

IZA COVID-19 Crisis Response Monitoring:

Sweden

Lena Hensvik and Oskar Nordström Skans

UCLS, Uppsala University, Sweden · CESifo · IZA, Germany

May 2020

Covid-19 Crisis Response Monitoring: Sweden^{*}

Lena Hensvik

Oskar Nordström Skans^{†‡}

May 2020

Abstract

This report contains an early assessment of the labor market impact of Covid 19 and the ensuing economic policy responses in Sweden. It is written as part of an international Crisis Monitoring Program organized by the IZA.

Swedish measures to mitigate the spread of the Covid-19 virus have been less restrictive than those used in most other countries. Despite of this, we document a massive contraction of the Swedish labor market with an emphasis on hotels, restaurants and retail sectors. Early policy responses have primarily been in the form of short-term financial aid to firms and policies aiming at preserving permanent employment contracts. A very generous short-time work scheme covers 9 percent of the total labor force. Policy measures are expensive, but sound fiscal finances makes them sustainable in the short to medium run.

Keywords: Covid-19, Labor Market Policy

JEL Codes: J08, J38, J65, J68

^{*}We thank Lars Calmfors, Stefan Eriksson, Anders Forslund, Peter Fredriksson and Iida Häkkinen Skans for supplying useful comments on very short notice. All remaining errors are our own.

[†]Uppsala University, UCLS, IZA and CESifo.

[‡]Uppsala University, UCLS and IZA.

1 Background

1.1 Covid-19 in Sweden

The first case of Covid-19 was confirmed by the Swedish Public Health Agency on January 31 in a traveller from China and a few weeks thereafter, during the second week of March, community spread was confirmed. As a response, various restrictions were imposed with the aim of slowing down the spread (or "flattening the curve"). These restrictions have been relatively mild compared to other European countries. The measures primarily rely on voluntary compliance with recommendations from the Public Health Agency regarding social distancing. During the second week of March (week 11), the Public Health Agency made several formal announcements, requiring all residents to keep a distance from each other, that high schools and universities must move their teaching online, and that workers should work remotely to the extent possible. All workers should remain at home if they have any symptoms traditionally associated with the flu or the common cold. Unnecessary travel within the country should be avoided. Gatherings were limited to 500 people; a restriction that was further tightened to 50 two weeks later. Compulsory schools (until age 15-16) have remained open and parents are obliged by law to ensure that children without symptoms attend school. Pre-schools (before age 6) also remain open but these are not covered by school attendance laws. Outdoors movement is unrestricted and encouraged for all groups as long as proper distance can be maintained. All shops and businesses can remain open but they need to ensure proper distance between customers and all employers are required to take measures that help protect their workers.

Some descriptive indicators of the time-line of the spread of the Covid-19 virus in Sweden are collected in figure 1. With the well-known caveats associated with each such indicator, they jointly suggest a rapid spread with many new severe cases around weeks 11 to 14 followed by a levelling out and a gradual fall in new severe cases starting between week 15 and 17 depending on indicator.

The Swedish response has been highlighted as an exception due to its comparative leniency. The response has spurred international criticisms in media and elsewhere. But the response has also been perceived as a possible route forward for other countries. The WHO (on April, 20) described the Swedish response as a possible future "model" for other societies when opening up from their current lockdown policies. It may therefore be of particular interest for other countries to assess the labor market effects of the Swedish response

In this context, it may be important to note that the Swedish response was never motivated by economic concerns *per se*. The response has been coordinated by the Public Health

Agency with very little interference from the political sphere (or economists). The agency motivates its route by a desire to avoid negative side effects on physical and mental health from reduced mobility and isolation, and a desire to impose a regime that can be sustained for a prolonged period of time with a fully functional health-care system. The agency has firmly stated that "herd immunity" is not a policy target and that the overall aims of the policies are similar to those of other countries. At the same time, the agency considers it impossible to prevent the disease from spreading in the long term without herd immunity or vaccination.

Overall, the Swedish Covid-19 response, as interpreted through an economic lens, mostly differ from other countries in terms of degree rather than content (with the exception of the open schools). The "recommendations" are more binding than the word may suggest as residents and firms are expected to abide by them. It is obvious that the recommendations had a massive impact on people's behavior.¹ The recommendations therefore had a sharp effect on economic outcomes. Sales in restaurants dropped by 70 percent from the second week of march and sales of apparel fell by about 50 percent during the same weeks.²

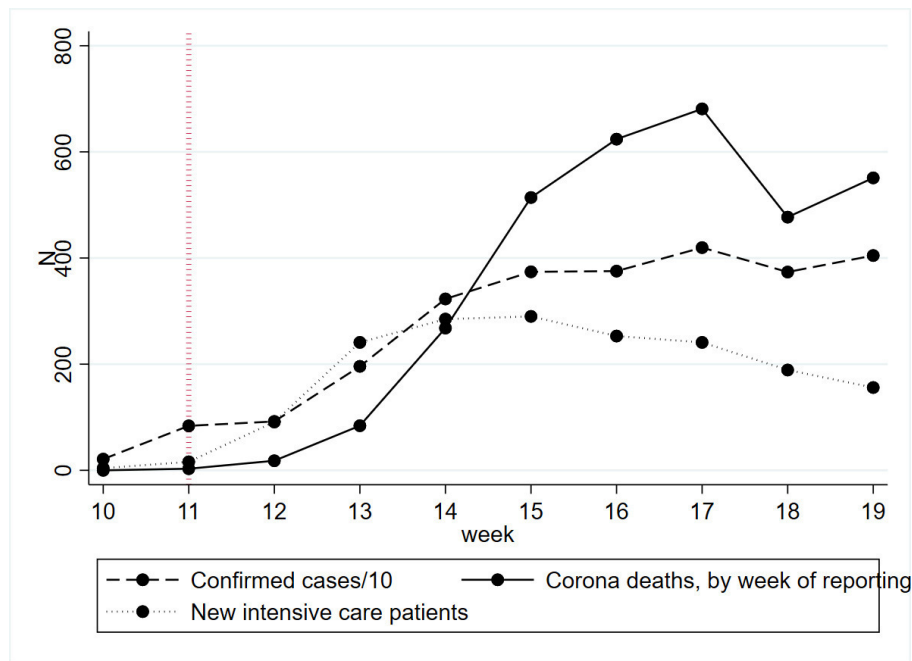


Figure 1: Timeline of the Covid-19 spread

Source: Confirmed cases: Public Health Agency; Intensive care patients: Svt.se; Deaths: Worldometer.

