

IZA COVID-19 Crisis Response Monitoring
Sweden (October 2020)

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ABSTRACT

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 make them sustainable in the short to medium run.

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Labor market impact of COVID-19

The first case of Covid-19 was confirmed by the Swedish Public Health Agency on January 31 in a traveler 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.

The Swedish restrictions and recommendations were designed to be durable over an extended period of time. As a consequence, there have been few changes in the restrictions over time. Recommendations against domestic travels were, however, removed in early June. High schools and universities were allowed to open for on-site teaching at the start of the fall semesters. But teaching at universities appears to remain online in many cases, in particular in metropolitan areas where students need to travel to classes with public transport.

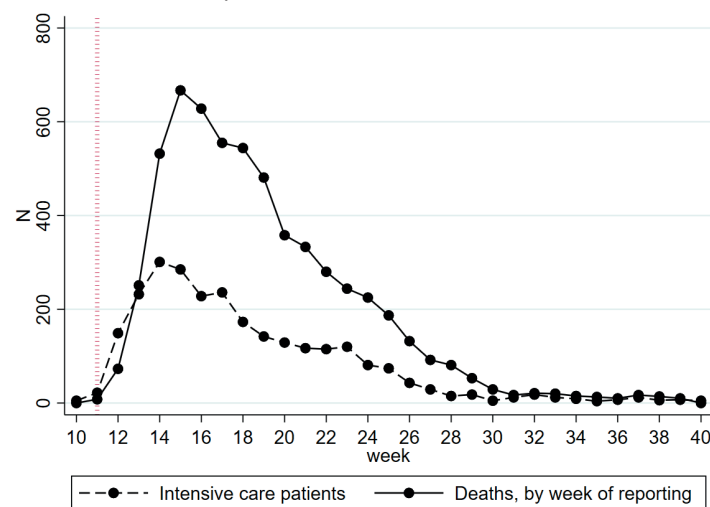
Some descriptive indicators of the timeline of the spread of the Covid-19 virus in Sweden are collected in figure 1. With the well-known caveats associated with each such indicator, they jointly suggest a rapid spread with many new severe cases around weeks 11 to 14 followed by a levelling out and a gradual fall in new severe cases starting between week 15 and 17 depending on indicator. Starting mid-September (around week 38), there is a gradual but steady increase in the number of reported cases.

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 differs 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 early on.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 Over time, there has been a very clear gradual reduction in the adherence to the restrictions and an increase in mobility (as we display below). As a consequence, the consumption of goods and services in some sectors that were hit hard initially has gradually started to recover. It appears as if the opening of the Swedish economy has been more gradual and “organic” than in other countries where the removal of specific temporary laws and restrictions appear to have been more instrumental.

Figure 1: Timeline of the Covid-19 spread



Source: Swedish Public Health Agency.

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 per-cent). 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

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

¹ Compliance 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.

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

³ All 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.

⁴ The 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.

the early labor market impact was. This is, most likely, a consequence of high early 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, primarily in the early phase of the crisis: The number of workers registered as unemployed at the PES increased by more than 100,000 people in just 3 months and the increasing trend clearly continues. During 2019, the number of registered unemployed fell by around 14,000 during the same season. The increase in registered unemployed corresponds 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 1/3 and the number of layoff notices increased sharply from 24,000 to 84,000 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.

