

Survey Non-response in Covid-19 Times: The Case of
the Labour Force Survey:
Online Appendix

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A Online appendix

A.1 Creation of mini panels

In this appendix we provide information on how we construct our LFS mini panels.

The LFS has a rolling panel design where households stay in the sample for six consecutive months. Every month one-sixth of the sample (i.e. households) is replaced by households in a similar area. The LFS is officially designed to generate cross-sectional samples; it follows dwellings and not individuals. If, for example, an individual leaves the dwelling part way through the six-month window, he/she is beyond the scope of the survey. Similarly, an individual that joins a household late will only be asked labour market information as of the time he/she started living in the targeted dwelling/household.

The LFS does not have a single person identifier variable. For our period of interest, one can nonetheless uniquely identify individuals across monthly files using the following two variables: the LFS household identifier (HHLDID), and the LINE variable that (uniquely) identifies a person within the household. The HHLDID variable (also called DWELID) is in fact made up of 10 variables (PROV, PROV1, PSEUDOUI, FRAME, STRAFRAM, TYPE, CLUST, ROTATION, LISTLINE and MULT). Once combined, they generate the unique 18-digit household/dwelling identifier.

For our panel analysis we must impose the following additional restrictions: first, we drop individuals whose rotation group rotated-out part-way through the panel; second, we remove individuals that join an existing household part-way through the panel; and third, individuals who are absent in the data for some, but not all months, for reasons other than mentioned above are also dropped.

Of the three reasons, the first is the most restrictive. For the two-month mini-panel one loses one rotation out of six.¹ The second restriction is the least restrictive; meaning that very few observations are lost. This is due to the short time-span of our panels, and may also be influenced by reduced mobility brought about by COVID-19. The third and final reason encompasses multiple possibilities: an individual moved out before the end of the mini panel (but whose household did not rotate out), perhaps there were “unusual circumstances” that resulted in no information being recorded,² or even the matching across months was poor

¹If one were to focus on longer panels, this issue is amplified. For example, when looking at a panel that spans four months, one must drop three rotations out of six, i.e. we lose half the sample—even before imposing any additional restrictions.

²This could be due to a household changing its mind and not wanting to share information any further, or the LFS not being able to find a “donor” for possible record imputation, to name just a couple of reasons.

which could be due to a problem with the matching variables. Although one cannot separate out the importance of each, one can say that as a group they represent a small proportion of the sample. For the two consecutive month panels it is only a couple of percentage points at most.

Given that the LFS is not a panel per se, one must rely on a series of variables to match an individual's information over time (see the appendix for more details). We thus verify that we are indeed following the same person over time. We follow the lead of Rivera Drew et al. (2014) and drop observations for which there are inconsistencies in age (in years) and gender across time. These variables should not change over time (other than becoming one year older) as the age and gender questions are asked of when an individual first enters the survey.³ We lose very few observations due to this restriction.

A.2 Types of non-response

In this appendix we describe how we construct the non-response rates presented in table 2. We also discuss the various robustness checks that were carried out to verify the sensitivity of our table 2 findings.

We cannot directly measure the number of birth non-response individuals as they do not appear in the data. If we assume that the household non-response rates shown in figure 1 also hold at the individual level and that they are also applicable for our our 20 to 64 age group, one can back out the number of individuals that were targeted by the LFS each month. The target sample of individuals 20 to 64 as of time t can be represented as

$$\text{target sample}_t = \frac{\text{sample excluding WRI}_t}{\text{response rate}_t} \cdot 100 \quad (1)$$

Said differently, one must inflate the sample of interviewed respondents (i.e. sample excluding WRI) using the response rate. The importance of birth non-response, as a percentage of the target population of individuals 20 to 64 years of age can be expressed as

$$\text{birth non-response rate}_t = \frac{\text{targeted sample}_t - \text{actual sample}_t}{\text{target sample}_t} \cdot 100 \quad (2)$$

³The LFS records the exact date of birth (i.e. day, month and year). As such, a person's age could change from one month to the next, i.e. increase by one year.