¹Compliance with the "recommendations" have been particularly high on public holidays. Travel out of Stockholm was very limited across Easter, and parks were completely empty during April 30th ("Walpurgis") when students traditionally celebrate the arrival of spring in public parks.

²See <https://www.caspeco.se/> and www.svenskhandel.se.

1.2 Sweden before Covid-19

Sweden has a total population of 10 million, whereof 7.5 million are in working age (15-74). In 2019, the labor force participation rate (73 percent) and employment rate (68 percent) were both high by international standards. The gender employment gap (4 percentage points) is also small. The unemployment rate (6.8 percent) was close to the European average. Unemployment is to a large extent concentrated among low-skilled workers, recently immigrated workers, and students. The GDP-gap in 2019 was small but positive (0.5 percent). Unemployment increased slightly between early 2019 and early 2020. The country has its own currency and a floating exchange rate. Exports are nearly 50 percent of GDP. Public finances are sound with a relatively low level of public debt (Maastricht debt is 35 percent of GDP).³

2 Overall impact on the labor market

To study the immediate impact on the labor market we primarily rely on data from the Public Employment Service (PES) on workers who are registered as unemployed.⁴ In light of the comparatively mild nature of Swedish Covid-19 restrictions, it is remarkable how stark the labor market impact has been. This is, most likely, a consequence of high rates of compliance with the public recommendations. Figure 2 documents a rapid deterioration in labor market conditions as measured by registered unemployment, reduced vacancy postings, increased layoff notices and bankruptcies. We show how these measures evolved before and during the initial phase of the crisis. In all graphs, except for the stock of unemployed, we display the *accumulated flows*. For comparison, we provide corresponding numbers for 2019.

The figures suggest a substantial slow-down of the Swedish labor market starting around the time-of-announcement of the Covid-19 restrictions: The number of workers registered as unemployed at the PES increased by almost 60,000 people in just 2 months and the increasing trend clearly continues. During 2019, the number of registered unemployed fell by around 9,000 during the same season. The increase in registered unemployed corresponds

³All numbers pertain to 2019. Labor market statistics and export share are taken from Statistics Sweden. Debt statistics are from the OECD. GDP-gap is from the National Institute for Economic Research.

⁴The total number of "registered as unemployed" usually align well with the number of unemployed in the Labor Force Surveys although the workers are not always the same. In particular, unemployed students rarely register as unemployed and participants in some labor market programs may not actively search for jobs and thus not show up as unemployed according to the LFS. See <https://www.scb.se/hitta-statistik/artiklar/2018/arbetslos-inte-samma-sak-hos-scb-och-arbetsformedlingen/>.

to about 1 percent of the labor force.⁵ As is apparent, the effect is mainly driven by the inflow into registered unemployment, even though the outflow is reduced as well.

The number of new vacancies at the PES dropped by almost 1/3 and the number of layoff notices increased sharply from 20,000 to 75,000 compared to the same period in 2019, thus suggesting that around 1 percent of the labor force has been notified of a layoff because of the crisis. There is also a rapid relative increase in the number of workers affected by bankruptcies, although these events affect much fewer workers.

Note that there is a possible element of double-counting across indicators since redundancy notices also include bankruptcies, and an unknown fraction of workers from bankruptcies may have ended up in registered unemployment. Due to relatively long (2-6 months) advance notice periods, most of the workers affected by a layoff notice are, however, not in the unemployment statistics yet and previous experiences suggest that many of the noticed workers will not end up in unemployment at all.⁶ The most important aspect to consider is, however, that all of the trends are evolving rapidly at the time of writing. It is therefore almost certain that the final impact will be substantially larger than those suggested by the end-points of our time series.

⁵The size of the labor force in May 2019 was 5.5 million according to the Labor Force Surveys

⁶During the financial crisis, about 60 percent of notices resulted in layoffs, whereof half became unemployed. The assessment is also somewhat complicated by the fact that layoff notices to the Public Employment Service only are required when firms lay off at least 5 workers, and the impact of the current crisis appears to be concentrated in sectors where there are many small firms.

