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Adjusting to Job Loss When Times Are Tough

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THE FUTURE OF SKILLS AND ADULT LEARNING

ABOUT THIS STUDY

This study was published as part of The Future of Skills and Adult Learning research program, under the direction of Natalia Mishagina. The manuscript was copy-edited by Elizabeth Macfie, proofreading was by Zofia Laubitz, editorial coordination was by Francesca Worrall, production was by Chantal Létourneau and art direction was by Anne Tremblay.

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SUMMARY

It has been almost a year since the COVID-19 pandemic began in early 2020, forcing thousands of workers out of jobs in Canada — many of them permanently. Although emergency income-support programs were introduced fairly quickly, they were meant to be temporary. With mass vaccination on the horizon, now may be the time to start thinking about long-term policies that will help displaced workers adjust to post-pandemic economic realities. A wide range of such policies already exists in Canada, including temporary income replacement, training and assistance with job search. What is less well known, however, is what workers do to improve their situations, especially when employment opportunities are scarce – as they are now and are likely to remain until the pandemic's effects subside.

This study by Statistics Canada researchers René Morissette and Theresa Hanqing Qiu documents the use of four adjustment strategies by Canadian workers permanently laid off in 2009 – in the middle of the last recession: moving to another region, enrolling in post-secondary education, signing up for a registered apprenticeship and becoming self-employed. The authors examine whether the adoption of strategies varied according to workers' characteristics and their employment status a year after job loss, and to what extent it differed in the short and long terms.

Looking at adjustment patterns in the first and fifth years after job loss, the authors find that, overall, only a minority of displaced workers – at most one in five – adopted at least one of these strategies. The use of adjustment strategies varied considerably depending on gender, age, education and other characteristics. For instance, in the first year after job loss, the most common strategy among laid-off women was to enrol in post-secondary education, whereas among men it was to move to another region. Five years after job loss, moving was the predominant strategy for both genders. Older displaced workers were less likely to move to another region or invest in skills, in both the short and long terms. Those with more education were more likely to become self-employed or pursue post-secondary education, especially if they already had university degrees. Compared with displaced workers born in Canada, immigrants – especially women – were less likely to move to another region, in both the short and long terms, whereas recent immigrant men were more likely to start a business, but only in the long term. Compared with laid-off workers who were re-employed in the year after job loss, those without jobs were more likely to adopt at least one adjustment strategy during the entire five-year period. Still, less than half of them (42 percent) did so at some point during that time.

As to whether job loss per se induced a large behavioural response on the part of displaced workers — that is, led them to make greater use of adjustment strategies – that does not appear to be the case. Although those who lost their jobs in 2009 were more likely than those who were not laid off to adopt at least one of these strategies, the difference was rather small. And the impact of job loss was more pronounced among workers who had more education than it was among those who had less.

Documenting and quantifying the adoption of various adjustment strategies is a first step in improving our understanding of workers' behaviour after job loss. Each strategy has pros and cons to be considered. And identifying the predominant strategies can shed light on the wide array of incentives and barriers people face when responding to job loss, especially when employment options are scarce. In the postpandemic world, the findings of this study will be especially relevant for informing the development of policies to support displaced workers.

RÉSUMÉ

Ça fait déjà presque un an que la pandémie de COVID-19 a éclaté en mars 2020 au pays, faisant perdre leur emploi à des milliers de travailleurs canadiens, dont beaucoup de façon permanente. Le gouvernement a adopté assez rapidement des programmes d'aide financière d'urgence, qui sont censés être provisoires. Maintenant que la campagne de vaccination est lancée, il est sans doute temps de réfléchir aux politiques à long terme qui aideront ces travailleurs licenciés à s'adapter aux réalités économiques de l'après-pandémie. Le Canada dispose déjà d'un éventail de politiques en matière de remplacement temporaire du revenu, de formation et d'aide à la recherche d'emploi. Mais on sait peu de choses sur les moyens que prennent les travailleurs pour améliorer leur situation, surtout quand les emplois sont rares, ce qui est le cas aujourd'hui et devrait le rester tant que les effets de la crise sanitaire se feront sentir.

Cette étude des chercheurs de Statistique Canada René Morissette et Theresa Hanqing Qiu se penche sur l'emploi de quatre stratégies d'adaptation par les travailleurs licenciés en 2009, soit au cœur de la dernière récession : changer de région, entreprendre des études postsecondaires, suivre un apprentissage enregistré et devenir travailleur autonome. Les auteurs examinent si les stratégies adoptées avaient varié selon les caractéristiques des travailleurs et leur situation d'emploi un an après leur perte d'emploi, et dans quelle mesure elles avaient évolué à court et à long terme.

À l'examen des schémas observés dans la première et la cinquième année suivant une perte d'emploi, les auteurs montrent que seule une minorité de travailleurs licenciés – tout au plus le cinquième d'entre eux – ont employé au moins l'une des quatre stratégies. Et que leur usage variait considérablement selon le sexe, l'âge, la scolarité et certaines autres caractéristiques. Dans l'année suivant leur perte d'emploi, par exemple, les femmes choisissaient le plus souvent d'entreprendre des études postsecondaires, tandis que les hommes préféraient changer de région. Mais après cinq ans, hommes et femmes privilégiaient tous deux le déménagement. Les plus âgés étaient moins enclins à changer de région ou à développer de nouvelles compétences, aussi bien à court qu'à long terme. Les plus scolarisés étaient plus susceptibles de devenir travailleurs autonomes ou de retourner aux études, surtout s'ils possédaient déjà un diplôme universitaire. Et par rapport aux travailleurs licenciés nés au pays, les immigrants – surtout les femmes – étaient moins susceptibles de changer de région à court comme à long terme, tandis que les hommes nouvellement arrivés démarraient plus

souvent une entreprise, mais uniquement à long terme. Comparativement à ceux qui avaient retrouvé un travail dans l'année suivant leur perte d'emploi, les travailleurs toujours sans emploi étaient plus susceptibles d'adopter au moins une stratégie d'adaptation pendant cette période de cinq ans. Néanmoins ce n'était le cas que pour moins de la moitié (42 p. 100) d'entre eux.

Rien n'indique en outre qu'une perte d'emploi n'entraîne à elle seule des changements de comportement importants chez les travailleurs licenciés, au sens où ils adopteraient plus souvent des stratégies d'adaptation. Les licenciés de 2009 étaient effectivement plus enclins à employer au moins l'une des stratégies que les travailleurs qui avaient conservé leur emploi, mais l'écart est plutôt mince. Et l'impact d'une perte d'emploi était plus marqué chez les travailleurs plus scolarisés.

La documentation et la quantification de ces stratégies d'adaptation constituent une première étape vers une meilleure compréhension du comportement des travailleurs ayant perdu leur emploi. Chaque stratégie a des avantages et des inconvénients dont il faut tenir compte. Mais le fait d'identifier les stratégies les plus courantes peut aider à cerner la gamme d'obstacles et d'incitations qui attendent les travailleurs licenciés, surtout quand les emplois sont rares. Dans le monde de l'après-pandémie, les conclusions de cette étude seront particulièrement utiles dans l'élaboration des politiques de soutien aux travailleurs licenciés.

HOW WORKERS ADJUST TO JOB LOSS: THE NEED TO KNOW MORE

Canadian governments reacted quickly to the thousands of layoffs in the first half of 2020 as the first wave of the COVID-19 pandemic and the effects of public health directives on the economy took hold. New temporary income support programs were created to protect those who found themselves without work and income practically overnight. Some of these programs were subsequently extended or adjusted in anticipation of the second wave of COVID-19. As the vaccination process gets under way and governments turn their attention to the postpandemic recovery, the extent to which the layoffs of 2020 will be permanent remains to be seen, along with the implications for longer-term policy beyond providing emergency income relief.[1]

Because job loss often leads to substantial and persistent earnings losses,[2] governments have long provided various support programs to help displaced workers to adjust. These supports range from temporary income replacement to job-search assistance and skills development programs. Yet relatively little is known about how displaced workers respond to job loss, especially when employment opportunities are scarce. What strategies do they use to cope and adjust? Some may start a business, change occupation (Poletaev and Robinson 2008; Gendron 2011), move to another region, pursue post-secondary education (PSE) or sign up for a registered apprenticeship. Others may leave the labour force or retire early.[3] Which strategies are used predominantly? Do these adjustment strategies vary depending on workers' characteristics, such as age and education? Do they differ in the short and long terms? Do displaced workers use them more or less frequently than workers who did not lose their jobs? Our study is the first Canadian study to answer these questions by examining four specific adjustment strategies within the same analytical framework.

Although more and more studies are documenting the use of specific adjustment strategies among displaced workers, they generally examine a single strategy in isolation. For example, research has shown that job displacement induces regional mobility in Norway (Huttunen, Moen and Salvanes 2018), increases transitions into self-employment in Sweden (Von Greiff 2009) and boosts enrolment into PSE in Canada (Frenette, Upward and Wright 2011; Ci, Frenette and Morissette 2017). These studies provide valuable information on adjustment following job loss, but they do not indicate whether some categories of displaced workers tend to favour certain strategies. And since these studies are based on data from different countries and time periods,[4] they do not demonstrate which strategies, if any, displaced workers use most often.

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[1] Following Morissette and Qiu (2020), we consider a layoff to be permanent when laid-off employees do not return to their former employer in the year of the layoff or the following year. We consider shorter layoffs to be temporary. We refer to permanently laid-off workers as "displaced" throughout this study.

[2] See Morissette and Qiu (2020) for a review of the relevant literature.