The importance of subsequent non-response can be written as

$$\text{subsequent non-response rate}_t = \frac{\text{actual sample}_t - \text{actual sample excluding WRI}_t}{\text{target sample}_t} \cdot 100 \quad (3)$$

Finally, if we assume that the number of targeted individuals is the same across all rotations, one can further decompose the birth non-response rate for the first month of the six-month window as

$$\begin{aligned} \text{Birth non-response (incoming)} = \\ \frac{\frac{\text{target sample}_t}{6} - \text{incoming rotation sample}_t}{\text{target sample}_t} \cdot 100 \end{aligned} \quad (4)$$

For the latter months of the six-month window, birth non-response takes the form

$$\begin{aligned} \text{Birth non-response (other)} = \\ \frac{\text{target sample}_t - \left(\frac{\text{target sample}_t}{6} - \text{incoming rotation sample}_t\right) - \text{actual sample}_t}{\text{target sample}_t} \cdot 100 \end{aligned} \quad (5)$$

Next, we verify the sensitivity of our findings to the choice of identifying assumptions. First, we relax the assumption tied to the age restriction. We recalculate table 2, but for individuals 15 to 69 years of age, and then for those 15 years and up (i.e. no age restriction). Our main conclusions remain unchanged. It should be noted, however, that the importance of subsequent nonresponse lessens in both the pre- and post-Covid period when we do not put any age restriction. This is to be expected, as there cannot be any subsequent non-response for individuals 70 years and up since their labour market information is automatically carried forward into the remaining months of the six-month window. As a second robustness check, we use an alternative approach to measuring the target sample, one that does not really rely on the response rates. We assume that the target sample for all months equals the largest sample size observed in 2019, and also where the target sample equals the average sample size observed in 2019. We believe such approaches (particularly the maximum approach) provide a rough approximation of the target population because in the pre-Covid period non-response rates were in the low teens whereas subsequent non-response represented 8-9% of the observed sample. As such, birth non-response was clearly of second-order importance before the advent of the pandemic. Again, these robustness checks generate very similar results.

Table A1: Probability of being observed in select months, two-month mini panels (first two months of the six-month window), 2019-2020, unweighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	-0.121*** (0.015)	-0.069*** (0.015)	-0.094*** (0.015)	-0.097*** (0.015)	-0.124*** (0.015)
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	0.003 (0.010)	0.001 (0.010)	-0.001 (0.010)	-0.001 (0.010)	0.000 (0.010)
20 to 29	-0.049*** (0.014)	-0.034** (0.014)	-0.045*** (0.014)	-0.037*** (0.014)	-0.022 (0.014)
50 to 64	0.013 (0.011)	0.006 (0.011)	0.017 (0.011)	0.003 (0.011)	0.025** (0.011)
Dropout	-0.037* (0.019)	-0.023 (0.019)	-0.020 (0.019)	-0.015 (0.019)	-0.020 (0.019)
College	0.032** (0.013)	0.026** (0.012)	0.008 (0.013)	0.030*** (0.013)	0.024* (0.013)
Bachelor degree +	0.034** (0.014)	0.026* (0.014)	0.028** (0.014)	0.010 (0.014)	0.021 (0.014)
East	-0.008 (0.016)	-0.001 (0.015)	0.051*** (0.015)	0.038** (0.015)	0.067*** (0.015)
Quebec	0.029* (0.015)	0.021 (0.015)	0.055*** (0.015)	0.037** (0.015)	0.044*** (0.015)
Prairies	-0.023 (0.016)	0.017 (0.015)	0.075*** (0.015)	0.036** (0.016)	0.054*** (0.016)
Alberta	0.004 (0.017)	-0.025 (0.017)	0.050*** (0.018)	0.093** (0.018)	0.016 (0.018)
British Columbia	-0.035** (0.017)	-0.043** (0.017)	0.020 (0.017)	-0.002 (0.017)	-0.005 (0.017)
adj. R^2	0.014	0.005	0.006	0.006	0.009
N	40,625	42,154	41,622	41,339	41,233