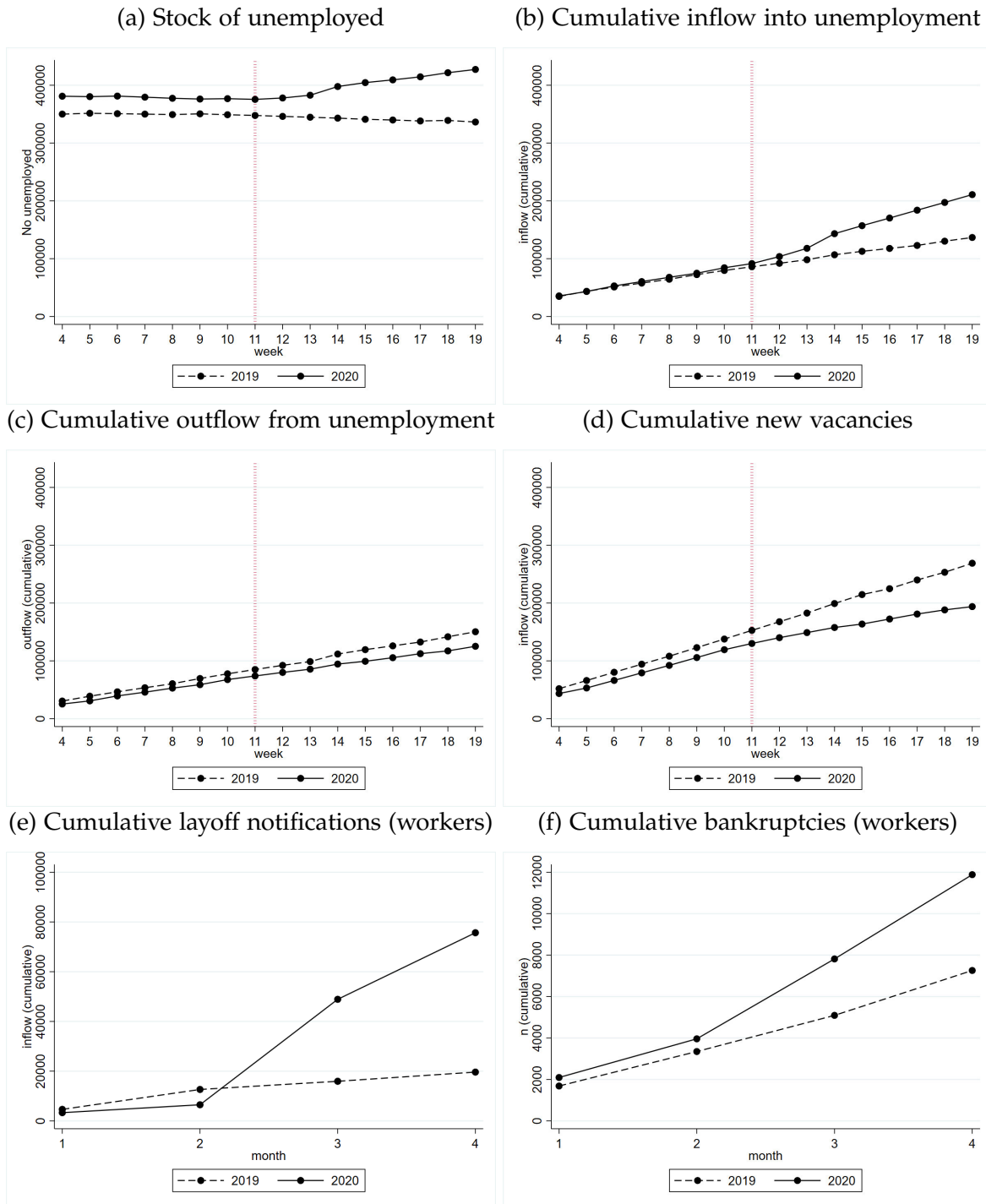


Figure 2: Initial impacts of the Covid-19 crisis
Source: (a)-(c), (e)-(f) The Swedish Public Employment Service; (d) [Hensvik et al. \(2020\)](#).

Table 1: Initial impacts of the Covid-19 crisis

Measure	By April 2019	By April 2020	Percent change
Registered unemployed	338,205	414,495	22.6
New registrations	130,291	197,258	51,4
Outflow to employment	141,729	117,300	-17.2
New vacancies	239,917	177,386	-26.1
New summer jobs	90,041	73,821	-18.1
Noticed workers	19,624	75,672	285.6
Bankruptcies	7,259	11,883	63,7
Short-time work (employers)	0	50,584	-
Short-time work (workers)	0	486,421	-

Note: The table shows the numbers and percent change corresponding to Figures 2 and 3. In addition, it shows the number of workers on short-time contracts. The numbers reflect the total stock/inflow/outflow over the period Jan-April in 2019 and 2020.

3 Orientation and targeting of economic policy measures⁷

Given the dramatic impact of the Covid-19 restrictions on the labor market it is not surprising that the Swedish government, as governments elsewhere, has imposed a number of targeted economic policy measures, some of which we summarize here. The specific policy measures appear to have had three objectives:

1. Reduce the financial burden from sickness absence.
2. Protect firms and jobs.
3. Increase access and generosity within the unemployment insurance system.

On sickness absence: The Swedish health insurance temporary covers the first day of sickness absence – normally paid by the absentee – and the first two weeks of sickness absence thereafter – normally paid by the employers.⁸ The measures were some of the first responses to the virus and its aim was clearly to ensure that workers with symptoms of Covid-19 should stay at home and not be tempted to remain at work for financial reasons.⁹ The measures are perhaps particularly important for the Swedish Covid-19 strategy as it relies heavily on workers remaining at home after self-assessment of symptoms.

Protecting jobs and firms: There are a number of policy measures aimed at protecting firms and jobs at this early stage of the crisis. Several of the policies are explicitly short-term in nature. A scheme for general compensation for reduced sales relative to the previous year compensates for sales losses in March and April. It was announced early May to avoid strategic reduction of sales and is labelled as a “restructuring support program”. Payroll taxes for the first 30 employees are reduced from around 30 to 10 percent of wages during March to June. This scheme covers wage costs up to a low wage cap of 25,000 SEK/Month which is close to the 10th percentile in the wage distribution. Financial support are available for landlords who rent out space to firms in some targeted industries (hotels, restaurants, and some retail) between April and June; the support reimburses half of any temporary rent-reduction for firms in covered industries, but at most 25 percent of the original rent. A targeted support system for cancelled events in arts and sports cover cancellations in April to May.

The most important policy tool, at least from a labor market perspective, is, however, the short-time work system that was set up as a response to the crisis. The system, which is in

⁷The compilation in this section draws on information collected at the websites of several government agencies.