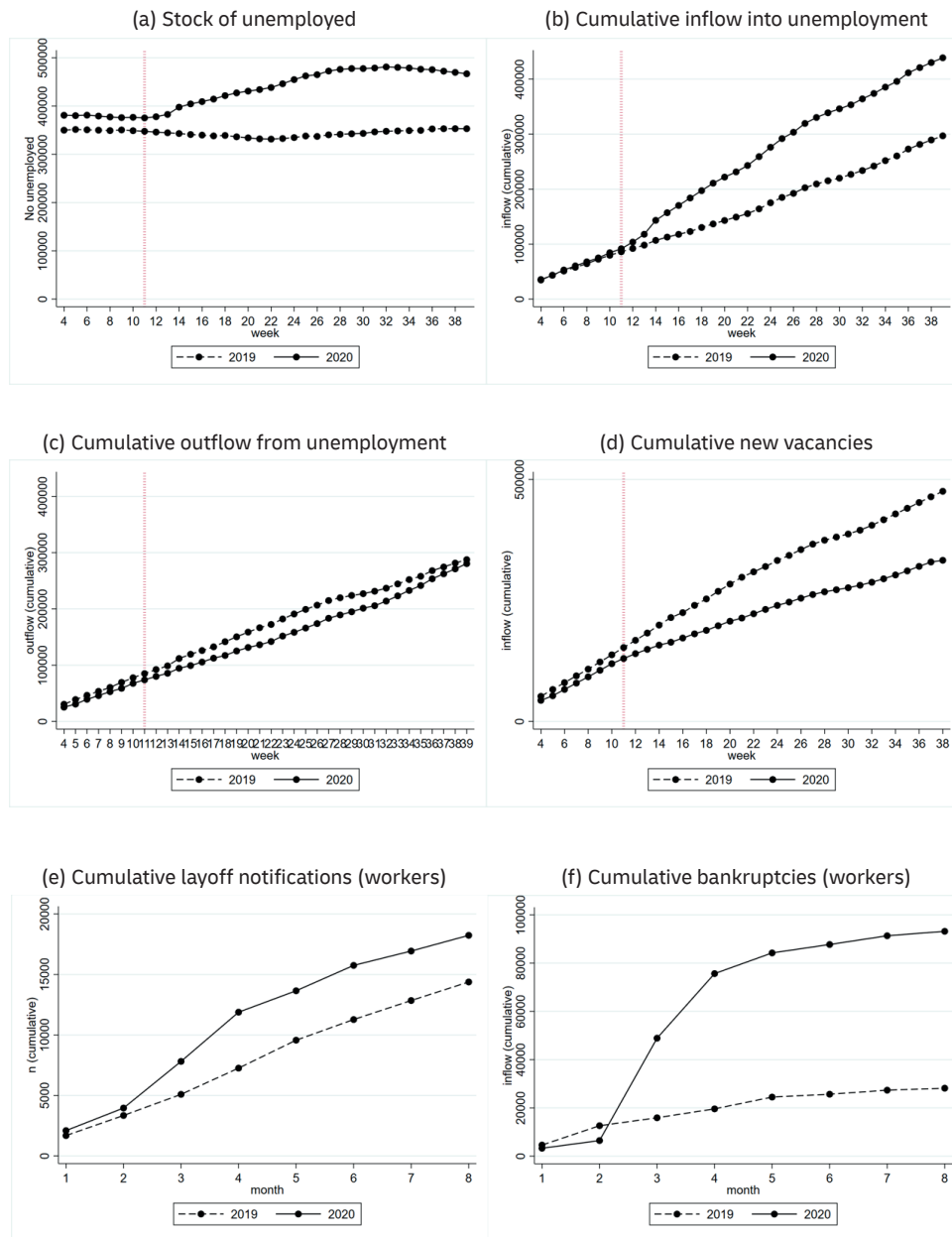
Note that there is a possible element of double-counting across indicators since redundancy notices also include bankruptcies, and an unknown fraction of workers from bankruptcies may have ended up in registered unemployment. Due to relatively long (2–6 months) advance notice periods, most of the workers affected by a layoff notice are, however, not in the unemployment statistics yet, and most workers who receive a notice do not end up in unemployment at all.⁶

Panel B of Table suggests that the labor market has recovered slightly since the spring although numbers are still well below 2019-levels. The rebound is particularly strong in terms of job-finding rates of the unemployed. The gap in accumulated layoffs and bankruptcies has remained almost constant after the initial shock. At the same time, we see that the inflow of new vacancies to the Swedish Public Employment Service continues to decrease. By September, the accumulated number of vacancies is 42 percent lower than in 2019. One possible explanation for the full set of results is that the crisis has resulted in a more positively selected pool of unemployed workers, which could result in higher share of posted vacancies being filled.