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in the first month of the two-month mini-panel (first two months of the six-month window), excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2019 and 2020. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are unweighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A2: Probability of being observed in select months, two-month mini panels (consecutive months), 2019-2020, unweighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	0.023*** (0.006)	-0.031*** (0.006)	-0.056*** (0.006)	0.058*** (0.006)	-0.065*** (0.006)
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	-0.003 (0.004)	-0.003 (0.004)	-0.004 (0.004)	-0.004 (0.004)	-0.004 (0.004)
20 to 29	-0.007 (0.006)	-0.007 (0.006)	-0.026*** (0.006)	-0.031*** (0.006)	-0.028*** (0.006)
50 to 64	0.004 (0.005)	0.015*** (0.005)	0.024*** (0.005)	0.020*** (0.005)	0.023*** (0.006)
Dropout	-0.013* (0.008)	-0.020** (0.008)	-0.029*** (0.008)	-0.035*** (0.008)	-0.038*** (0.008)
College	0.006 (0.005)	-0.004 (0.005)	-0.007 (0.005)	-0.002 (0.005)	-0.006 (0.005)
Bachelor degree +	0.005 (0.006)	0.001 (0.006)	0.006 (0.006)	0.005 (0.006)	-0.001 (0.006)
East	0.001 (0.007)	0.004 (0.007)	0.023*** (0.007)	0.019*** (0.007)	0.030*** (0.007)
Quebec	0.006 (0.006)	0.006 (0.006)	0.015** (0.006)	0.014** (0.006)	0.014** (0.006)
Prairies	0.004 (0.007)	0.015** (0.007)	0.036*** (0.007)	0.051*** (0.007)	0.062*** (0.006)
Alberta	0.016** (0.007)	0.025*** (0.007)	0.021*** (0.008)	0.046*** (0.008)	0.076*** (0.008)
British Columbia	-0.010 (0.007)	-0.024*** (0.007)	-0.011 (0.007)	-0.013* (0.007)	-0.004 (0.007)
adj. R^2	0.000	0.001	0.003	0.003	0.004
N	230,933	229,081	224,677	224,744	223,556

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in the first month of the two-month mini-panel (consecutive months), excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2019 and 2020. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are unweighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A3: Probability of being observed in select months, six-month mini panels, 2019-2020, unweighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	-0.120*** (0.015)	-0.068*** (0.015)	-0.096*** (0.015)	–	–
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	0.003 (0.010)	0.001 (0.010)	-0.000 (0.010)	–	–
20 to 29	-0.048*** (0.014)	-0.033** (0.014)	-0.042*** (0.014)	–	–
50 to 64	0.014 (0.011)	0.006 (0.011)	0.019* (0.011)	–	–
Dropout	-0.038** (0.019)	-0.023 (0.019)	-0.019 (0.019)	–	–
College	0.031** (0.013)	0.026** (0.013)	0.007 (0.013)	–	–
Bachelor degree +	0.033** (0.014)	0.027* (0.014)	0.029** (0.014)	–	–
East	-0.009 (0.016)	-0.003 (0.015)	0.051*** (0.015)	–	–
Quebec	0.028* (0.015)	0.018 (0.015)	0.056*** (0.015)	–	–
Prairies	-0.024 (0.016)	0.014 (0.016)	0.078*** (0.015)	–	–
Alberta	0.001 (0.018)	-0.025 (0.017)	0.052*** (0.018)	–	–
British Columbia	-0.037** (0.017)	-0.047*** (0.017)	0.020 (0.017)	–	–
adj. R^2	0.014	0.005	0.006	–	–
N	40,219	41,749	41,229	–	–