⁸These measures are currently set to end in September

⁹Requirement for doctor’s certificate when absent is also temporarily relaxed.

place for the full duration of 2020, allows firms to reduce working time for their employees by 20, 40 or 60 percent (May to July also 80 percent). Firms, workers and the central government share the costs, but most of the costs are born by the government. With a 60 percent reduction, employers reduce their wage cost to half, and workers retain over 90 percent of their initial salary, see Table 2. There is a wage cap around the 80th percentile in the wage distribution (SEK 44,000/month). Costs above this cap are not covered by the subsidies. Firms are expected to do whatever else they can to reduce their labor costs, which implies that they should not hire new workers unless absolutely necessary. Only workers with at least 3 months tenure at the time of application can be covered by the system. Notably, this subsidy can be combined with the payroll tax reduction which implies that firms with less than 30 (low-wage) employees essentially have all their wage costs covered if workers are on 80 percent short-time work. At the time of writing, applications for short-time work covers 490,000 workers (9 percent of the labor force) whereof 394,000 were already approved.

Table 2: The short-time work scheme

Working time reduction	Worker pay reduction	Labor cost reduction
20 %	4 %	19 %
40 %	6 %	36 %
60 %	7.5 %	53 %
80 %*	12 %	72 %

Note: Numbers pertain to workers earning less than 44,000 SEK/Month. Support is available for up to 6 months during March to December 2020. *80 % reduction is only available during May to July.

Source: The Swedish Agency for Economic and Regional Growth.

In addition to these subsidies, there are various liquidity measures aimed directly at firms, including a measure which allows firms to postpone 3 months of payroll taxes and VAT for one year at a low interest rate. These measures are complemented by interventions to ensure market-level financial stability by the Riksbank and other government agencies.

Unemployment insurance: The government has taken several measures to extend unemployment insurance coverage and increase benefit levels during the crisis. As a starting point, it is worthwhile to note that the UI system in Sweden has a very low cap which in effect means that the compensation is at the same flat rate for nearly all full-time employed workers. Compensation is even lower for workers who have chosen not to be members of a UI fund. Many workers are covered by additional insurance through schemes organised by unions or jointly by the social partners. These schemes cover workers who are union members and/or are employed at workplaces that are covered by collective agreements.

The main reforms put in place during the current crisis is a reduction of the work-requirements for UI eligibility from 80 to 60 hours/month during 6 of the past 12 months and a lowered required duration of membership in UI funds from 12 to 3 months. The lowest benefit level (for those without UI membership) and the benefit cap have both been increased quite substantially; the increases are around 30 percent relative to previous levels. In addition, the Swedish financial supervisory authority have granted banks the right to provide general exemptions from rules regarding amortisation of mortgages between April and June. The aim is to provide workers with additional liquidity in the case of job loss or other income disturbances.

Remaining challenges: Current measures have either focused on running costs (short-time work, payroll reduction and financial support for rental costs) or replacing past lost earnings during specific months (compensation for reduced sales and cancelled arts/sports events). There is still considerable uncertainty regarding future lost earnings, perhaps in the next step within the tourist dependent sectors that rely heavily on earnings during the summer in Sweden as elsewhere.

4 Policy take-up and small firms

The short-time work policy, which is the key policy tool at this stage, was introduced very rapidly and efficiently. It was announced to be in effect from the day of announcement even though it would take a few weeks to get the proposal through parliament and set up the system (i.e. firms could apply retroactively). Applications could be submitted by early April but slightly more than half of the applications submitted at the time of writing pertain to working-time reductions starting in March. Access and application is streamlined through an on-line portal requiring very little information above a listing of the covered employees. Payments from the scheme came within days of the application for most firms.¹⁰ Figure 3 illustrates the application and approval (i.e. processing, as most will be approved) rates across time. By the end of April, more than 50,000 firms have applied for the short-time work subsidy, which can be compared to 2,104 firms filing for bankruptcy during the same period. The applications cover 490,000 workers.¹¹ Application numbers correspond to 15 % of all firms and 9 % of all workers in Sweden. This suggest that many small firms applied.¹²

¹⁰Firms without collective agreements need to make individual arrangements with 70 percent of employees in order to access the scheme. This is mostly relevant for small firms.

¹¹The numbers are from Swedish agency for Economic and Regional Growth.

¹²Note that employers that were funded or owned by central or local employers were not eligible to apply, a restriction that apply to more than 1/3 of all workers in the economy.