[3] Job loss can also greatly affect other aspects of displaced workers' lives. Displaced workers may save and spend less (Stephens 2001; Browning and Crossley 2008), borrow more, have fewer children than planned, cut child care expenditures (Ananat, Gassman-Pines and Gibson-Davis 2013; Bono, Weber and Winter-Ebmer 2015; Huttunen and Kellokumpu 2016), divorce (Charles and Stephens 2004; Doiron and Mendolia 2012) or postpone marriage or home purchase. In addition, their spouses may have to join the labour force or work longer hours to replace lost family income (Stephens 2002; Morissette and Ostrovsky 2008).

[4] Von Greiff (2009), Huttunen, Moen and Salvanes (2018) and Ci, Frenette and Morissette (2017) examine job losses during the late 1980s, the 1990s and the 2000s, respectively.

Documenting and quantifying the adoption of different adjustment strategies is a first step in improving our understanding of displaced workers' behaviour after job loss. Because each strategy has its pros and cons, identifying which is (or are) predominant can inform policy discussions about the incentives that laid-off workers have and the intricate relationship among the many factors that affect workers' behaviour in the labour market.

For example, if displaced workers are less likely to enrol in PSE than to start their own business, is it because of barriers to schooling or too few incentives to study? Or is it because this is the optimal choice for those concerned, which would mean that no intervention is required? Likewise, if more-educated displaced workers are far more likely to move to another region than to start a business, one might wonder what drives this difference – especially given the non-negligible psychological costs of leaving family and friends. Is it barriers to credit or the lack of entrepreneurial skills?

Finally, should we be concerned if the majority of displaced workers fail to adopt any adjustment strategy? If it is because most of them find new jobs soon after job loss, that is one thing – a good news story. But if they remain unemployed for some time, perhaps the programs and policies meant to support labour market adjustment have limitations that prevent people from using them. Without comparable data on a range of adjustment strategies, these questions cannot even be raised.

Our study provides new evidence on the use of four adjustment strategies: regional mobility, enrolment in PSE (full- or part-time),[5] enrolment in a registered apprenticeship and (unincorporated) self-employment. By linking Statistics Canada's Longitudinal Worker File (LWF) with the 2001 Census of Population and the Registered Apprenticeship Information System (RAIS), we document, for the first time in Canada, the relative importance of these four strategies.[6]

We focus our attention on workers displaced in 2009, midway through the most recent recession prior to the outbreak of COVID-19.[7] Although our findings cannot necessarily be generalized to years of economic expansion, they nevertheless describe the fairly recent responses of Canadian workers to job loss during a period when labour market conditions were difficult, as they have been since March 2020 and will continue to be until the pandemic's effects have fully subsided.

As one might expect, workers displaced in 2009 had more difficulty finding a new position than those who were permanently laid off in the early 2000s. To illustrate, be-

[5] Ci, Frenette and Morissette (2017) show that part-time enrolment is generally more prevalent among adults than full-time enrolment. In their sample of individuals aged 35 to 44, men's part-time and full-time enrolment averaged 1.6 and 1 percent, respectively. The corresponding percentages for women were 3 and 1.4 percent.

[6] We determined whether a worker is enrolled in PSE using data from the LWF. Regional mobility is assessed by comparing records in the LWF on workers' economic regions of residence, either one or five years after job loss, with those recorded in the year before job loss. Statistics Canada defines an economic region as a grouping of complete census divisions (with one exception in Ontario) created as a standard geographic unit for analysis of regional economic activity.

[7] Because our analyses require information in the year prior to job loss and RAIS was not available before 2008, we limited our study to workers permanently laid off in 2009.

tween 2000 and 2007, about 80 percent of displaced workers aged 25 to 64 found a new job in the year following job loss, compared with 76 percent in 2009 (Morissette and Qiu 2020). Assuming that displaced workers tend to do more to cope with job loss when employment opportunities are scarce, then the numbers reported in this study can be viewed as an upper limit of the degree to which workers generally adopt adjustment strategies following job loss.

Of the workers permanently laid off in 2009, we focus on those aged 33 to 52[8] who, in that year (1) were not self-employed (in an unincorporated business); (2) did not attend a post-secondary institution; and (3) were not in a registered apprenticeship.[9] We then identify if workers used a particular activity at any time during the first year following job loss (2010) or during the four subsequent years (2011 to 2014).

Thanks to the information on workers' demographic characteristics provided by the LWF-Census-RAIS linkage, we are able to draw a rich profile of displaced workers and their adjustment strategies based on their level of education, origin (Canadian-born versus immigrant), disability status and job tenure prior to layoff (long- versus short-tenured).[10] And, where possible, we break down our results by gender.

Of particular interest are differences in workers' use of the four adjustment strategies depending on their level of education.[11] There may be a variety of reasons why less-educated workers may adopt fewer strategies to adjust to job loss. First, their skills may be job- and industry-specific and become obsolete after they lose their jobs, whereas the skills of more-educated workers might be more easily transferred across jobs. Second, less-educated workers may be less able to learn new concepts and techniques or may lack credentials, which would make them less likely to retrain or make major investments in additional schooling. Third, any postdisplacement work disincentives associated with social safety net programs might be more pronounced for less-educated workers than for those with more education.[12]

To shed light on this important issue, we test whether highly educated displaced workers were more likely than their less-educated counterparts to become self-employed or pursue PSE, as one might expect if the former had greater financial resources to start a business (or go back to school) and a greater ability to retrain.

We also test additional hypotheses looking at outcomes one year and five years following job loss. For instance, were older displaced workers less likely than their

[8] Our sample consists of workers who were aged 25 to 44 in the 2001 Census. We selected this age group because, when they were laid off in 2009 at age 33 to 52, the vast majority of them had already completed their school-to-work transition and were too young to contemplate early retirement. For the rest of the study, we refer to a worker's age in 2009.

[9] These conditions allow us to identify transitions into PSE, self-employment and registered apprenticeship following job loss.

[10] Long-tenured workers are those who have worked for the same firm for at least six years, whereas short-tenured workers have worked for two or fewer years.

[11] Frenette, Upward and Wright (2010) and Ci, Frenette and Morissette (2017) could not investigate this issue, because they did not have information on workers' education.

[12] For example, Notowidigdo (2020) shows that means-tested transfer programs disproportionately compensate low-skilled workers in the United States when a region experiences an adverse economic shock.

younger counterparts to invest in education via PSE or registered apprenticeship, as one would expect, since older workers have less time remaining to receive returns on their investments? Were laid-off immigrant workers less likely than those born in Canada to move to another region after job loss? This would be the case if, for example, proximity to family and friends were a more important consideration for immigrants than for the Canadian-born.

Finally, we assess the impact of job loss on the use of adjustment strategies by comparing displaced workers' use of the four strategies with that of those who kept their jobs, but, nevertheless, might have used one or more strategies to improve their situation.

Our findings are especially relevant in the context of postpandemic planning, because they may help inform discussions on policies to facilitate labour market adjustment. For instance, we know that COVID-19 has, so far, disproportionately affected lower-wage workers (Morissette 2020), many of whom tend to have lower educational attainment. Understanding their patterns of adjustment and the obstacles they may face is crucial to helping them regain employment. As the second wave of COVID-19 increases the number of permanently laid-off Canadians, it also remains to be seen to what extent the sectors most affected will rebound, whether firms will accelerate their adoption of automation technologies and what shifts in employment might ensue (Frenette and Frank 2020). In such a context, it is more important than ever that workers be able to adjust efficiently to the evolving labour market.

ADJUSTMENT STRATEGIES ADOPTED IN THE FIRST YEAR AFTER JOB LOSS

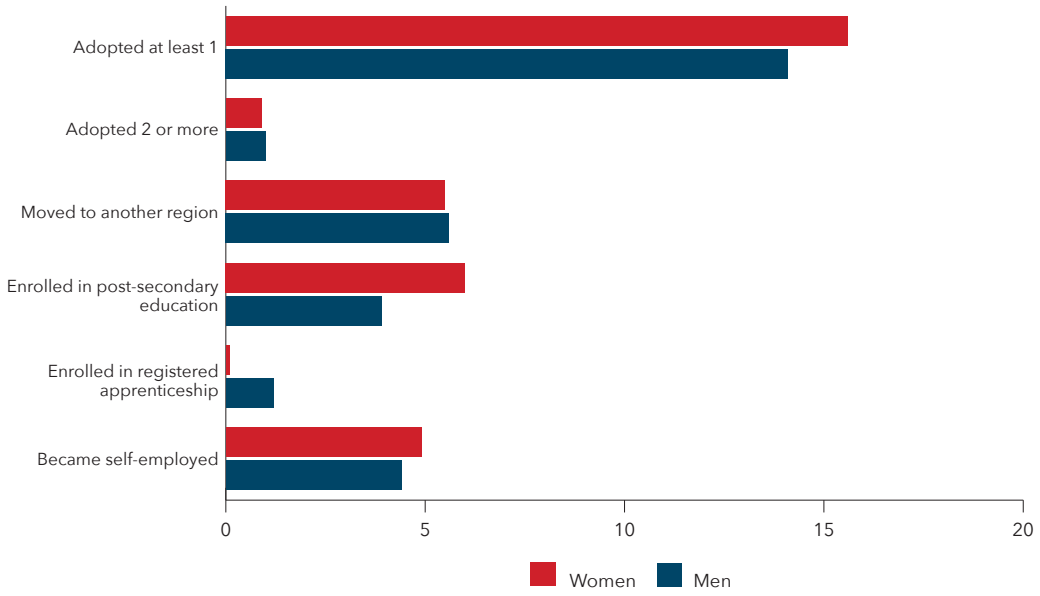
Figure 1 provides an overall portrait of the use of the four adjustment strategies by workers laid off in 2009 in the year after losing their jobs (2010): moving to another region, enrolling in PSE, enrolling in a registered apprenticeship or becoming self-employed. We find that, overall, between 14 and 16 percent of these displaced workers used at least one of the four strategies, with women being slightly more likely to do so than men.