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in the first month of the six-month mini-panel, excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2019 and 2020. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are unweighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A4: Probability of being observed in select months, two-month mini panels (first two months of the six-month window), 2019-2020, weighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	-0.003 (0.021)	-0.013 (0.020)	-0.014 (0.020)	0.002 (0.020)	-0.031 (0.021)
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	-0.006 (0.014)	0.000 (0.014)	0.000 (0.014)	-0.001 (0.014)	-0.006 (0.014)
20 to 29	-0.036* (0.020)	-0.006 (0.019)	-0.013 (0.019)	-0.007 (0.019)	0.014 (0.020)
50 to 64	-0.000 (0.016)	0.005 (0.015)	0.010 (0.015)	-0.027* (0.015)	0.017 (0.016)
Dropout	-0.006 (0.028)	-0.010 (0.026)	0.013 (0.027)	0.037 (0.027)	0.001 (0.027)
College	0.017 (0.018)	0.018 (0.018)	0.007 (0.018)	0.020 (0.018)	0.035* (0.018)
Bachelor degree +	0.015 (0.019)	0.026 (0.019)	0.022 (0.019)	0.005 (0.019)	0.030 (0.019)
East	-0.009 (0.018)	-0.002 (0.018)	0.003 (0.018)	0.001 (0.018)	0.011 (0.018)
Quebec	-0.001 (0.020)	0.006 (0.019)	0.003 (0.019)	-0.001 (0.019)	0.014 (0.020)
Prairies	-0.008 (0.018)	-0.010 (0.018)	0.008 (0.018)	-0.005 (0.018)	-0.005 (0.018)
Alberta	0.005 (0.023)	-0.011 (0.022)	-0.004 (0.022)	-0.004 (0.022)	0.009 (0.023)
British Columbia	-0.010 (0.023)	-0.010 (0.022)	-0.005 (0.022)	-0.011 (0.022)	-0.007 (0.023)
adj. R^2	0.001	0.001	0.000	0.000	0.001
N	40,625	42,154	41,622	41,339	41,233

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in the first month of the two-month mini-panel (first two months of the six-month window), excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2019 and 2020. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are weighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A5: Probability of being observed in select months, two-month mini panels (consecutive months), 2019-2020, weighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	0.002 (0.008)	0.008 (0.008)	0.008 (0.009)	0.007 (0.009)	0.005 (0.009)
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	-0.002 (0.006)	-0.002 (0.006)	-0.005 (0.006)	-0.003 (0.006)	-0.004 (0.006)
20 to 29	-0.000 (0.008)	0.005 (0.008)	0.004 (0.008)	-0.002 (0.008)	-0.001 (0.008)
50 to 64	0.001 (0.006)	0.005 (0.006)	0.012* (0.007)	0.007 (0.007)	0.010 (0.007)
Dropout	-0.010 (0.011)	-0.025** (0.011)	-0.029** (0.011)	-0.032*** (0.011)	-0.033*** (0.012)
College	-0.001 (0.007)	-0.013* (0.007)	-0.023*** (0.008)	-0.016** (0.008)	-0.013* (0.008)
Bachelor degree +	-0.002 (0.008)	-0.008 (0.008)	-0.009 (0.008)	-0.008 (0.008)	-0.009 (0.008)
East	0.000 (0.008)	-0.001 (0.008)	0.003 (0.008)	0.003 (0.008)	0.002 (0.008)
Quebec	0.001 (0.008)	0.001 (0.008)	0.004 (0.008)	0.004 (0.008)	0.004 (0.008)
Prairies	0.001 (0.007)	0.001 (0.007)	0.002 (0.008)	0.002 (0.008)	0.004 (0.008)
Alberta	0.002 (0.009)	-0.000 (0.009)	0.003 (0.009)	0.003 (0.009)	0.006 (0.010)
British Columbia	0.001 (0.009)	-0.001 (0.009)	0.002 (0.009)	-0.001 (0.009)	-0.000 (0.009)
adj. R^2	-0.000	0.000	0.000	0.000	0.000
N	230,933	229,081	224,677	224,744	223,556