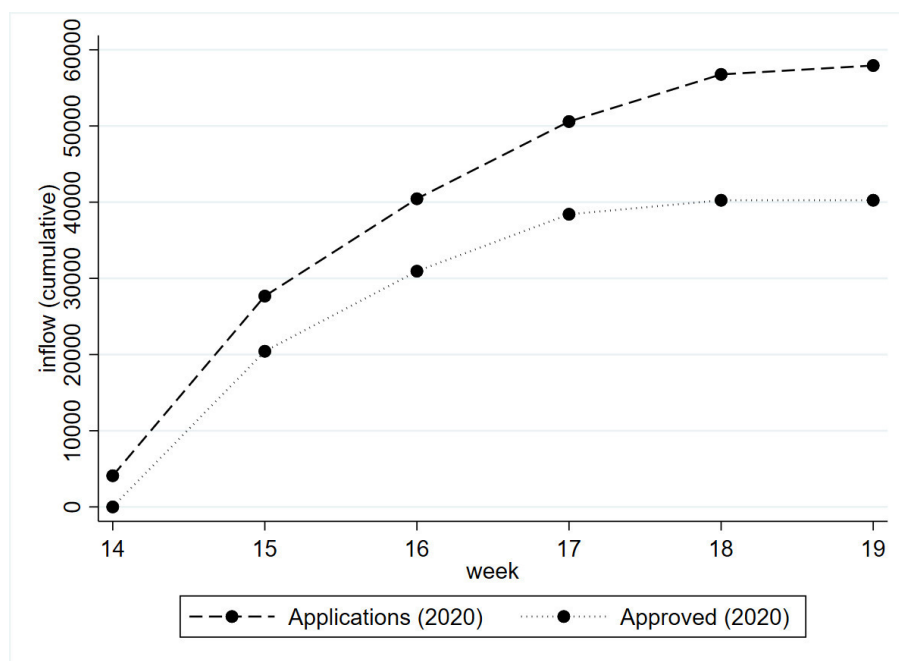


Figure 3: Take up of short-time contracts

Source: The Swedish Agency for Economic and Regional Growth

Because of the fairly mechanical approval of the applications, there is an obvious risk of fraud. There are, e.g., some anecdotal reports that employees are required to work more than allowed by the short-time work schemes while paid by the subsidies. There has been a discussion regarding whether subsidies should be accessible for profitable firms that pay out major dividends, which was possible initially but appear not to be any more after some adjustments by the responsible agency. In addition, there is an obvious risk that these policies are used by firms that in the end will not survive. But given the short-run nature of the policies, these seems as acceptable costs, at least at this early stage – but concerns could potentially be more severe in the longer run considering that the policy will be in effect throughout the year (at 60 percent work reduction).¹³ An unfortunate feature of the system is that it does not contain any guarantees for employment relationships to be maintained – the system can even be used while workers have received an advance notice of layoff.

Some measures are explicitly targeted at the small firms and freelance workers. Reduced payroll taxes are clearly of largest importance for small firms as it only covers the first 30 employees. Self-employed workers have been given additional opportunities to put their firms in hibernation in order to access unemployment insurance. Firms can use the short-

¹³After the end-of-the year, there will be a slightly less generous system in place (permanently) that grants firms access to short-time work under more restrictive conditions.

time work scheme even if self-employed as long as the firm is incorporated, and many small firms seem to be among the applicants as noted above. The arts and sports support which also could cover many freelancers have, however, taken long to materialize and there is still considerable uncertainty as to who will receive funding; the budget is fixed and will be allocated among applications after individual assessment.

5 Dependent workers

The Swedish labor market is characterized by very low wage dispersion which has remained reasonably constant across the past two decades.¹⁴ On the other hand, income inequality has increased, partly because caps on most social insurance payments, including UI, have remained largely fixed in nominal terms for a very long time. The combination of uniformly growing nominal (and real) wages together with fixed UI-payments have generated a situation where much of the income inequality is related to the employment margin. In this respect, the policy direction during the initial phase of the crisis has the benefit of effectively preventing poverty. This is true in particular, as the replacement rates in the short-time work program are very high – workers in this program are much better insured than they would be if they lost their job. On the losing side, however, are those marginal workers who are on temporary contracts that will not be renewed when expiring. The reduction of UI eligibility requirements may serve as to alleviate some of this impact.¹⁵

6 Working conditions

The Swedish Public Health Agency recommends that all workers who can should work from home. As is shown in figure 4 this seems to have had a substantial impact on the time spent at work. As a contrast, the figure also shows comparable statistics for neighboring countries with stricter policies and it is clear that the Swedish response was more gradual and less pronounced. To some extent this is mechanical as some workplaces that were closed by law in other countries remained open in Sweden, most notably schools and child-care facilities. From the parents' perspectives this may also have been an important factor in terms of ensuring effective labor supply by making it possible for parents to travel to

¹⁴The background description in this paragraph draws heavily on Nordström Skans et al. (2017), for a summary in English of that source, see <https://www.sns.se/en/articles/sns-economic-policy-council-report-2017-policies-for-an-inclusive-swedish-labor-market/>. For a description of the Swedish wage structure see Carlsson et al. (2019).

¹⁵We have not been able to document how various aspects of Swedish active labor market policies have changed in response to the crisis.

work if needed, and to remain more productive when working from home. These factors may be particularly important in a Nordic context with a very clear dual-earner model and a near universal residential separation between children and grandparents. Very few families have access to non-employed household members who can take care of children, at least before the short-term work policies took effect.

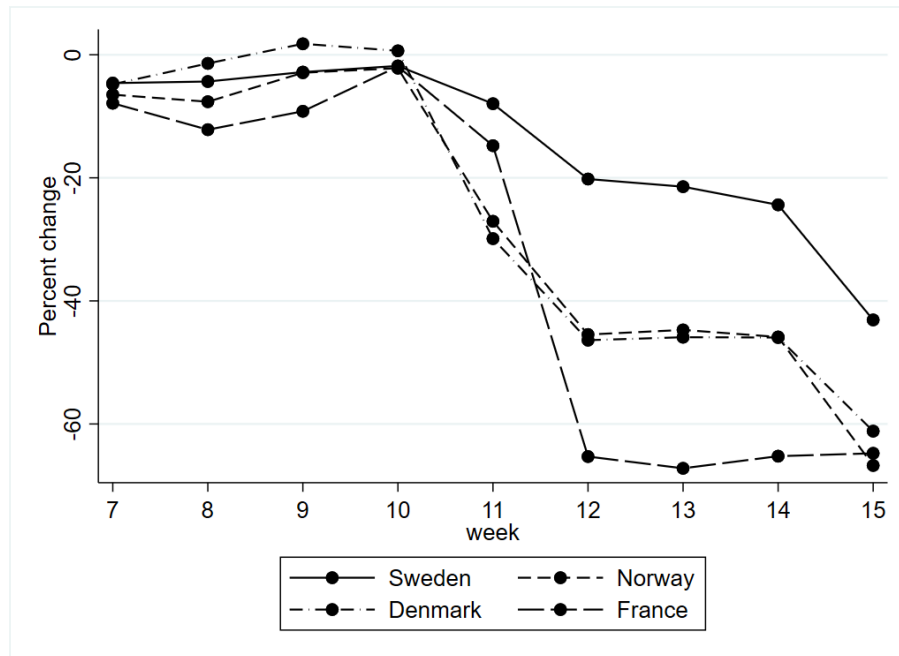


Figure 4: Time spent in workplace

Note: The figure shows the change in the time spent in the workplace provided by Google’s Covid-19 Community Mobility Report. The data is drawn from users who have opted-in to Location History for their Google Account and the baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020. The data and more information can be found at <https://www.google.com/Covid19/mobility/>. Because the location accuracy and the understanding of categorized places varies from region to region, some cautions is warranted when interpreting the cross-country differences.