Figure 1 also shows that only a small minority – about 1 percent – of either men or women displaced in 2009 used more than one strategy. This comes as no surprise, given that each of these adjustment strategies is either time-consuming (e.g., going back to school or starting a business), energy-consuming (e.g., moving to a new region) or both. For instance, starting a business while entering PSE might be impossible for most people.

Our results further indicate that laid-off workers enrolled in PSE, became self-employed or changed regions in similar proportions (4 to 6 percent, 6 percent and 4 percent, respectively). Women were slightly more likely than men to enrol in PSE or start a business, whereas men were more likely to start a registered apprenticeship.

When considering the use of strategies according to demographic and employment characteristics, we notice several patterns (table A1). First, moving to another region was, re-

Figure 1. Adjustment strategies adopted by workers laid off in 2009 in the first year after job loss, by gender (percent)



Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

gardless of age, the predominant strategy for men, but not for women. Regional mobility appears to decrease with workers' tenure on the job and their age. The latter finding could be due to other differences between younger and older workers, such as educational attainment, marriage and homeownership rates and attachment to family and friends. Moving to another region was also more common among Canadian-born workers (compared with landed immigrants); workers with some degree of disability; and those laid off from large firms (for men), from medium-size firms (for women), or from mining, oil and gas industries. In the case of many displaced workers in the resource sector, moving to another region might have been inevitable to the extent that these jobs were located in rural areas and small towns, where re-employment opportunities were especially limited.

Second, enrolling in PSE was generally the predominant adjustment strategy for displaced women. There were a few exceptions: those with the lowest educational attainment (high school diploma or less), with short job tenure or born in Canada were more likely to move to another region than pursue studies. As was the case with regional mobility, PSE enrolment tended to decrease with age. It tended to increase with educational attainment and, to a lesser extent, with job tenure. Men and women who already had at least a bachelor's degree were the most likely to pursue this avenue. This may be due to a variety of factors, such as their greater ability to learn new concepts and techniques and their having the prerequisites to enrol in PSE. The result about age likely reflects the fact that the future (discounted) benefits of investments in schooling are generally lower for older workers than for younger ones. In the case of job tenure, the results could be due to long-tenured

workers needing to update their skills in order to improve their re-employment prospects. We also found that PSE enrolment was twice as likely to occur among men laid off from manufacturing or public services than among those laid off from construction, mining, and oil and gas extraction industries. Among women, the highest enrolment rates were among those laid off from public or low-skill services.

Third, signing up for a registered apprenticeship was the least popular strategy, with very low rates among men and almost no instances among women. Among men, those laid off from mining, oil and gas industries and construction were the most likely to pursue apprenticeships, as were those who were not permanent residents.

Fourth, becoming self-employed ranked second as a strategy among men (after moving to another region) and third among women. Yet men and women generally tended to open their own businesses at a fairly similar rate. Just as with regional mobility and PSE enrolment, the proportion of displaced workers opting for self-employment tended to decrease with age (and more so for women than men), and it was highest for those with degrees. Being highly educated could be associated with having lower credit constraints and greater wealth holdings relative to those with less education. Becoming self-employed was also more frequent among nonpermanent residents (men), recent immigrants (both men and women) and workers displaced from the low-skill services sector and from firms with fewer than 20 employees.[13]

To understand what drives the differences in the use of the four adjustment strategies, we conducted regression analyses that simultaneously account for workers' age, education, immigrant and disability statuses, and province of residence, as well as their tenure, industry of employment and the size of the organization that employed them in their previous jobs.

Our results suggest that even after accounting for differences in various worker characteristics, age was still a significant predictor of workers' propensity to move to another region (mostly for men) and to enrol in PSE (table A2 in the appendix). To illustrate, men and women aged 48 to 52 in 2009 were between 1.6 and 3 percentage points less likely than those aged 33 to 37 – but who were otherwise similar – to pursue one of these two strategies in the first year following job loss. These differences are important in relative terms, given that the overall proportion of displaced workers who moved to another region or pursued PSE varied between 4 and 6 percent (recall figure 1). Men with more than five years of job tenure were also less likely to move to another region (by roughly 2 percentage points). Because our analyses already took workers' ages into account, this difference cannot be explained by possible age differences between long- and short-tenured workers. Otherwise, long-tenured workers' use of adjustment strategies was not much different than that of other workers. These findings are of particular interest, since long-tenured workers are susceptible to significant earnings losses after layoff (Jacobson, Lalonde and Sullivan 1993; Morissette, Qiu and Chan 2013).

[13] The latter finding is especially relevant in the context the COVID-19 pandemic, which is hitting small businesses particularly hard (Statistics Canada 2020).

Some other regional-mobility patterns apparent in table A1 remain unchanged even when we take into account factors such as age and education. For instance, landed immigrants are still less likely to move to another region — a difference of about 1.8 percentage points for men and 3.4 percentage points for women from the baseline rate of around 5.6 percent for either gender (table A2). But being laid off from mining or oil and gas extraction industries is no longer associated with being more likely to move to another region. This suggests that other factors are at play, such as the age or education of the workers laid off from these industries.

Some of the descriptive evidence presented in table A1 holds regardless of age and other characteristics. Laid-off workers with degrees were still more likely to enrol in PSE or become self-employed than were those with high school diplomas or less (table A2). Compared with men laid off from manufacturing, those laid off from construction, mining, and oil and gas extraction were, all else equal, about 3 percentage points less likely to pursue PSE. In addition, those laid off from construction were slightly more likely to start an apprenticeship. Men laid off from low-skill services[14] were less likely to invest in skills (through either PSE or registered apprenticeship) and more likely to become self-employed than were men laid off from manufacturing. Such differences were not observed among women. Likewise, both men and women laid off from large firms were between 1.5 and 2.3 percentage points less likely to opt for self-employment than those laid off from small firms (fewer than 20 employees). This result is worth noting, given the number of workers laid off from small firms during the COVID-19 pandemic. However, whether this difference reflects greater entrepreneurial skills among employees of small firms or is due to other factors remains to be determined.

To summarize:

- Moving to another region was, regardless of age, the predominant adjustment strategy among men, but not among women. It was less common among older workers, among workers who were landed immigrants (especially women) and among men with a longer job tenure.
- Enrolling in PSE was generally the predominant adjustment strategy among women. It was less common among older men and women, among those who had less education and among men laid off from the resource sector or construction.
- Enrolling in a registered apprenticeship was the least common strategy for either gender and varied little across socio-economic characteristics. Men who were older, had degrees or were laid off from the low-skill services were less likely to use the strategy. Men laid off from construction were slightly more likely to enrol in an apprenticeship.
- Becoming self-employed was the second most common strategy among men and the third among women. Less-educated men and women, men with activity limitations and men and women laid off from large firms were less likely to opt for self-employment.

[14] Low-skill services include retail trade, accommodation and food services, arts, entertainment and recreation.

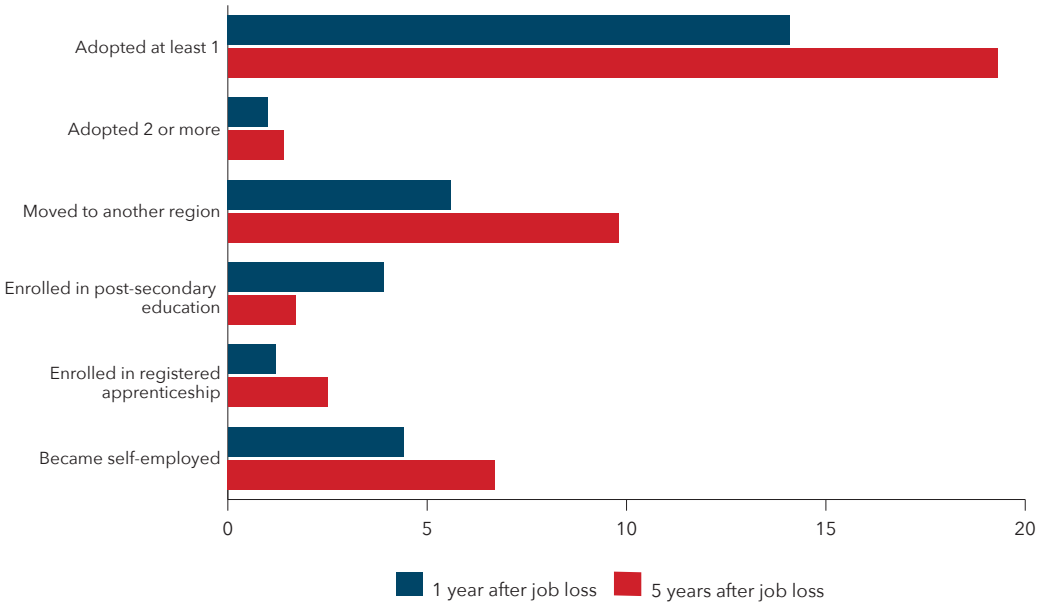
ADJUSTMENT STRATEGIES ADOPTED IN THE LONGER TERM

Because workers are likely to adjust to job loss gradually, it is important to document how their use of specific strategies changed after the first year following job loss. We do so by comparing the strategies that the cohort of workers who were displaced in 2009 were adopting five years after job loss (in 2014) to those they used in the first year.

We find that, five years after job loss, a greater proportion of displaced workers had either changed regions, started a business or enrolled in a registered apprenticeship than in the year following job loss (see figures 2 and 3). We observe similar patterns for both men and women. For example, after five years, rates of regional mobility for both men and women were close to 10 percent, compared with under 6 percent after one year. In contrast, PSE enrolment dropped by about one half during the same period. This indicates that many of the first-year transitions into PSE lasted only a few years. Overall, we find that that five years after losing their jobs, almost 20 percent of men and women laid off in 2009 were using at least one of the adjustment strategies. As was the case in the short term, very few of them used more than one strategy.