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

⁶ Slightly more than half of advance notices from the spring 2020 resulted in layoffs and one quarter became unemployed at some point. The share ending up in unemployment is marginally higher than during the financial crisis. Unemployment after a notice is most prevalent in the hardest hit sectors of restaurants and hotels. 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: Cumulative impacts of the Covid-19 crisis

Measure	Panel A		
	By week 24 2019	By week 24 2020	Percent change
Registered unemployed	334,801	454,859	35.9
New registrations	175,182	276,138	57.6
Outflow to employment	190,984	158,396	-17.1
New vacancies	294,236	204,847	-30.4
New summer jobs	108,588	84,104	-29.1
Noticed workers	24,503	84,240	243.8
Bankruptcies	9,569	13,651	42.7
Short-time work (employers)	0	50,584	-
Short-time work (workers)	0	486,421	-

Measure	Panel B		
	By week 39 2019	By week 39 2020	Percent change
Registered unemployed	353,145	466,946	32.2
New registrations	296,898	438,760	47.8
Outflow to employment	287,562	280,472	-.03
New vacancies	475,572	333,023	-42.8
Noticed workers*	28,182	93,191	230.6
Bankruptcies*	14,379	18,232	26.8
Short-time work (employers)*	0	69,933	-
Short-time work (workers)*	0	577,658	-

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.

*Because of data availability these figures report the numbers by week 35.

Orientation and targeting of adopted measures

Given the dramatic impact of the Covid-19 restrictions on the labor market it is not surprising that the Swedish government, as governments elsewhere, 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 covered 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.⁷ 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.⁸ 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. These measures have been prolonged until the end of 2020.

⁷ These measures were originally set to end in September but have been prolonged until the end of 2020.

⁸ Requirement for doctor's certificate when absent is also temporarily relaxed.

Protecting jobs and firms: A number of policy measures aimed at protecting firms and jobs were put in place during the 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”. The scheme is announced to be prolonged for an additional 3 months, but the formal decision has not yet been taken. The system will also be complemented with targeted support replacing 75 percent of earnings–losses among unincorporated self-employed (if losing at least 40 percent relative to the same period in 2019) during March to July. This group was not eligible to apply for support within the initial system.

Payroll taxes for the first 30 employees were 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. A reduction of payroll taxes of workers below age 24 from April 2021 has been announced. Financial support were 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. A prolongation has been announced, but details are not yet released.

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 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 could be combined with the payroll tax reduction which implies that firms with less than 30 (low-wage) employees essentially had all their wage costs covered if workers were on 80 percent short-time work during the most intense part of the crisis. Applications for short-time work covered more than 500,000 workers (10 percent of the labor force). However, there is still some uncertainty as to how large share of workers have been covered by the scheme, for which periods, and by what intensity (percent of full time). Employers are required to report ex post on the actual intensity by which they used the scheme, but details from this back-reporting have not been released at the time of writing this text. At the moment, it appears as if the training component of the short-time work is mostly absent, but the government has announced in the current budget proposal that there should be more training going forward; exactly how this will play out in practice remains to be seen.

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 organized 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. The changes in benefit levels have been announced to be prolonged until the end of 2022. In addition, the Swedish financial supervisory authority have granted banks the right to provide general exemptions from rules regarding amortization of mortgages. 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 as to what will happen with firms in the hardest hit sectors (e.g. event organizers) that still are prevented from operating, after the end of the year when their participation in short-time work will need to end.

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 March to December 2020.

*80 % reduction is only available during May to July.

Source: The Swedish Agency for Economic and Regional Growth.

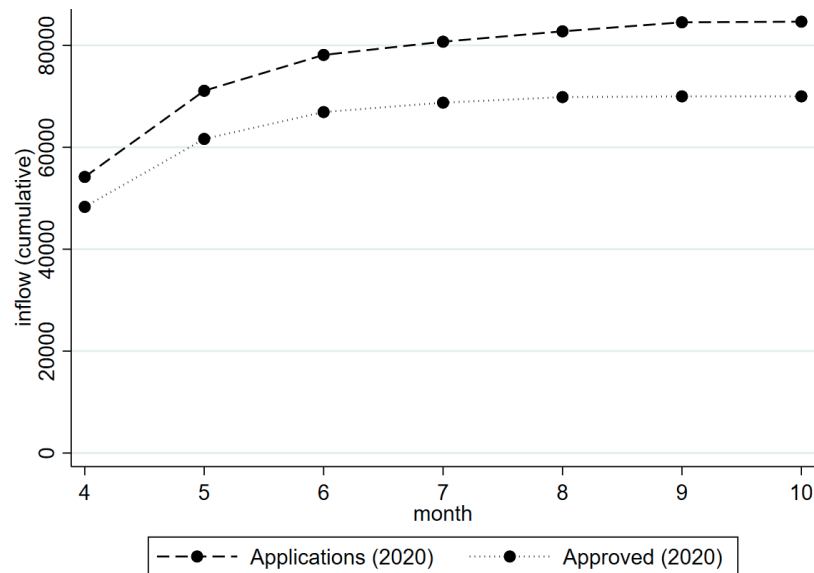
Immediate liquidity support to businesses

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.⁹ 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

⁹ Firms 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.

period. The applications covered 490,000 workers.¹⁰ Application numbers corresponded to 15% of all firms and 9% of all workers in Sweden, suggesting that many small firms applied.¹¹ Applications continued to increase during the spring and then leveled off. By early October, 70,000 applications were approved, covering 560,000 workers (i.e. 10 % of all workers) according to the responsible agency.

