

C A G E

**How are workers
searching for jobs
during the COVID-19
crisis?**

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How are workers searching for jobs during the COVID-19 crisis?

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Summary

The COVID-19 crisis has increased the number of job seekers, and reduced the number of jobs available. If job seekers continued to search in the same way they did before the crisis, these two facts combined would create more competition for any given job. More competition for jobs means that job seekers will take a longer time to find a job, but also that employers will find it easier to fill their vacancies. The latter is favourable to the labour market: if hiring is easier, employers will react by posting relatively more vacancies.

In this note, we present the results of the analysis of unique data from *Platsbanken*, the online job board of the Swedish public employment service. In these data, we observe not only the vacancies posted by employers, but also clicks on these vacancies by the users of the online platform.

We ask the following questions:

- How has the number of job postings evolved since the beginning of the COVID-19 crisis?
- Are job seekers searching more or less?
- How do job seekers adapt their search activity to the change in the composition of job listings?

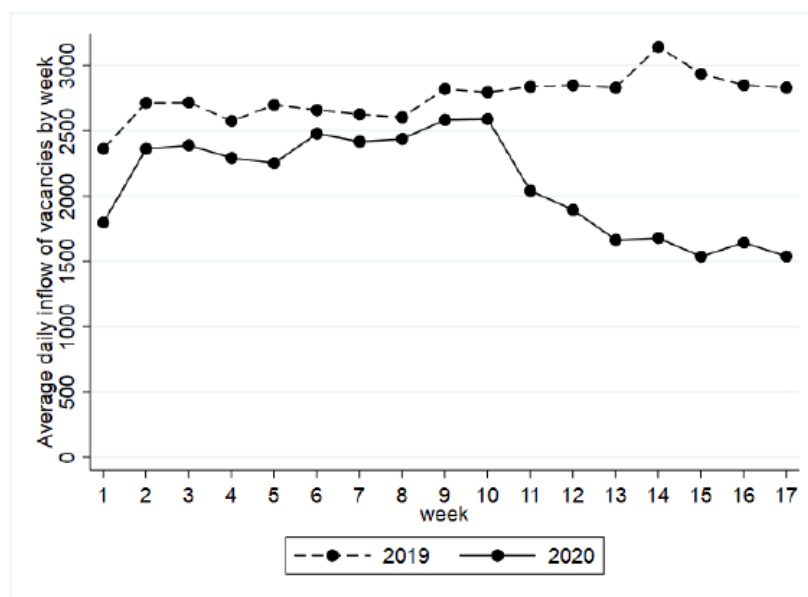
The main takeaways are that:

- The number of new job postings has been decreasing by about 40% in Sweden since the second week of March 2020. Industries and occupations are diversely affected by the crisis. Healthcare occupations, and occupations where the share of work done at home is higher have been relatively less impacted.
- Job seekers have been reducing the number of clicks they make on the platform. On average each job vacancy receives fewer applications than it did prior to the beginning of the crisis in March 2020. This finding means that hiring is more difficult for employers, in spite of the increase in the number of job seekers.
- Job seekers have been updating the direction of their search to the available vacancies on the website. A given job seeker is more likely to click on occupations that are more frequently advertised since the crisis. This means that more resilient occupations are relatively less affected by the drop in the number of clicks since the beginning of the crisis.

How has the number of job postings evolved since the beginning of the COVID-19 crisis?

A study of vacancy postings gives us our primary measure of labour demand changes in the wake of the COVID-19 pandemic. Figure 1 compares the daily inflow of vacancies from January to mid-April in 2019 and 2020. The inflow of vacancies in 2020 is stable until week 10 after which we see a sharp and persistent drop. We calculate a 40% reduction in the inflow of vacancies since the beginning of the crisis.