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in the first month of the mini-panel (consecutive months), excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2019 and 2020. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are weighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A6: Probability of being observed in select months, six-month mini panels, 2019-2020, weighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	-0.003 (0.021)	-0.013 (0.020)	-0.016 (0.020)	–	–
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	-0.008 (0.014)	-0.001 (0.014)	-0.001 (0.014)	–	–
20 to 29	-0.031 (0.020)	-0.001 (0.019)	-0.006 (0.019)	–	–
50 to 64	0.001 (0.016)	0.007 (0.015)	0.012 (0.015)	–	–
Dropout	-0.009 (0.028)	-0.008 (0.027)	0.014 (0.027)	–	–
College	0.018 (0.018)	0.021 (0.018)	0.006 (0.018)	–	–
Bachelor degree +	0.015 (0.020)	0.028 (0.019)	0.024 (0.019)	–	–
East	-0.008 (0.019)	-0.003 (0.018)	0.003 (0.018)	–	–
Quebec	0.000 (0.020)	0.003 (0.019)	0.003 (0.020)	–	–
Prairies	-0.009 (0.018)	-0.013 (0.018)	0.011 (0.018)	–	–
Alberta	0.001 (0.023)	-0.011 (0.022)	0.000 (0.023)	–	–
British Columbia	-0.011 (0.023)	-0.014 (0.022)	-0.004 (0.022)	–	–
adj. R^2	0.001	0.001	0.000	–	–
N	40,219	41,749	41,229	–	–

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in the first month of the six-month mini-panel, excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2019 and 2020. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are weighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A7: Probability of being observed in select months, 2018-2019, incoming rotation, unweighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	0.015 (0.014)	0.033** (0.014)	0.026* (0.014)	0.039*** (0.014)	0.021 (0.014)
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	0.003 (0.009)	0.001 (0.009)	0.006 (0.010)	0.013 (0.009)	0.012 (0.009)
20 to 29	-0.007 (0.013)	-0.007 (0.013)	-0.011 (0.013)	-0.005 (0.013)	-0.031** (0.013)
50 to 64	0.001 (0.011)	0.003 (0.011)	-0.024** (0.011)	-0.013 (0.011)	-0.018* (0.011)
Dropout	-0.023 (0.017)	-0.040** (0.018)	0.004 (0.018)	-0.024 (0.018)	-0.017 (0.018)
College	-0.013 (0.012)	-0.015 (0.012)	0.009 (0.012)	-0.013 (0.012)	-0.006 (0.012)
Bachelor degree +	-0.014 (0.013)	-0.013 (0.013)	0.007 (0.013)	-0.011 (0.013)	-0.011 (0.013)
East	0.008 (0.015)	-0.015 (0.015)	-0.014 (0.015)	-0.025* (0.015)	-0.002 (0.015)
Quebec	0.000 (0.014)	-0.025* (0.014)	-0.030** (0.015)	-0.013 (0.015)	-0.001 (0.014)
Prairies	0.006 (0.015)	0.004 (0.015)	0.011 (0.015)	-0.013 (0.015)	0.023 (0.015)
Alberta	0.003 (0.007)	-0.037** (0.016)	-0.060*** (0.017)	-0.108*** (0.017)	-0.029* (0.017)
British Columbia	0.025 (0.016)	0.014 (0.016)	0.012 (0.016)	0.005 (0.016)	0.004 (0.016)
adj. R^2	0.000	0.000	0.001	0.002	0.000
N	46,000	45,659	44,653	45,008	45,454

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in the incoming rotation, excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2018 and 2019. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are unweighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A8: Probability of being observed in select months, 2018-2019, all rotations, un-weighted