A direct consequence of the Covid-19 outbreak is the fast increase in the demand for health care personnel. To accommodate this, medical unions and employers have agreed on a “crisis” agreement, which requires staff to potentially work more hours and adapt to location changes in an emergency. A 120% “crisis compensation” is offered in return on top of existing pay (yielding a 220% pay increase). The agreement has so far only been activated for a subset of ICU medics in the worst affected area of Stockholm.

7 Labor market entrants

The cohorts about to enter the Swedish labor market face particularly challenging circumstances due to the Covid-19 outbreak. It is well-established that labor market entrants are more adversely affected by downturns compared to workers established on the labor market, which has long-lasting effects on job finding and earnings as shown by [Oreopoulos et al. \(2012\)](#) and by [Engdahl et al. \(2019\)](#) for Sweden. As shown by [Aslund and Rooth \(2007\)](#), labor market conditions upon entry also have lasting negative effects on refugee immigrants. Adding to this general picture is the fact that the current crisis so far has been particularly damaging to the hotel, restaurant and retail sectors, all of which provide many entry-level jobs. The crisis is therefore likely to affect both young workers and immigrants particularly hard. This is very different from the Swedish experience during the financial crisis when the main effects were felt in industries that employ much fewer labor market entrants.¹⁶ Table 3 shows that the early impact on the inflow into unemployment during the first few week of the current crisis. The adverse effects so far appear to be strongest among workers aged 25-29.

Figure 5 shows that the number of posted summer-job vacancies has decreased by 18 percent after the onset of the crisis.¹⁷ This is another cause for concern given the major role played by summer job contacts in the school-to-work transition for high school graduates in Sweden. [Hensvik et al. \(2017\)](#) show that as many as 1/3 of vocational high school students in Sweden find their first stable job in establishments where they had a summer/extra job during high school, a share that is notably higher during recessions. [Müller \(2020\)](#) shows that closures of such stepping-stones establishments before graduation have lasting negative effects on the affected youths, in particular if parents also lose their jobs at the same point in time.¹⁸

So far, there are no major specific policies or initiatives targeting these labor market entrants, although the number of slots at Universities for the fall have been increased. Universities have also been given incentives to offer summer courses, a measure that has been used during previous Swedish recessions as well.

¹⁶The financial crisis primarily affected exporting firms in manufacturing and their domestic suppliers in Sweden, see [Olsson \(2020\)](#).

¹⁷The drop is substantially higher- 30 percent- in Stockholm (the region hit hardest by the outbreak).

¹⁸Concerns have also been raised that the physical closings of high schools since March will be particularly harmful to student from low SES households and students with disabilities, potentially further widening the SES-gap in high school achievement and early labor market outcomes.

Table 3: New registrations in unemployment by age and gender

Measure	By April 2019	By April 2020	Percent change
<i>By age:</i>			
- 24	31,491	47,115	49.6
25-29	21,602	34,392	59.2
30-39	32,222	48,684	51.1
40-49	21,956	32,698	49.0
50-59	17,704	26,578	50.1
60+	5,316	7,791	46.6
<i>By gender:</i>			
- women	63,393	94,833	49.6
- men	66898	102425	53.1

Source: Public Employment Service

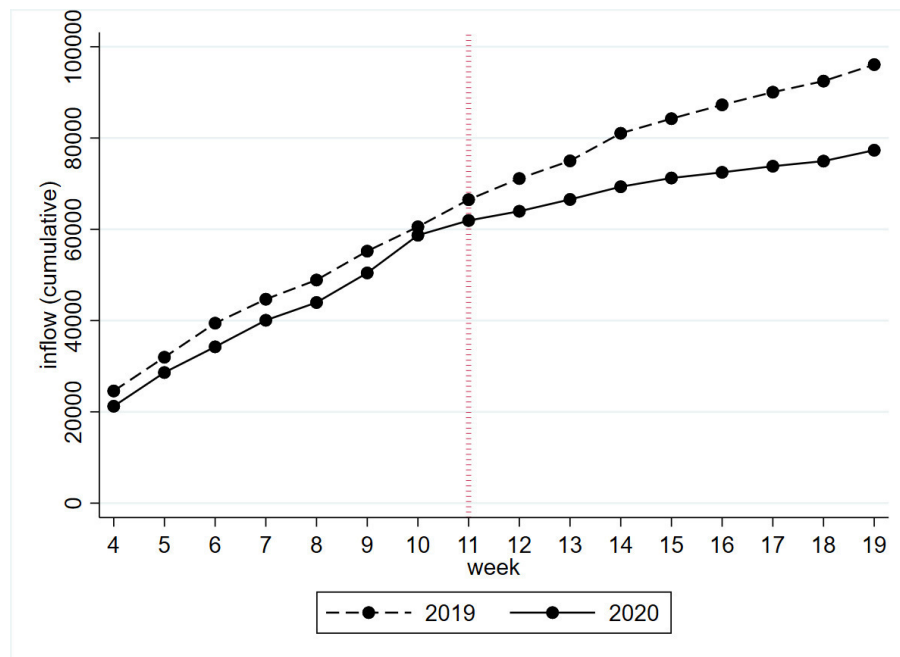


Figure 5: Cumulative inflow of summer-job vacancies, by week

Source: Public Employment Service

8 Industries and structural change

8.1 Impact by industry

Figure 6 illustrates how the number of notified workers and workers covered by the short-time work program are distributed across industries. Layoff notifications are highest in hotels and restaurants, followed by administrative services. Short-time work on the other hand, is used most in manufacturing followed by wholesale and retail trade. The difference in the prevalence of layoffs vs. short-time work is interesting, as it could serve as a measure of the willingness to hoard labor in anticipation of future business opportunities. With this interpretation in mind, it seems as if restaurants and hotels are much less willing to hoard labor than employers in the manufacturing sector where much of the (early stage) disturbances appear to be in the form of supply-chain disturbances.¹⁹