Figure 1: average daily inflow of vacancies per week: 2019 vs 2020

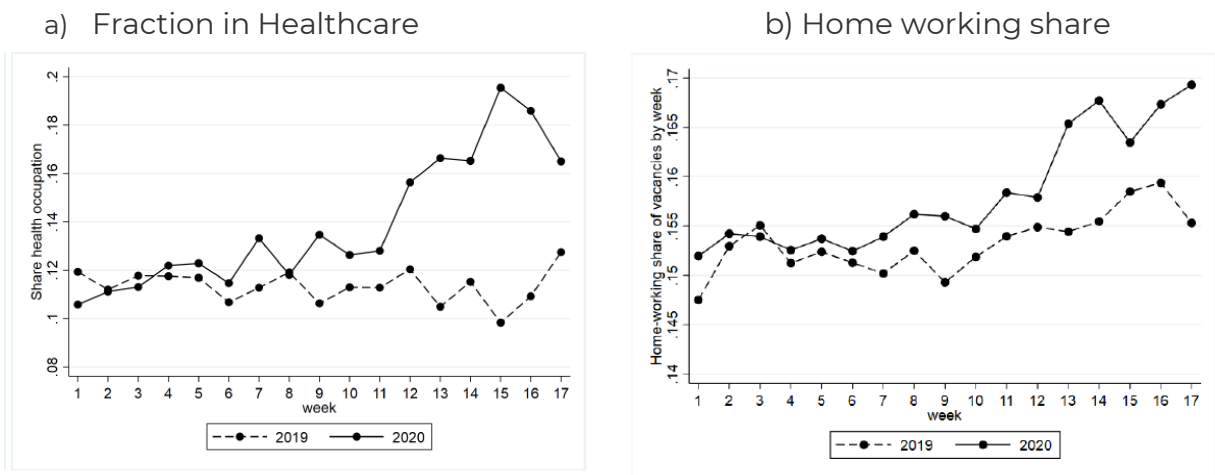


Note: This figure plots the weekly time series of the daily inflow of vacancies in 2019 and 2020. On the x-axis, we have the rank of the week within the calendar year. In 2020, week 5 begins January 27 and ends February 2; week 10 is March 2 to March 8 and Week 13 from March 23 to March 29.

While the inflow of vacancies has dropped overall, there has been a marked increase in the fraction of posted vacancies in healthcare occupations: a rise of 5 percentage points. This is an indication of the increasing demand for healthcare personnel during the COVID-19 outbreak.

Jobs where social distancing is less problematic, such as those done at home, have also resisted the shock of the health crisis. Home working vacancies have risen by 0.5 percentage points.

Figure 2: Trends in types of vacancies per week



Note: The figure shows the evolution of different vacancy attributes inferred from the occupation of the vacancy. Share health care is the fraction of vacancies with the following occupation titles (SSYK codes): Medical doctors (221), Nursing professionals (222 & 223), Personal care workers in health services (532) and Health care assistants (553). Home working share is the mean share of hours worked at the workplace and home derived from the American Time Use Survey (ATUS).

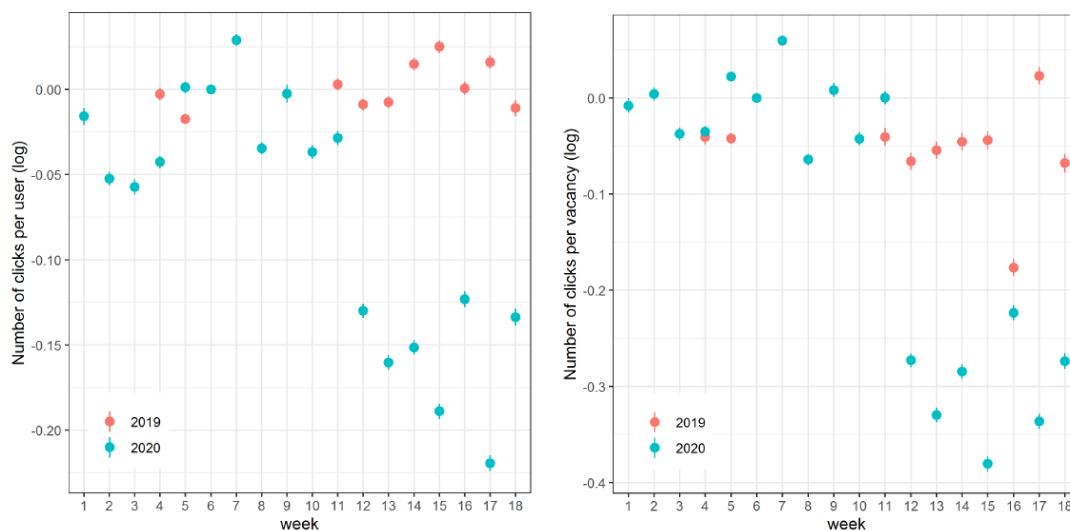
Are job seekers searching more or less?