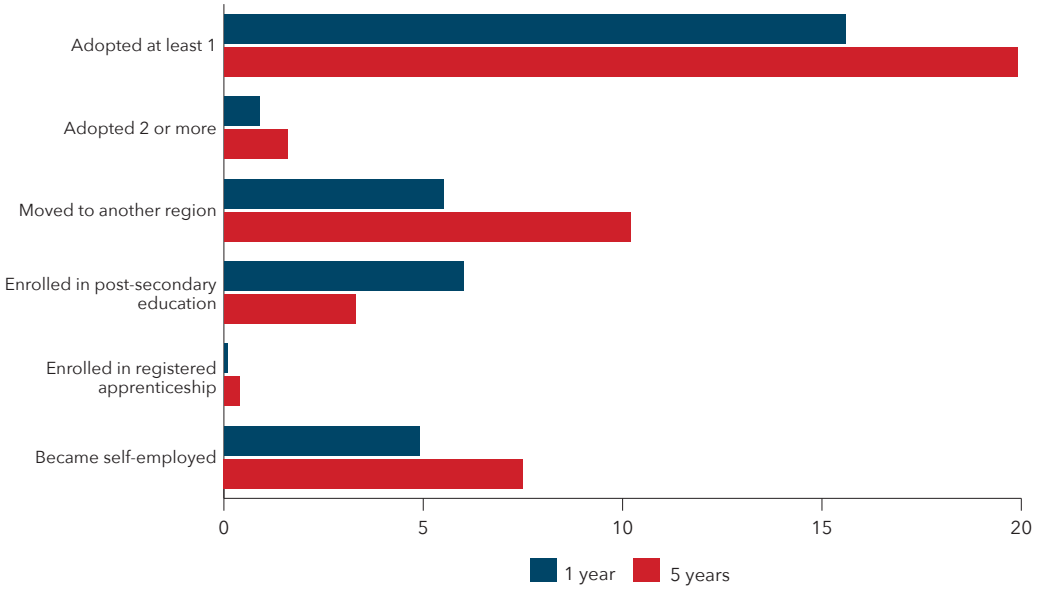
Having repeated the analyses that we conducted on first-year patterns to take workers' characteristics into account, we find many of the same patterns in the long term, with a few notable differences (see tables A3 and A4). Moving to another region was still the predominant strategy for men five years after job loss, followed by self-employment. However, we now also observe the same pattern for women, whereas enrolling in PSE

Figure 2. Adjustment strategies adopted by men laid off in 2009 one year and five years after job loss (percent)



Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of male workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

Figure 3. Adjustment strategies adopted by women laid off in 2009 one year and five years after job loss (percent)



Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of female workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

was their predominant choice in the first year. Investing in skills via PSE five years after job loss had a much lower take-up among men and women, whereas enrolment in apprenticeship went up for both genders, being more popular than PSE among men. The use of all strategies decreased with age, except for women aged 48 to 52, who were almost as likely to move as younger women. Regional mobility and PSE enrolment (for women) also decreased with tenure on the job. PSE enrolment and self-employment tended to increase with educational attainment, while transitions into self-employment tended to decrease with firm size in the previous job.

Comparing our findings from tables A2 and A4 on adjustment strategies one year and five years after job loss, we draw the following conclusions:

- Five years after job loss, moving to another region was still less frequent for displaced men who were older, had at least three years of job tenure or were immigrants. In contrast, men with some degree of disability were still more likely to move to another region as were, now, men laid off from large firms. As was the case in the short term, immigrant women were far less likely to move than Canadian-born women. Being less likely to move was now associated with having six or more years of job tenure, whereas women laid off from the resource sector, construction and low-skill services, or firms with 100 to 499 employees were more likely to move five years after job loss, which was not the case in the year following job loss.

- Significantly fewer displaced workers were enrolled in PSE, and the likelihood of using this option was still lower for older workers and for those with less education. PSE enrolment was no longer less frequent for men displaced from the resource sector, construction or various services, relative to manufacturing.
- Displaced men were more likely to take on an apprenticeship five years after job loss than in the first year, but there was also more variation in take-up rates across demographic and employment characteristics. Men aged 38 and over in 2009 or laid off from public or low-skill services, as well as individuals who were not permanent residents or had landed in Canada over 10 years ago, were all less likely to take up apprenticeships.
- Becoming self-employed was more likely among displaced younger workers and those with more education. The differences observed in the short term for men with some activity limitations (relative to those without limitations) were no longer statistically significant after five years. Workers displaced from smaller firms were still more likely to start their own businesses. Finally, men who were recent immigrants and women laid off from low-skill or public services and those who immigrated over 10 years ago were more likely to become self-employed.

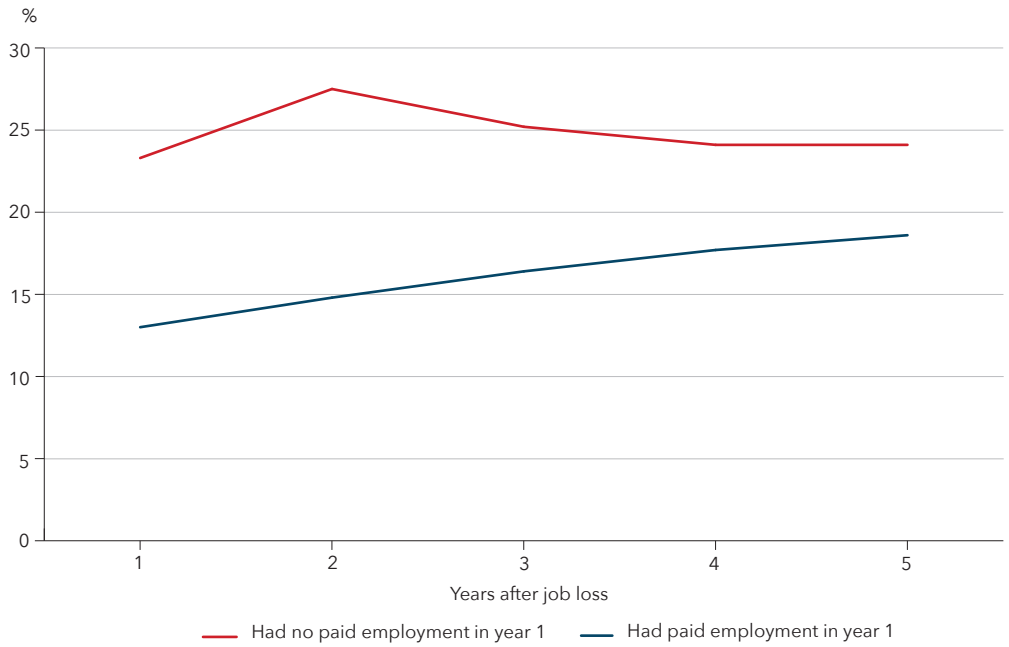
ADJUSTMENT BY EMPLOYMENT STATUS IN THE FIRST YEAR AFTER JOB LOSS

The findings we have presented so far capture the extent to which laid-off workers use various strategies on average, regardless of whether they were re-employed in the year following job loss. However, displaced workers who had difficulty finding a new job in 2010 may have been more likely to adopt some adjustment strategies in that first year after losing their job than those who found work quickly.[15] Hence, in the short term, we expect higher take-up rates for all strategies among displaced workers without a paid job compared with those who were re-employed. In the longer term, displaced workers who adopted adjustment strategies shortly after losing their jobs may have fared better in the labour market than those who did not. Since overall re-employment rates for workers displaced in 2009 were, in the year following job loss, about 4 percentage points lower than the average for 2000-07, it is worth examining whether the use of adjustment strategies varied depending on whether a worker found a job in 2010 (figures 4 and 5).

Overall, displaced workers without jobs in 2010 were significantly more likely to use at least one adjustment strategy than those who were re-employed, especially within the first two years of losing their jobs (figure 4). For example, workers without a job were 10 percentage points more likely to use at least one adjustment strategy than those who had a job, whereas this difference dropped by half after five years.

[15] Conversely, workers who adopted a given strategy in 2010 (e.g., who entered PSE on a full-time basis) may have had less time available for work that year. For this reason, the differences documented in this section should not be interpreted as reflecting solely the effect of re-employment on the use of adjustment strategies.