Hensvik et al. (2020) provide a more detailed documentation of the differential labor demand response by industries and occupations as measured by vacancy inflows. They show that while the negative shock has a clear impact on all industries, some industries are substantially more affected than others. As with the figure discussed above, they document substantially larger drops in industries where social-distancing measures are likely to bind, such as hotels and restaurants, entertainment and retail trade. The impact is much more moderate in the health and education sector, in real estate and in public administration and defence. A similar picture emerges in their analysis of vacancies by occupations. Among the ten occupations with the largest decrease in vacancy inflow, they find waiters and bartenders, dentists, and fast-food workers. On the other extreme, they show that the demand for journalists and health care specialists remain relatively resilient.

8.2 Relationship to structural change

Overall, it seems plausible that the distribution of the shock speeds up ongoing structural transformation. The large impact in retail, and perhaps also in restaurants, is likely to be associated with a move towards online distribution of these goods, a process that was already ongoing but at a slower pace before the crisis. Much of this (pre-crisis) transformation appears to be a within-industry phenomenon which is much more visible in bankruptcy statistics than in overall employment trends, at least within broad industry categories. In retail, the rate of layoffs due to bankruptcies grew by 50 percent between 2018 and 2019 (from 2000 to 3000 workers) suggesting that the structural change was ongoing already

¹⁹See e.g. Riksbank (2020).

before the current crisis.²⁰ But the pace, as measured in the growth rate of bankruptcies, increased five-fold when the crisis hit; bankruptcies grew by 250 percent from March 2019 to March 2020 (from 370 to 937 workers).²¹ From a labor market perspective, this is both good and bad news. It is good news in the sense that many of the businesses that are failing at the moment are likely to have been unsustainable in the long run even without the current shock. It is bad news in the sense that an accelerated pace of job destruction in weak industries may make it very hard for laid-off workers to find new employment.

On the flip-side of this process, we see signs of encouraging supply-side adjustments. As an example, there has been a 30 percent increase in applications of prospective students to University nursing programs,²² which is very good news as this is a profession where the lack of skilled workers is particularly predominant. Similarly, [Hensvik et al. \(2020\)](#) find that job-seekers searching online on Sweden's largest online job board respond to the crisis by redirecting their search efforts towards vacancies from the more resilient occupations.

²⁰We see the same rate of increase between February 2019 and February 2020.

²¹Data is from scb.se. We do not see a corresponding pre-trend in other hard-hit industries such as hotels and restaurants and wholesale.

²²Applications closed on April 15. 1st option applications increased from 9,400 to 12,200. Data are from the national admissions office uhr.se.

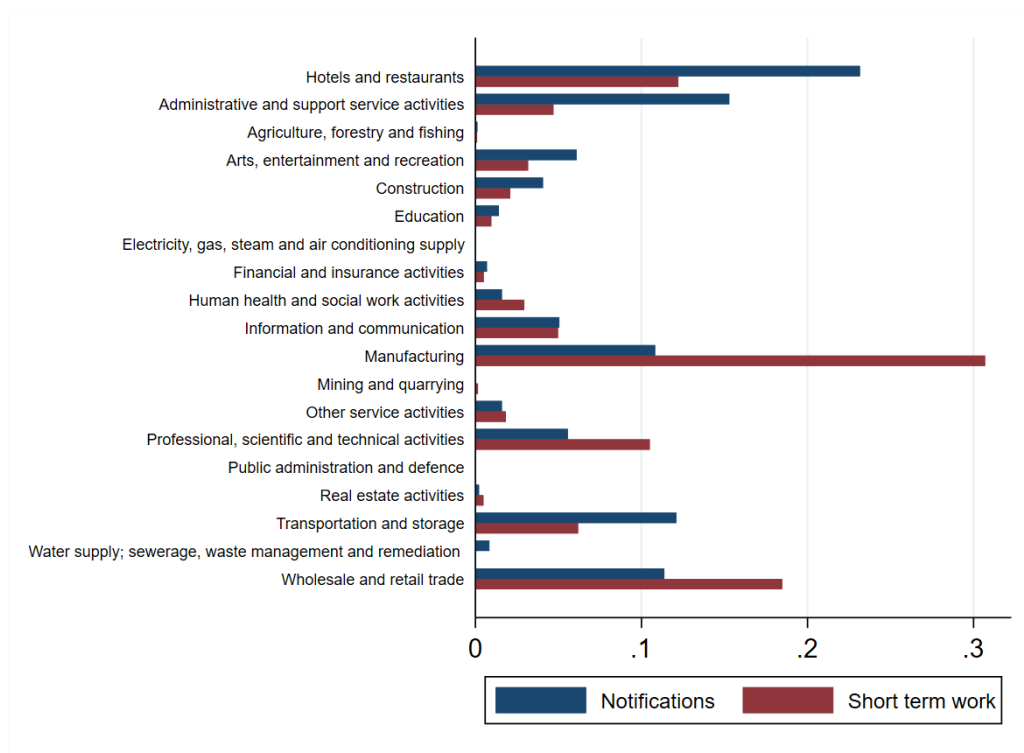


Figure 6: Distribution of the aggregate number of workers noticed/on short-time work Jan-April 2020, by industry

Note: Each bar shows the share of all noticed workers (and workers on short-time work); this means that blue (and red) bars sum to 1 across industries.

Source: The Swedish Agency for Economic and Regional Growth.