Following the reduction in available vacancies, we see that job seekers have been reducing their job search effort.

Figure 3 (left) shows the percentage change of the average number of clicks made by each job seeker on the online platform, compared to week 6. For a job seeker who clicks at least once on a given day, the number of clicks declines by about 15% since the beginning of the crisis.

Figure 3 (right) shows the consequences for employers of the reduced search activity. Compared to week 6, a given job posting receives, on average, 30% fewer clicks since the beginning of the crisis.

Figure 3: Average percentage change of the number of clicks per user (left) and per vacancy (right) for each week in 2020, compared to week 6



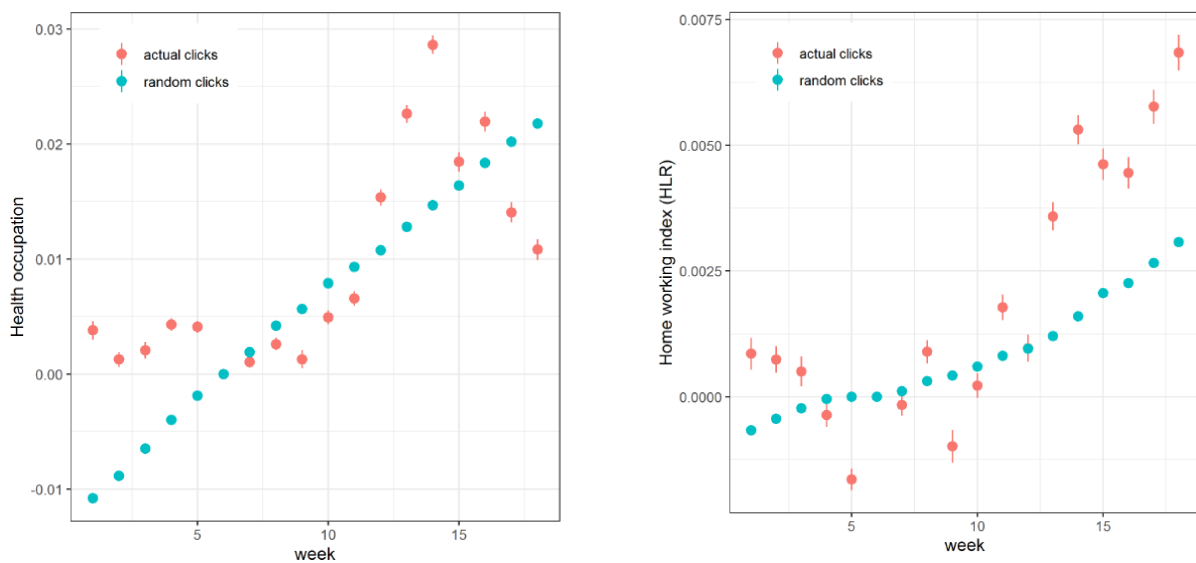
Sample: Clicks on Platsbanken between 1 Jan and 3 May in 2020 and in 2109.

Note: This figure shows the weekly effects in the regression of the log of the number of clicks per user (left) and of clicks per vacancy (right). The plotted estimates correspond to the coefficients β_w in Regressions 1 and Regression 2 (See Hensvik et. al, 2020). Blue dots are for 2020 estimates and red dots for 2019 estimates. The 6th week of the year is chosen as the reference. Standard errors are clustered at the user level in per user regressions, and at a vacancy level in per vacancy regressions. Vertical lines show 95% confidence intervals.

How do job seekers adapt their search activity to the change in the composition of job listings?

Job seekers have been updating the direction of their search. Figure 4 shows that since mid-March 2020, job seekers have been clicking more frequently on healthcare occupation vacancies. The same phenomenon occurs for occupations with a higher home-working index (which represents the average share of the work in a given occupation that is done from home).