Figure 4. Percentage of workers laid off in 2009 who adopted at least one adjustment strategy in the subsequent five years, by employment status in the year after job loss



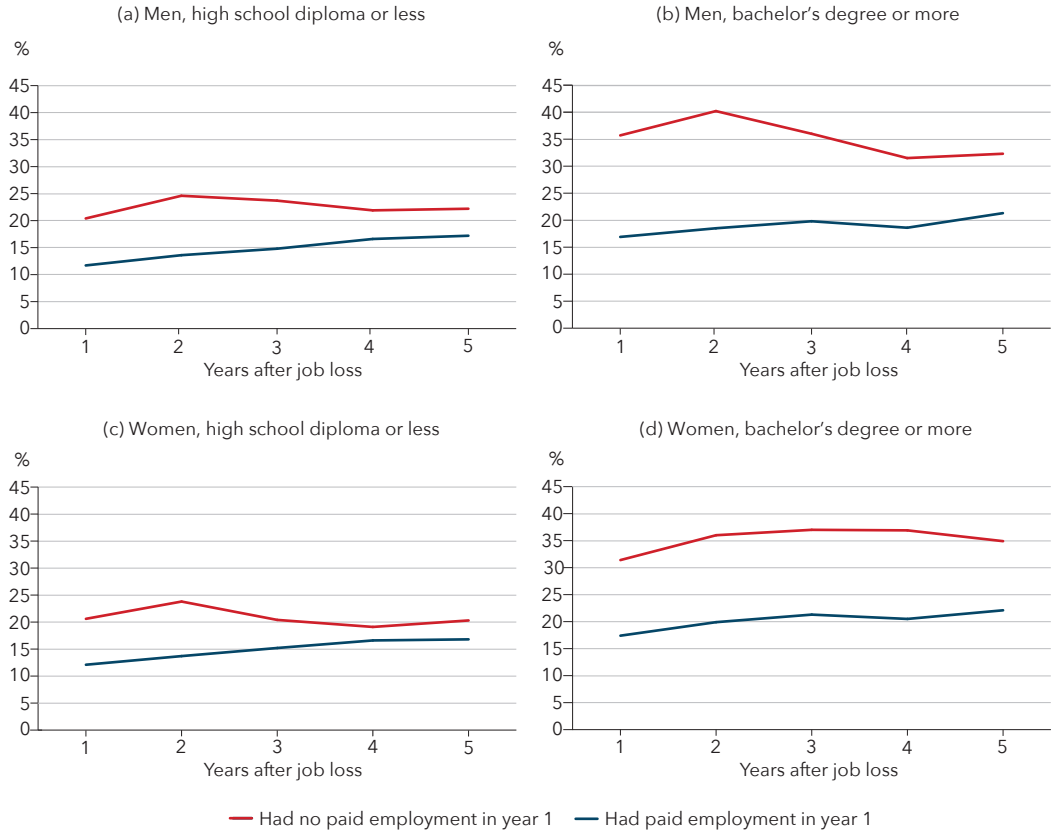
Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Notes: The figure shows, for each of the first five years after job loss, the percentage of workers laid off in 2009 who adopted at least one of the four adjustment strategies. Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

Remarkably, three quarters of the displaced workers who were still without jobs in 2010 did not adopt any strategy that first year. Some of them – for example, long-tenured ones – might have been waiting for job offers that paid as well as their previous jobs and, as a result, joined the ranks of the long-term unemployed. Others might have left the labour force temporarily because they were discouraged workers.[16]

Looking at adjustment behaviour by level of education and employment status, we find that, regardless of education, laid-off men and women without jobs in 2010 were more likely than those with jobs to use at least one adjustment strategy in a given year after job loss (figure 5). However, the gap in strategy use associated with having a job or not was more pronounced among more-educated workers without jobs than their counterparts with less education. This gap tended to narrow over time for all workers except for women holding university degrees.[17]

[16] Further investigation of this issue is left for future research.
[17] While it is difficult to tell whether displaced workers do "enough" to adjust to job loss, we can get a sense of the extent of labour adjustment by measuring the proportion of workers using at least one strategy over the entire five-year period following job loss. We find they represent 32 percent of all displaced workers, 42 percent of workers without jobs and 30 percent of those with jobs in 2010 (table A5, columns 13 and 14).

Figure 5. Percentage of workers laid off in 2009 who adopted at least one adjustment strategy in the subsequent five years, by employment status in the year after job loss and level of education



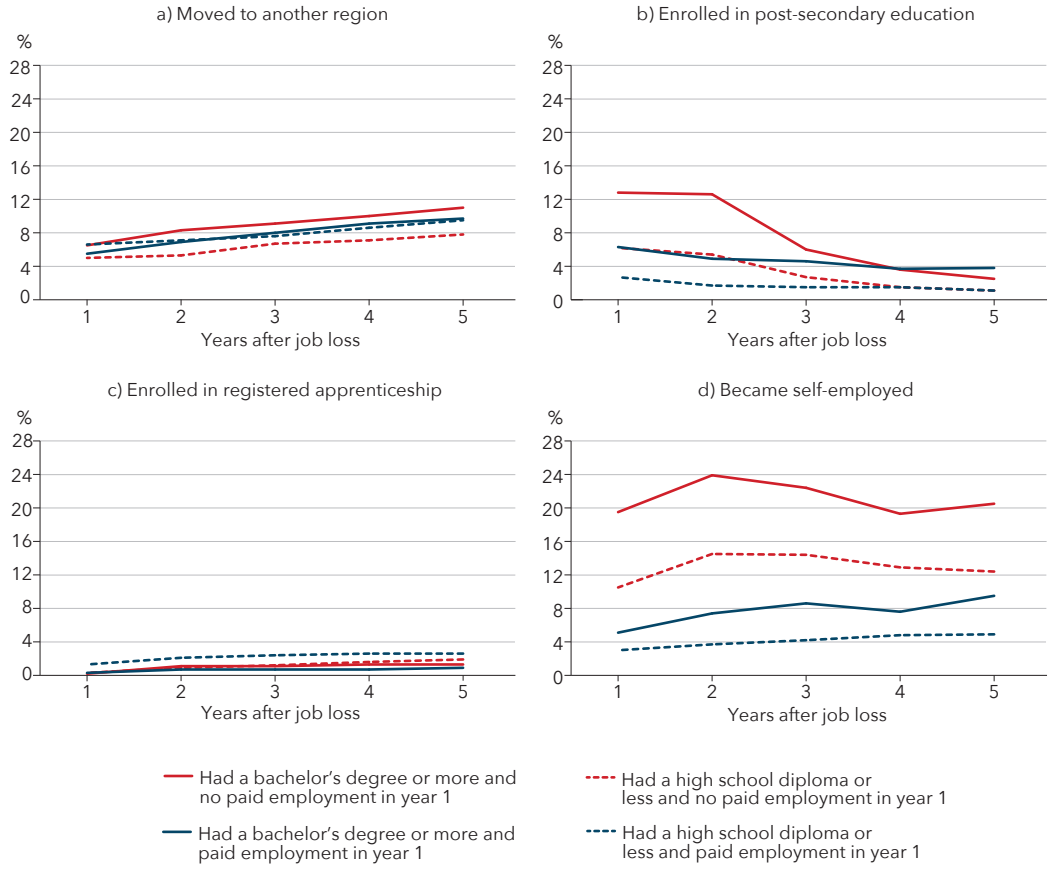
Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Notes: The figure shows, for each of the first five years after job loss, the percentage of workers laid off in 2009 who adopted at least one of the four adjustment strategies. Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

To understand what drives the patterns described above, we compare the take-up rates of each strategy by employment status in 2010 for the same four gender-education groups. Figures 6 and 7 reveal striking differences in adjustment behaviour.

Regardless of their education, men and women without jobs in 2010 were, in any given year after job loss, more likely to become self-employed than those who had a job in 2010. For PSE enrolment, we observe a similar pattern – but only within the first two to four years after job loss – with the difference vanishing over time. This again indicates that the effect of job loss on opting to pursue PSE is temporary.

In the case of regional mobility, the patterns were different and varied by education rather than gender. Specifically, less-educated men and women without jobs were, in

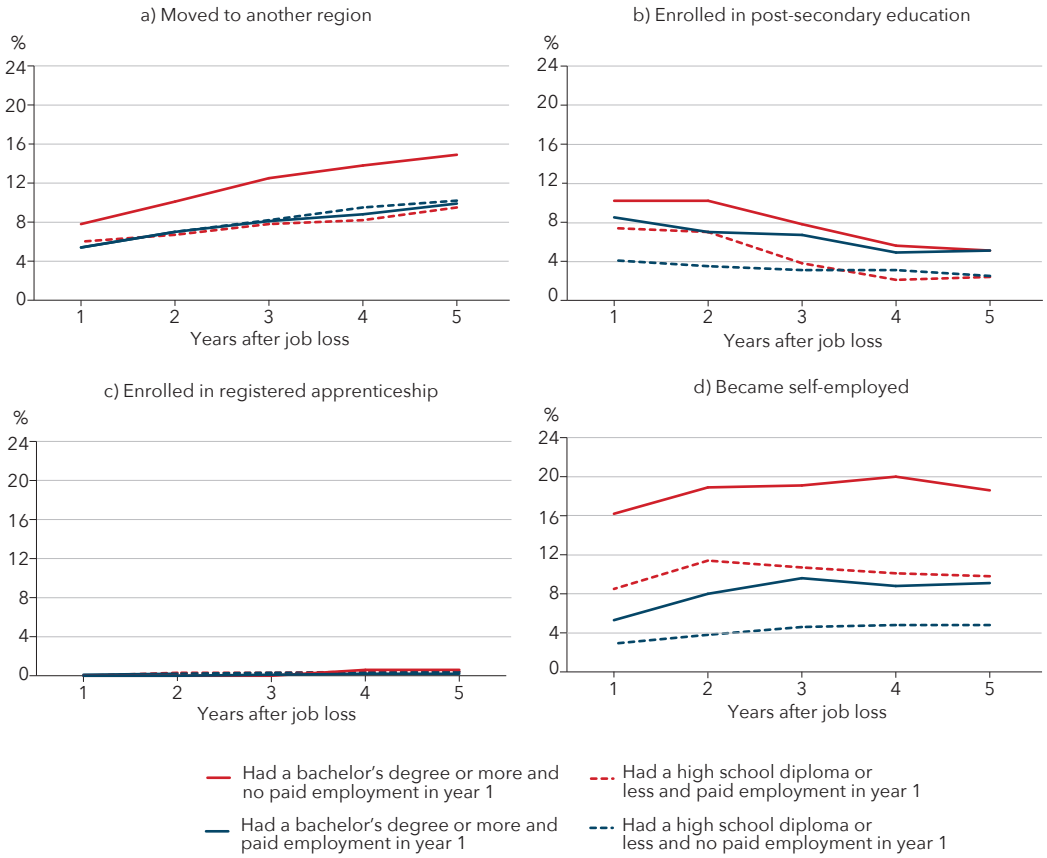
Figure 6. Adjustment strategies adopted by men laid off in 2009 in the subsequent five years, by employment status in the year after job loss and level of education (percent)



Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Notes: The figure shows, for each of the first five years after job loss, the percentage of workers laid off in 2009 who adopted one of the four adjustment strategies. Sample consists of male workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

general, somewhat less likely to move to another region than were those with jobs, whereas more-educated men and women without jobs in 2010 were more likely to change regions than were those without jobs. Differences in take-up rates of registered apprenticeship by employment status in 2010 were generally small.