9 Sustainability

There is no doubt that the current economic policy measures are dramatic by any normal standards. The total cost of the current set of (short-run) discretionary measures is estimated to be 240 billion SEK,²³ i.e. 4.8 percent of GDP. The most expensive measure is the short-time work scheme (95 billion SEK). The total cost estimate does not include liquidity measures or additional funding for health care expenditures and other related costs. As most programs have "running" costs, i.e. no fixed budget, it is not unlikely that the costs will exceed these estimates even without extensions, and extensions are likely to come. On top of this, there will be a substantial additional financial burden incurred from lost tax revenues and payments related to the automatic stabilizers. On the positive side, Sweden benefits from reasonably sound public finances, and in particular, low public debt (35 percent of GDP) at the onset of the crisis. Obviously, a low debt rate makes the response more sustainable than otherwise. At the same time, it is unlikely to be sustainable to retain one in every ten worker on a near full payroll without participating in productive work. In the worst case, the very generous subsidy rates in the short-time work scheme may induce firms to postpone the reopening of business activities for too long. In particular, the speed of recovery for "up-stream" firms that supply inputs to other firms may be hampered if their "down-stream" buyers remain in short-time work schemes for too long. This suggests that the most generous subsidy rate (80 percent) which currently will end in July, probably should not be extended.

10 Tentative conclusions

This report has produced an early assessment of the impact on the Swedish labor market from restrictions related to the Covid-19 outbreak with the aim of making an early assessment of policy measures aimed at mitigating the negative impact on the labor market. Our documentation and assessments are early and partial in nature, and the report has been produced with limited time and resources. This means that our later assessments may well change because of new data or new insights. As part of the IZA Covid-19 policy monitoring program, we will return and update our assessments later on.

In this early report, we make three main observations: First, despite the apparent comparative leniency of the Swedish Covid-19 restrictions, the Swedish labor market has been hit hard. The impact has been particularly severe in industries where Covid-19 recommendations are most directly relevant, such as hotels, restaurants and retail. Eight weeks after

²³Source: Government press conference on May 14, 2020

the restrictions were announced, 9 percent of the labor force is on short-term work. The crisis has led to an increase in registered unemployment and layoff notices of layoffs by 1 percent of the labor force each and the numbers continue to accumulate. Second, the negative impact has arisen even though policy responses have been massive by historical standards. Measures have primarily been aimed at protecting firms and permanent jobs. Our early assessment is that this has been a reasonable objective as it may facilitate a more rapid recovery when the economy rebounds. On the negative side, this focus inevitably leaves marginal workers to be hit very hard by the downturn. Reduced eligibility criteria for unemployment insurance may alleviate some of this impact. Third, despite being expensive, the current policy stance is financially sustainable. But current measures are explicitly short-run in nature, and it is likely that several of them may need to be prolonged. Strong public finances ensure that the country can spend and loan for some time, but as current measures are draining the public finances at a rapid pace, they are not sustainable indefinitely.

Perhaps the clearest take-away from our early assessment of the Swedish experience is to caution against overly optimistic assessments of the economic impact of gradual openings from complete lockdowns to Swedish-style "modest" restrictions in other countries. Even though it seems possible, or even plausible, that the labor market impact has been even worse in other countries (we leave explicit cross-country comparisons to the comparative part of this assessment project), it seems fair to conclude that restrictions such as those currently held in Sweden – with Swedish compliance rates – generate a substantial drop in labor demand, in particular within the hotels, restaurants and retail sectors. Thus, if Swedish-style restrictions are perceived as the route forward and the "new normal" as indicated by the WHO, we should expect the European labor markets, at least in segments related to personal services, to suffer greatly for an extended period of time. Recovery hopes may be more reasonable in the manufacturing sector where firms appear more willing to hoard labor at the moment, and where much of the (initial) negative impact appears to have been related to international supply-chain disturbances. These disturbances may be mitigated as restrictions are lifted across multiple countries at the same time.

References

- ASLUND, O. AND D.-O. ROTH (2007): "Do when and where matter? initial labour market conditions and immigrant earnings," *The Economic Journal*, 117, 422–448.
- CARLSSON, M., I. HÄKKINEN SKANS, AND O. NORDSTRÖM SKANS (2019): "Wage Flexibility in a Unionized Economy with Stable Wage Dispersion," Tech. rep., IZA Discussion Paper 12093.
- ENGDAHL, M., M. GODARD, AND O. NORDSTRÖM SKANS (2019): "Early Labor Market Prospects and Family Formation," Tech. rep., IZA Discussion Paper 12092.
- HENSVIK, L., T. LE BARBANCHON, AND R. RATHELOT (2020): "Job Search during the COVID-19 Crisis," Working Paper X, CEPR.
- HENSVIK, L., D. MÜLLER, AND O. NORDSTRÖM SKANS (2017): "Connecting the Young: High School Graduates' Matching to First Jobs in Booms and Great Recessions," Tech. rep., IFAU Working Paper 2017:2.
- MÜLLER, D. (2020): "Lost Opportunities: Market Work during High School, Establishment Closures and the Impact on Career Prospects," Tech. rep., Job Market Paper.
- NORDSTRÖM SKANS, O., S. ERIKSSON, AND L. HENSVIK (2017): *Åtgärder för en inkluderande arbetsmarknad*, SNS.
- OLSSON, M. (2020): "Labor Cost Adjustments During the Great Recession," In: *Essays on Macroeconomics: Wage Rigidity and Aggregate Fluctuations Economic Studies 188*, Uppsala University.
- OREOPOULOS, P., T. VON WACHTER, AND A. HEISZ (2012): "The short-and long-term career effects of graduating in a recession," *American Economic Journal: Applied Economics*, 4, 1–29.
- RIKSBANK (2020): "The Riksbank's Business Survey February and March 2020," Tech. rep., Sveriges Riksbank.