Figure 4: Number of clicks on vacancies in healthcare (left) or those with a high home working index (right)

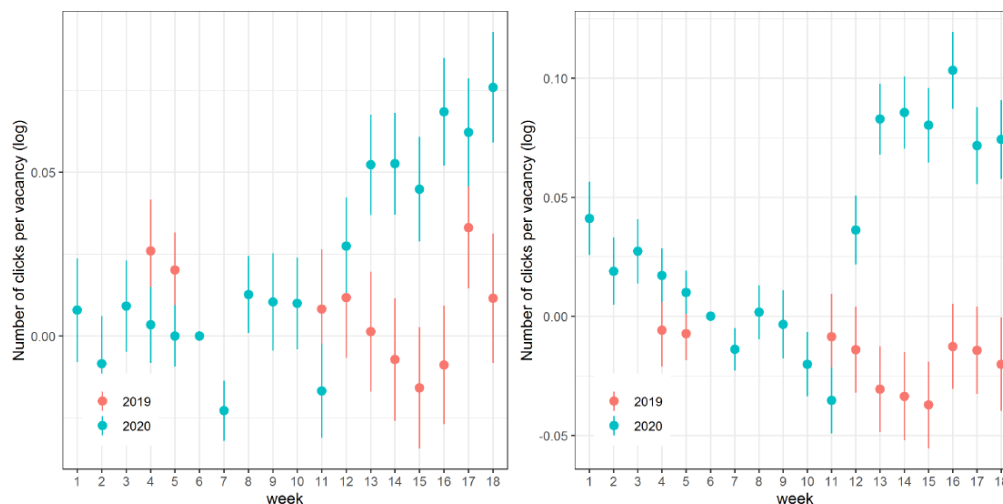


Sample: clicks on the Platsbanken between 1 Jan and 3 May 2020 and 2019.

Note: This figure shows the weekly effects on the characteristics of the vacancies that users click on: healthcare occupation and home-working index. The plotted estimates correspond to the coefficients β_w in Regressions (1) with user fixed effects (See Hensvik et al., 2020). Red dots are for 2020 estimates on actual clicks, and blue dots for clicks by counterfactual random searchers on available vacancies. The 6th week of the year is chosen as the reference. Standard errors are clustered at the user level. Vertical lines show 95% confidence intervals.

Figure 5 (left) shows the difference between the number of clicks received by high home-working vs low home-working vacancies (normalised at zero for week 6). While the difference is roughly stable before mid-March (or throughout in 2019), the figure shows that high home-working vacancies receive on average 5% more clicks than low home-working ones since the beginning of the crisis. Figure 5 (right) shows the same for resilient vs. less-resilient occupations: vacancies belonging to resilient occupations receive 8 to 10 % more clicks than less-resilient ones.

Figure 5: Number of clicks received by high home working occupations vs low home-working (left) and by resilient vs less resilient occupations (right)



Sample: clicks on the Platsbanken between 1 Jan and 3 May 2020 and 2019.

Note: This figure shows coefficient estimates from Regression (3) (see Hensvik et. al, 2020) of the log of the number of clicks per vacancy. We plot the δ_w coefficients of the week effects interacted with high home working occupations (left) and with resilient occupations (right). Blue dots are for 2020 estimates, and red dots for 2019 estimates. The 6th week of the year is chosen as the reference. Standard errors are clustered at vacancy level. Vertical lines show 95% confidence intervals.

Policy take-aways

Despite the comparative leniency of the Swedish Covid-19 restrictions, the Swedish labour market has been hit very hard. The impact has been particularly severe in industries where COVID-related restrictions are most directly relevant, such as hotels, restaurants and retail. While the labour market impact may be even worse in countries that chose to apply more stringent lockdown policies, our work suggests that switching to a more lenient approach would not necessarily undo the damage to the labour market.

Our findings highlight the risk of underestimating the labour market impact of the crisis if not accounting for the reaction of job seekers. The fact that people search less may magnify the crisis by making it more difficult for firms to find workers. Interventions aimed to assist firms in their recruitment process during the crisis might be a solution, by reducing the cost for firms in need to fill their vacancies.

Interventions that aim to help workers financially during the crisis, like unemployment-insurance extensions, might need to be focused on sectors and occupations where the lack of vacancies is greater.

Job-seekers seem willing to make job search adjustments by directing their search efforts towards vacancies from the more resilient occupations. This willingness to search for other jobs than in “normal times” is encouraging as it means that workers will respond to policies aiming to bring workers and available jobs closer together. However, it also means that sectors and occupations that suffer the most from the crisis are also more affected by the disaffection of workers, and might find even more difficult to hire. From a policy point of view, this is one more reason for the government to support the industries that suffer most during the crisis.

References

Hensvik, L., Le Barbanchon, T., Rathelot, R., (2020) 'Job search during the COVID-19 crisis', CAGE working paper no. 473