Figure 7. Adjustment strategies adopted by women laid off in 2009 in the subsequent five years, by employment status in the year after job loss and level of education (percent)



Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Notes: The figure shows, for each of the first five years after job loss, the percentage of workers laid off in 2009 who adopted one of the four adjustment strategies. Sample consists of female workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

THE EFFECTS OF JOB LOSS ON WORKERS' USE OF ADJUSTMENT STRATEGIES

We have seen how the use of adjustment strategies varies depending on workers' characteristics. But to what extent is the use of a given strategy due to job loss per se as opposed to, say, workers' efforts to advance their careers? We provide a possible answer by comparing workers who lost their jobs in 2009 with those who did not in their use of the four adjustment strategies.[18] To have two comparable groups, we restricted our sample of workers not laid off in 2009 to those who also (1) were not self-employed; (2) did not attend a PSE institution; and (3) were not in a registered apprenticeship that year.

[18] This is known as the "difference-in-differences" approach.

For workers who were laid off in 2009 and for those who were not, figure 8 shows the proportion who adopted each strategy in 2010, 2012 and 2014. The overall picture is that workers displaced in 2009 were generally more likely to use the four adjustment strategies than those who kept their jobs, but the differences – which we can attribute directly to job loss – were relatively small: at most 3.5 percentage points. These differences decreased over time for PSE enrolment, grew for registered apprenticeships and regional mobility and remained stable for self-employment. Overall, the greater likelihood of using at least one of these strategies associated with job loss fell over the five years from 8 to 6.8 percentage points.

Figure 8. Adjustment strategies used by workers who were laid off in 2009 and by those who were not (percent)

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of workers aged 25 to 44 in 2001 who in 2009 were not (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

After repeating the same analyses for men by level of education (figures 9 and 10), we found that job loss appears to have a moderately greater impact on more-educated men in terms of becoming self-employed and pursuing PSE relative to those with less education. For example, five years after job loss, job displacement appears to increase transitions into self-employment by 6.1 percentage points for male degree holders, compared with 2.3 percentage points for men with high school diplomas or less education. The impact of job loss on the use of regional mobility was initially higher for

Figure 9. Adjustment strategies used by men with a high school diploma or less education who were laid off in 2009 and by those who were not (percent)

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of workers aged 25 to 44 in 2001 who in 2009 were not (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

more-educated laid-off workers than for those with less education (by 3.4 and 2.5 percentage points, respectively), but after five years the difference attributed to job loss was similar for both groups, at about 3 percentage points. To complete the picture, we note that job loss had a slightly larger impact on taking on a registered apprenticeship for less-educated workers, in both the short and long terms.

To conclude, not only was the take-up of adjustment strategies higher for more-educated laid-off workers than those with less education, it was also more affected by job loss. To illustrate, the impact of job loss on the use of at least one strategy in the first year after job loss is 7.4 percentage points for those with less education, compared with 12.5 percentage points for those with more education (table A6). The difference between these impacts – 5.1 percentage points – is our estimate of the additional impact of job loss on the use of adjustment strategies for laid-off workers with more education. By repeating the same calculations for each individual strategy, we find that the estimates of the additional impact are fairly modest – between 1 and 4 percentage points – and, therefore, are not quantitatively important in some cases.[19]

[19] Similar patterns are observed for women (table A7)

Figure 10. Adjustment strategies used by men with a bachelor's degree or more education who were laid off in 2009 and by those who were not (percent)

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of workers aged 25 to 44 in 2001 who in 2009 were not (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

Our two key takeaways from these analyses are these: (1) in both the short and long terms, the effect of job loss on a worker's use of adjustment strategies appears to be fairly modest; and (2) this effect appears to be slightly larger for highly educated laid-off workers than for those with less education.

CONCLUSION

In the wake of COVID-19, one important concern is whether the current social safety net and skills development policies can adequately help Canadians who are or will be permanently laid off due to the pandemic. Much new information and many factors should be taken into consideration in such an assessment, including better knowledge and understanding of what displaced workers actually do to adjust to job loss when employment opportunities are scarce.

This study is the first to consider, in the same analytical framework, several adjustment strategies used by Canadian displaced workers. Using a data set that links

administrative data with Census of Population data, we document the extent to which Canadian workers permanently laid off in 2009 – in the midst of a recession – became self-employed, moved to another region, went back to school (PSE) or enrolled in a registered apprenticeship in the first and fifth years following job loss.

Overall, only a minority of displaced workers – at most one out of five – adopted at least one adjustment strategy in either the first or the fifth year after job loss. Women were slightly more likely than men to use at least one strategy. However, the use of adjustment strategies varied considerably depending on workers' demographic and employment characteristics. Here is a recap of our main findings:

- In the first year after job loss, enrolling in PSE was the predominant strategy for women; men predominantly moved to another region. Five years after job loss, moving became the main strategy for both genders.
- Older workers were less likely to move to another region or invest in skills, in both the short and long terms. They were also less likely to become self-employed in the long term.
- Workers with more education were more likely to pursue PSE, especially if they already had university education, as well as more likely to become self-employed.
- In both the short and long terms, immigrants – especially women – were less likely to move to another region than workers born in Canada. Immigrants were also less likely to enrol in apprenticeships five years after job loss. Recent immigrant men were more likely to start a business than their Canadian-born counterparts in the long term.
- Men with at least three years of job tenure were less likely to move than were men with fewer years on the job, in both the short and long terms. Those with six or more years of job tenure were more likely to invest in PSE in the short term.
- Workers laid off from small firms (fewer than 20 employees) were, all else being equal, more likely to start their own businesses in the short and long terms.

Our finding that displaced workers who were older and less educated were also less likely to adopt adjustment strategies may be because they found it more difficult to adjust or less rewarding financially. In today's context where COVID-19 has disproportionately affected less-skilled workers, this finding suggests that education and retraining programs might not reach and/or benefit these workers as much as they would more educated workers.

As for immigrants being less likely to move to another region than those born in Canada, this may be due to immigrants attaching higher importance to staying close to family and friends and to their having relatively limited social circles elsewhere in Canada. Regardless of the underlying mechanisms, the observed differences in regional mobility suggest that social factors such as family considerations might play an important role in individuals' willingness to move to other areas to find employment. If social networks are a key determinant of individual well-being, and if labour mobility entails a disruption of such networks, "incorporating the link between social ties and well-being into discussions of labour market flexibility and labour mobility might be a useful exercise" (Morissette 2017, 6).

Of course, the use of the adjustment strategies we investigated is not confined to displaced workers who remain unemployed in the year following job loss, or even to workers being laid off to begin with. These strategies may also be adopted by those who found new jobs shortly after layoff, as well as by those who were not laid off, but sought to improve their career prospects. Our analysis takes these distinctions into account. We find that being re-employed one year after job loss appears to matter: workers without paid employment in 2010 were more likely than those who were re-employed to use any of the adjustment strategies in any given year in the first five years after losing their jobs.

Finally, we have attempted to quantify the effect of job loss per se on workers' use of specific adjustment strategies. We find that being laid off in and of itself had a modest impact on the adoption of adjustment strategies. Compared with those who remained employed in 2009, those who were laid off were more likely to use at least one adjustment strategy in 2010, 2012 and 2014, but the differences were small. The impact of job loss was greater among workers with more education than among those with less education.

The main finding here is that job loss does not appear to induce – either in the short or the long term – a large behavioural response in terms of an increased use of the four strategies considered in this study. This result is consistent with the fact that, even during tough times, the vast majority of displaced workers find a paid job – albeit one that often pays less than the previous one – shortly after job loss (Morissette and Qiu 2020).

Still, the vast majority of workers – three quarters – who remained jobless one year after losing their jobs did not use any of the four strategies in the short term. Identifying who these workers are, the reasons they fail to pursue any of these avenues to adjust to job loss, and which policies, if any, could help them fare better in the labour market are important questions for future research.

When interpreting these results, the reader should keep in mind several points. While the study has considered four adjustment strategies, we did not document their relationship with other, potentially relevant, strategies. For example, displaced workers may also adjust to job loss by retiring early, leaving the labour force or changing occupations. Thus, an interesting question for future research is the degree to which displaced workers use PSE as a stepping stone toward a major occupational change – a form of lifelong learning that enables a major change in one's life.

The study also makes no attempt to identify which strategies are the most useful, in the sense of generating the most benefits, given their opportunity costs. Nevertheless, it offers a set of results that is richer than has been available to date regarding labour adjustment after job loss. We hope our findings can be used as building blocks for future policy research aimed at helping workers improve their postdisplacement outcomes and provide a useful framework for discussions about labour adjustment in the context of the postpandemic recovery.