	Mar (1)	May (2)	Jul (3)	Sep (4)	Nov (5)
Post COVID-19	0.001 (0.006)	0.004 (0.006)	-0.000 (0.006)	0.001 (0.006)	-0.005 (0.006)
<i>Interaction terms with post COVID-19 indicator:</i>					
Female	-0.000 (0.004)	0.001 (0.004)	0.002 (0.004)	0.004 (0.004)	0.005 (0.004)
20 to 29	0.002 (0.005)	0.001 (0.005)	0.009* (0.005)	0.011** (0.005)	0.006 (0.005)
50 to 64	-0.000 (0.004)	-0.001 (0.004)	0.003 (0.004)	-0.001 (0.004)	-0.004 (0.004)
Dropout	0.001 (0.007)	-0.003 (0.007)	0.006 (0.007)	0.004 (0.007)	0.012* (0.007)
College	-0.002 (0.005)	-0.000 (0.005)	0.002 (0.005)	0.001 (0.005)	0.004 (0.005)
Bachelor degree +	-0.002 (0.005)	-0.005 (0.005)	0.002 (0.005)	0.001 (0.005)	0.003 (0.005)
East	0.002 (0.006)	-0.004 (0.006)	-0.005 (0.006)	-0.003 (0.006)	0.002 (0.006)
Quebec	0.001 (0.006)	-0.003 (0.006)	-0.001 (0.006)	0.005 (0.006)	0.009 (0.006)
Prairies	0.001 (0.006)	0.000 (0.006)	0.007 (0.006)	0.014** (0.006)	0.026*** (0.006)
Alberta	0.003 (0.007)	-0.008 (0.007)	-0.014** (0.007)	-0.040*** (0.007)	-0.046*** 0.007
British Columbia	0.005 (0.006)	0.006 (0.006)	0.011 (0.006)	0.012* (0.006)	0.013** (0.006)
adj. R^2	-0.000	-0.000	0.000	0.001	0.001
N	290,791	290,602	288,870	287,526	286,640

Notes: Probability of being observed in select months, conditional on individual characteristics. Sample for individuals aged 20 to 64 in all rotations, excluding full-time members of the armed forces and those living in the territories, and observed in February and a select month of 2018 and 2019. The select month is identified at the top of each column. The dependent variable is an indicator for whether the individual is observed in the select month. All regressions are unweighted and include the sociodemographic characteristics on their own and a constant. Standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.

Table A9: Labour-market outcomes across pre- and post-March entrants, 2018-2019, weighted

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Mar	Apr	May	Jun	Jul	Mar	Apr	May	Jun	Jul
<i>Panel A: Probability of employment</i>										
d^{2019}	0.004	0.008***	0.012***	0.009***	0.005	0.006*	0.011***	0.019***	0.020***	0.022***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.005)	(0.007)
d^r						0.004	0.005	0.012***	0.010**	0.011*
						(0.006)	(0.005)	(0.004)	(0.004)	(0.006)
$d^{2019} \times d^r$						-0.013	-0.008	-0.015**	-0.017***	-0.021***
						(0.008)	(0.007)	(0.006)	(0.006)	(0.008)
N	145,522	145,766	145,333	144,978	143,601	145,522	145,766	145,333	144,978	143,601
<i>Panel B: Probability of non-participation</i>										
d^{2019}	-0.004	-0.009***	-0.008***	-0.005**	-0.004	-0.007**	-0.013***	-0.015***	-0.018***	-0.020***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.005)	(0.007)
d^r						-0.006	-0.008*	-0.012***	-0.013***	-0.013**
						(0.005)	(0.004)	(0.004)	(0.004)	(0.005)
$d^{2019} \times d^r$						0.016**	0.013**	0.015***	0.018***	0.018**
						(0.008)	(0.006)	(0.006)	(0.006)	(0.007)
N	145,522	145,766	145,333	144,978	143,601	145,522	145,766	145,333	144,978	143,601

Notes: placebo regressions across pre- and post-March entrants for select labour-market outcomes. Sample for individuals aged 20 to 64 in all rotations, excluding full-time members, and observed in a specific calendar month, in 2018 and 2019. The relevant month is identified at the top of each column. Columns (1) to (5) report estimates of the model (4) with the restriction $\delta_1 = \delta_3 = 0$ i.e., estimates for the unconditional impact across all rotation. Columns (6) to (10) report estimates for the full model (4) i.e., it allows the impact to vary across the individuals assigned to pre- and post-March 2019 incoming rotations. All regressions are weighted and include a constant. Robust (Huber-White) standard errors are shown in parentheses. * denotes statistical significance at 10%; ** significance at 5%; *** significance at 1%.