canadian Women's Foundation (2021).
- 7 See Borysenko (2020) and McIntyre (2019).
- 8 See Bardaro (2013), Rosin (2013), and Gerstmann (2019).
- 9 For an example of this more granular analysis, see Chamberlain (2016).
- See Consad Research Corporation (2009). 10
- 11 See Gould, Schieder & Geier (2016).
- 12 See Sommers (2014).
- 13 See Borysenko (2020).
- 14 See Antonie, Gatto & Plesca (2020), Christie & Shannon (2001), and Schirle & Sogalu (2020).
- 15 See Waite (2017).
- 16 See Mueller (2019), Pelletier, Patterson & Moyser (2019), and Shirle (2015).
- 17 See Drolet (2001) and Drolet (2011).
- 18 See Kidd & Shannon (1996).
- See Smith, Waite, & Durand (2017), Smith & Waite (2019), Boudarbat & Connolly (2013), 19 Finnie & Wannell (2004a), Finnie & Wannell (2004b), Davies, Mosher & O'Grady (1996), Hughes & Lowe (1993), Jehn, Walters & Howells (2019), and Wannell (1990).
- 20 See Smith, Waite, & Durand (2017) and Smith & Waite (2019).
- 21 See Smith, Waite, & Durand (2017).
- 22 See Boudarbat, & Connolly (2013).
- 23 See Antonie, Plesca, & Teng (2016), Drolet (2001), and Gunderson (2006).
- 24 See Sowell (2016).
- 25 See Linde Leonard & Stanley (2020), Phipps, Burton & Lethbridge (2001), Cukrowska-Torzewska & Lovasz (2016), and Cukrowska-Torzewska & Lovasz (2020).
- 26 See Correll, Benard, & Paik (2007).
- 27 See Rousu (2014).
- 28 See Finnie & Wannell (2004a) and Finnie & Wannell (2004b).
- 29 See Christie & Shannon (2001), and Boudarbat & Connolly (2013).
- 30 See Pizarro Milian, Seward, Zarifa, & Davies. (2020), and Pullman, Sweetman & Finnie (2020).
- 31 See Nyhus & Pons. (2012).
- 32 See Risse, Farrell & Fry (2018).

- See Alake-Apata (2021). 33
- See Pendakur & Pendakur (1998). 34
- 35 See Hudon (2016).
- See Canadian Union of Public Employees (2019), Macleod (2018), McKinsey & Company 36 (2017), National Farmers Union (2021), Ontario Coalition for Better Child Care (2018), Public Service Alliance of Canada (2019), and United Food and Commercial Workers Union (2018).
- See Matteazzi & Scherer (2021). 37