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Table A1. Adoption of adjustment strategies among workers laid off in 2009 one year after job loss, by selected characteristics (percent)

	Men (%)				Women (%)			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
All	5.6	3.9	1.2	4.4	5.5	6.0	0.1	4.9
Age in 2009								
33-37	7.6	5.3	1.8	4.8	6.9	8.0	0.1	5.7
38-42	6.1	4.3	1.2	4.3	5.4	6.6	0.0	5.2
43-47	5.0	3.9	1.3	4.1	5.0	5.2	0.1	4.6
48-52	4.5	2.5	0.7	4.3	5.1	4.7	0.1	4.4
Education in 2001								
High school diploma or less	5.4	3.2	1.1	4.1	5.5	4.9	0.1	4.3
Trades certificate	5.7	3.2	1.7	2.9	5.3	6.6	0.0	3.7
Some post-secondary	5.8	4.9	1.2	5.4	5.4	6.5	0.2	5.3
Bachelor's degree or more	6.6	7.5	0.2	7.7	5.9	8.8	0.0	7.5
Tenure in previous job								
2 years or less	6.4	3.4	1.2	4.1	6.0	5.8	0.1	5.1
3-5 years	5.3	3.7	1.1	5.1	5.4	5.9	0.1	5.3
6 years or more	4.1	5.4	1.2	4.3	4.7	6.6	0.1	4.0
Immigration status								
Canadian-born	6.0	3.6	1.3	4.0	6.4	5.9	0.1	4.4
Landed in last 10 years	4.1	6.3	0.3	7.0	3.2	6.8	0.0	7.0
Landed more than 10 years ago	3.6	3.7	0.6	4.9	3.1	5.7	0.1	5.5
Not permanent resident	13.5	10.5	2.2	9.5	3.1	8.4	0.0	4.6

Table A1. Adoption of adjustment strategies among workers laid off in 2009 one year after job loss, by selected characteristics (percent) *(cont.)*

	Men (%)				Women (%)			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
Disability status in 2001								
Not disabled	5.5	3.9	1.2	4.5	5.4	5.9	0.1	4.8
Yes, sometimes	8.7	4.5	0.5	3.7	6.5	8.1	0.0	6.2
Yes, often	4.5	3.9	0.7	2.3	7.4	4.7	0.1	3.8
Not stated	7.8	0.0	0.0	2.5	6.9	7.2	0.0	9.4
Industry of previous job								
Mining, oil and gas	9.6	2.3	2.3	4.2	9.0	5.3	0.0	2.9
Construction	5.1	2.3	1.9	2.7	6.7	4.8	0.2	3.9
Manufacturing	4.6	5.7	1.2	4.1	4.7	6.2	0.1	3.6
Low-skill services	6.5	4.4	0.6	6.1	5.7	7.1	0.0	5.5
High-skill services	5.6	3.3	0.4	4.3	5.2	4.2	0.1	4.4
Public services	8.9	5.3	1.0	5.0	6.1	7.1	0.1	4.5
Other	5.2	4.1	0.9	5.3	5.2	5.5	0.1	6.1
Unknown	5.9	1.2	0.5	4.1	7.0	3.1	0.0	7.0
Firm size in previous job (number of employees)								
Fewer than 20	5.2	3.4	1.1	5.1	4.9	5.0	0.1	5.7
20-99	5.3	3.6	0.9	4.8	6.1	6.2	0.1	4.3
100-499	5.0	4.5	1.3	3.8	6.2	6.9	0.1	4.3
500 or more	6.9	4.4	1.4	3.3	5.6	6.7	0.1	4.6

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

Table A2. Likelihood of adopting adjustment strategies among workers laid off in 2009 one year after job loss, by selected characteristics (percentage points)

	Men				Women			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
Age in 2009								
(33-37)	–	–	–	–	–	–	–	–
38-42	-1.29*	-1.19*	-0.55	-0.42	-1.24	-1.34	-0.06	-0.45
43-47	-2.31***	-1.63**	-0.46	-0.59	-1.69*	-2.56***	-0.01	-0.91
48-52	-2.72***	-2.88***	-1.08***	-0.21	-1.64*	-3.03***	0.06	-1.08
Education in 2001								
(High school diploma or less)	–	–	–	–	–	–	–	–
Trades certificate	0.01	0.31	0.44	-0.73*	-0.64	1.74*	-0.06*	-0.42
Some post-secondary	0.13	1.46**	0.19	1.20*	-0.39	1.17	0.14	0.89
Bachelor's degree or more	1.08	3.37***	-0.60**	2.72***	0.57	2.98***	-0.06	2.90***
Tenure in previous job								
(2 years or less)	–	–	–	–	–	–	–	–
3-5 years	-1.22**	-0.19	0.00	0.69	-0.50	-0.15	0.01	0.21
6 years or more	-1.85***	1.17*	0.23	-0.08	-0.78	0.61	0.03	-0.97
Immigration status								
(Canadian-born)	–	–	–	–	–	–	–	–
Landed in last 10 years	-1.82**	1.47	-0.31	1.81*	-3.41***	0.21	-0.16**	1.82*
Landed more than 10 years ago	-1.89**	-0.25	-0.24	0.42	-3.18***	-0.42	-0.13	0.81
Not permanent resident	6.55	5.24	1.32	4.17	-3.77	1.78	-0.11*	-0.53

Table A2. Likelihood of adopting adjustment strategies among workers laid off in 2009 one year after job loss, by selected characteristics (percentage points) *(cont.)*

	Men				Women			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
Disability status in 2001								
(Not disabled)	–	–	–	–	–	–	–	–
Yes, sometimes	2.89**	0.93	-0.48	-0.87	0.81	2.58*	-0.11**	1.37
Yes, often	-0.89	0.48	-0.20	-2.36**	1.92	-0.71	-0.01	-0.90
Not stated	2.51	-4.21***	-1.06***	-2.25	2.06	1.31	-0.06	3.86
Industry of previous job								
(Manufacturing)	–	–	–	–	–	–	–	–
Mining, oil and gas	1.39	-3.06***	0.85	0.88	2.25	-0.47	-0.09	-1.12
Construction	-1.00	-2.61***	0.61*	-0.96*	0.63	-0.97	0.04	0.21
Low-skill services	0.79	-1.46**	-0.60**	1.57**	0.43	0.62	-0.10	1.39
High-skill services	0.52	-2.09**	-0.70*	-0.26	-0.08	-1.52	-0.06	0.45
Public services	2.41	-0.96	-0.36	0.98	0.48	0.69	0.03	0.45
Other	-0.16	-1.09	-0.31	0.88	0.02	-0.40	-0.04	2.12*
Unknown	0.59	-3.95***	-0.76	-0.49	2.54	-2.13	-0.08	2.16
Firm size in previous job (number of employees)								
(Fewer than 20)	–	–	–	–	–	–	–	–
20-99	0.02	-0.14	-0.29	-0.41	1.44*	0.71	0.02	-1.66**
100-499	-0.33	0.51	0.12	-1.51**	1.46	1.09	-0.02	-1.73*
500 or more	0.72	0.17	0.35	-2.30***	0.54	0.45	0.02	-1.54**
Baseline rate (percent)	5.6	3.9	1.2	4.4	5.5	6.0	0.1	4.9

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Linear probability models are run separately by sex and outcome. Other explanatory variables include province of residence. Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.
*$p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$

Table A3. Adjustment strategies adopted by workers who were laid off in 2009 five years after job loss, by selected characteristics (percent)

	Men (%)				Women (%)			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
All	9.8	1.7	2.5	6.7	10.2	3.3	0.4	7.5
Age in 2009								
33-37	12.2	2.7	4.2	7.8	11.6	5.0	0.6	8.9
38-42	11.1	2.4	3.3	7.0	10.6	4.2	0.5	7.9
43-47	8.6	1.5	1.9	6.4	9.1	2.9	0.2	7.3
48-52	8.0	0.6	1.3	5.9	10.0	1.5	0.4	6.5
Education in 2001								
High school diploma or less	9.4	1.1	2.5	6.1	10.0	2.5	0.4	6.0
Trades certificate	10.1	1.8	3.1	5.7	11.0	3.1	0.6	7.4
Some post-secondary	10.5	2.4	2.7	7.5	10.0	4.1	0.5	8.9
Bachelor's degree or more	9.7	3.6	0.9	11.5	10.9	5.1	0.3	11.0
Tenure in previous job								
2 years or less	11.2	1.7	2.8	6.3	11.0	3.6	0.6	7.4
3-5 years	8.8	1.9	2.1	7.3	10.8	3.4	0.3	8.1
6 years or more	7.1	1.5	2.3	7.2	7.9	2.4	0.3	7.3
Immigration status								
Canadian-born	10.3	1.7	2.8	6.0	11.8	3.5	0.5	7.0
Landed in last 10 years	6.8	2.3	1.6	12.4	6.0	3.3	0.3	8.8
Landed more than 10 years ago	7.3	1.5	0.6	7.1	5.8	2.4	0.1	9.2
Not permanent resident	17.5	2.2	0.0	12.9	7.2	0.0	0.0	9.4

Table A3. Adjustment strategies adopted by workers who were laid off in 2009 five years after job loss, by selected characteristics (percent) *(cont.)*

	Men (%)				Women (%)			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
Disability status in 2001								
Not disabled	9.5	1.7	2.6	6.8	10.0	3.3	0.4	7.5
Yes, sometimes	14.3	1.6	1.9	5.9	12.8	3.0	0.2	8.9
Yes, often	10.1	2.0	1.5	5.1	12.1	2.4	1.6	5.7
Not stated	11.3	4.8	4.0	4.0	10.5	7.1	0.0	9.0
Industry of previous job								
Mining, oil and gas	13.0	1.5	4.0	4.2	21.1	0.8	0.0	7.4
Construction	9.6	1.1	3.4	5.3	13.8	5.0	0.9	6.8
Manufacturing	8.1	1.5	2.9	6.6	7.6	2.8	0.3	5.7
Low-skill services	11.1	2.4	1.4	8.0	11.0	3.3	0.3	8.0
High-skill services	10.0	2.1	2.2	8.1	8.7	2.3	0.3	7.0
Public services	12.0	2.2	0.9	7.5	10.9	4.8	0.5	8.4
Other	9.1	1.9	2.1	7.3	10.6	3.0	0.7	8.5
Unknown	7.9	0.5	2.1	9.3	12.0	2.8	1.2	7.9
Firm size in previous job (number of employees)								
Fewer than 20	8.6	1.3	2.8	7.9	9.5	2.8	0.4	8.5
20-99	9.7	1.7	2.4	6.6	10.1	4.0	0.5	7.5
100-499	9.4	2.0	2.9	6.1	11.5	3.2	0.4	7.2
500 or more	11.5	1.9	2.0	5.7	10.7	3.5	0.4	6.5

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.

Table A4. Likelihood of adopting adjustment strategies among workers laid off in 2009 five years after job loss, by selected characteristics (percentage points)

	Men				Women			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
Age in 2009								
(33-37)	–	–	–	–	–	–	–	–
38-42	-0.80	-0.41	-0.99*	-1.01	-0.46	-0.74	-0.10	-0.91
43-47	-3.27***	-1.35***	-2.32***	-1.68**	-2.06*	-2.03***	-0.45*	-1.4
48-52	-3.89***	-2.09***	-3.00***	-2.00**	-1.14	-3.38***	-0.19	-2.26**
Education in 2001								
(High school diploma or less)	–	–	–	–	–	–	–	–
Trades certificate	0.32	0.82**	0.46	0.39	0.10	0.18	0.16	1.4
Some post-secondary	0.75	1.13***	0.35	1.36*	-0.61	1.23**	0.05	2.64***
Bachelor's degree or more	0.46	2.15***	-0.84*	4.15***	0.99	2.00**	-0.09	4.55***
Tenure in previous job								
(2 years or less)	–	–	–	–	–	–	–	–
3-5 years	-2.63***	0.01	-0.60*	0.72	-0.12	-0.17	-0.26	0.54
6 years or more	-3.54***	-0.27	-0.13	0.57	-2.23**	-0.89*	-0.18	0.39
Immigration status								
(Canadian-born)	–	–	–	–	–	–	–	–
Landed in last 10 years	-2.87**	0.21	-0.31	4.87***	-5.24***	-0.14	-0.19	0.93
Landed more than 10 years ago	-1.98*	0.04	-1.37***	0.50	-5.18***	-0.32	-0.36**	2.08*
Not permanent resident	6.62	-0.25	-2.44***	5.03	-4.89	-4.10***	-0.48***	1.33

Table A4. Likelihood of adopting adjustment strategies among workers laid off in 2009 five years after job loss, by selected characteristics (percentage points) *(cont.)*

	Men				Women			
	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed	Moved to another region	Enrolled in post-secondary education	Enrolled in registered apprenticeship	Became self-employed
Disability status in 2001								
(Not disabled)	–	–	–	–	–	–	–	–
Yes, sometimes	4.51**	0.12	-0.15	-0.81	2.22	-0.02	-0.20	1.56
Yes, often	0.96	0.63	-0.50	-1.76	2.17	-0.46	1.22	-1.47
Not stated	2.28	3.09	1.91	-3.31	1.58	4.16	-0.37**	0.79
Industry of previous job								
(Manufacturing)	–	–	–	–	–	–	–	–
Mining, oil and gas	0.03	-0.28	0.63	-0.60	9.02*	-2.62**	-0.19	1.26
Construction	-0.64	-0.41	-0.11	-0.32	3.55*	1.78	0.43	0.85
Low-skill services	1.56	0.59	-1.74***	0.99	2.29*	-0.09	-0.11	1.90*
High-skill services	1.26	0.68	-1.15*	1.05	-0.09	-0.83	-0.07	0.92
Public services	1.20	-0.03	-2.37***	1.14	1.17	0.98	0.14	2.49**
Other	0.03	0.50	-1.34**	0.70	2.13	-0.18	0.28	2.25*
Unknown	-1.15	-0.92*	-1.84	2.14	4.22	-0.15	0.94	1.23
Firm size in previous job (number of employees)								
(Fewer than 20)	–	–	–	–	–	–	–	–
20-99	1.09	0.35	-0.67	-1.47**	1.11	1.01*	0.12	-1.36
100-499	0.96	0.65	-0.03	-2.09***	2.61**	0.41	0.14	-1.80*
500 or more	2.30**	0.40	-0.57	-2.67***	1.28	0.37	0.11	-3.20***
Baseline rate (percent)	9.8	1.7	2.5	6.7	10.2	3.3	0.4	7.5

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Notes: Linear probability models are run separately by gender and outcome. Other explanatory variables include province of residence. Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.
*$p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$

Table A5. Percentage of workers laid off in 2009 who used an adjustment strategy at least once in the subsequent five years, by employment status in the first year after job loss, gender and level of education

	Strategy adopted (%)														
	Moved to another region			Enrolled in post-secondary education			Enrolled in registered apprenticeship			Became self-employed			Adopted at least one strategy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Re-employed in year 1?	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ
All	10.9	24.5	-13.6	9.7	14.2	-4.5	3.2	1.6	1.5	11.3	10.8	0.5	30.0	42.3	-12.4
Men															
High school diploma or less	11.1	8.8	2.2	6.1	10.8	-4.7	4.8	2.7	2.1	9.4	22.3	-12.9	27.0	37.6	-10.6
Trades certificate	11.8	9.7	2.1	7.7	10.4	-2.7	6.2	1.7	4.5	8.6	24.3	-15.7	29.3	40.2	-10.9
Some post-secondary	11.3	12.0	-0.7	9.9	18.2	-8.3	4.3	4.2	0.0	11.6	29.7	-18.1	31.9	50.8	-18.9
Bachelor's degree or more	10.1	11.5	-1.4	13.3	21.5	-8.3	1.4	1.5	-0.1	17.4	40.5	-23.1	34.5	60.6	-26.0
Women															
High school diploma or less	11.6	11.2	0.4	10.4	13.0	-2.7	0.5	0.7	-0.2	9.6	19.7	-10.1	28.1	37.0	-8.9
Trades certificate	12.1	13.0	-0.9	12.5	20.3	-7.8	1.1	0.8	0.4	11.1	23.4	-12.3	31.6	47.2	-15.6
Some post-secondary	11.2	9.9	1.3	15.8	16.7	-1.0	0.7	1.0	-0.2	13.3	25.0	-11.8	34.7	44.1	-9.4
Bachelor's degree or more	11.1	15.4	-4.3	18.1	18.3	-0.2	0.2	0.6	-0.4	18.3	33.8	-15.5	38.3	55.7	-17.4

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of workers aged 25 to 44 in 2001 who were laid off in 2009 and were not, in that year, (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.
Δ = Difference between columns

Table A6. Percentage of men laid off and not laid off in 2009 who adopted adjustment strategies in subsequent years, by level of education

	Strategy adopted (%)														
	Moved to another region			Enrolled in post-secondary education			Enrolled in registered apprenticeship			Became self-employed			Adopted at least one strategy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Laid off in 2009?	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ
High school diploma or less															
Year															
2010	5.4	2.9	2.5	3.2	1.1	2.1	1.1	0.4	0.7	4.1	1.5	2.7	13.0	5.7	7.4
2012	7.8	4.9	2.9	1.7	1.3	0.4	2.2	0.8	1.4	5.7	3.0	2.7	16.1	9.5	6.7
2014	9.4	6.5	2.9	1.1	1.1	0.0	2.5	1.0	1.5	6.1	3.8	2.3	17.9	11.7	6.3
Bachelor's degree or more															
Year															
2010	6.6	3.2	3.4	7.5	2.5	5.0	0.2	0.1	0.1	7.7	2.4	5.3	20.3	7.8	12.5
2012	7.9	5.1	2.8	4.9	2.9	2.0	0.8	0.1	0.7	11.1	4.5	6.6	22.8	11.9	10.9
2014	9.7	6.8	2.9	3.6	2.5	1.0	0.9	0.2	0.8	11.5	5.3	6.1	23.3	13.9	9.4

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of male workers aged 25 to 44 in 2001 who in 2009 were not (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.
Δ = difference between columns

Table A7. Percentage of women laid off and not laid off in 2009 who adopted adjustment strategies in subsequent years, by level of education

	Strategy adopted (%)														
	Moved to another region			Enrolled in post-secondary education			Enrolled in registered apprenticeship			Became self-employed			Adopted at least one strategy		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Laid off in 2009?	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ	Yes	No	Δ
High school diploma or less															
Year															
2010	5.5	2.7	2.9	4.9	1.8	3.1	0.1	0.1	0.0	4.3	1.5	2.8	14.2	5.8	8.3
2012	8.1	4.6	3.5	3.3	2.1	1.2	0.3	0.2	0.1	6.1	3.0	3.1	16.5	9.4	7.1
2014	10.0	6.2	3.8	2.5	1.8	0.7	0.4	0.3	0.2	6.0	3.7	2.3	17.6	11.3	6.4
Bachelor's degree or more															
Year															
2010	5.9	2.4	3.5	8.8	3.7	5.1	0.0	0.0	0.0	7.5	2.4	5.1	20.2	8.2	12.0
2012	9.0	4.1	4.9	6.9	4.6	2.3	0.1	0.0	0.0	11.5	4.5	7.0	24.5	12.4	12.1
2014	10.9	5.5	5.4	5.1	4.3	0.8	0.3	0.0	0.3	11.0	5.8	5.2	24.7	14.4	10.3

Sources: Statistics Canada, Longitudinal Worker File; Census of Canada, 2001; Registered Apprenticeship Information System.
Note: Sample consists of female workers aged 25 to 44 in 2001 who in 2009 were not (1) self-employed; (2) enrolled in post-secondary education; or (3) enrolled in a registered apprenticeship.
Δ = difference between the columns

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