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 seem as acceptable costs, at least at the 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).¹² 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-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.

¹⁰ The numbers are from the Swedish Agency for Economic and Regional Growth.

¹¹ Note 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.

¹² After 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.

Support of dependent workers

The Swedish labor market is characterized by very low wage dispersion which has remained reasonably constant across the past two decades.¹³ 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.¹⁴

Job search monitoring was temporarily halted during the spring, but has since been resumed. Otherwise, we have not been able to document how various aspects of Swedish active labor market policies have changed in response to the crisis. According to forecasts in the 2021 budget, the Public Employment Service will only spend 80 percent of budgeted funds for active labor market policies despite of the large increase in unemployment. But the situation was very turbulent already before the Corona crisis. Funding was cut dramatically because of political turmoil in the budget for 2019. At the same time, there was a political push to privatize more of the services. The agency responded by announcing large layoffs and closure of local offices. Some of these decisions were later overturned, but the whole process created a set of practical disturbances to the general functioning of the agency. This makes it difficult to assess how much of the contraction in spending on active labor market policies is due to Corona and how much is due to other problems within the agency.

Going forward, funding for active labor market policies will increase by 17 percent during 2021, but this is far from the forecasted increase in the number of unemployed workers (up 40 percent relative to 2019). This is somewhat concerning considering the increase in UI-benefit levels, which would have called for more activation measures and monitoring of job search behavior.

Working conditions and work organization

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, at least early on during the crisis. 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 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

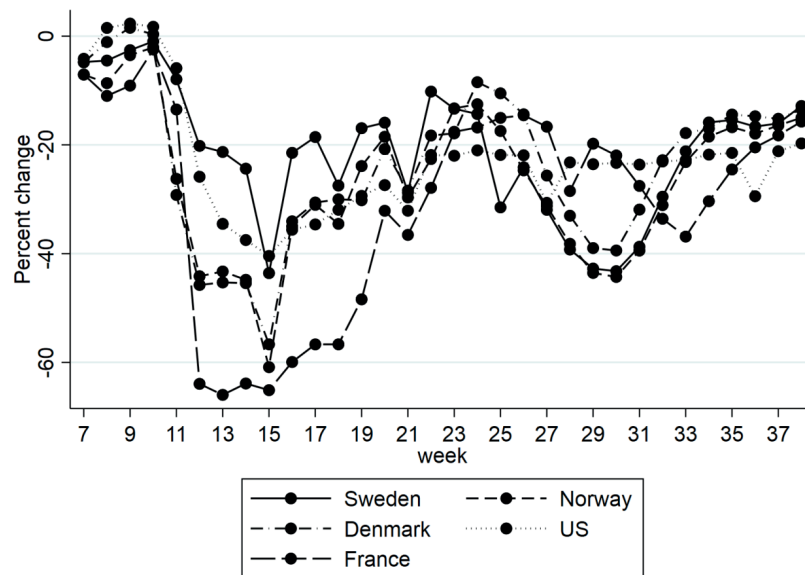
¹³ The background description in this paragraph draws heavily on Nordström Skans et al. (2017), for a summary in English of that source, see <https://www.sns.se/en/articles/sns-economic-policy-council-report-2017-policies-for-an-inclusive-swedish-labor-market/>. For a description of the Swedish wage structure see Carlsson et al. (2019).

¹⁴ We have not been able to document how various aspects of Swedish active labor market policies have changed in response to the crisis.

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.

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” was offered in return on top of existing pay (yielding a 220% pay increase). The agreement was activated for a subset of ICU medics in the worst affected area of Stockholm during the most affected period.

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.

New 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.¹⁵ Table 3, Panel A shows that the early impact on the inflow into unemployment during the first few week of the current crisis. The adverse effects

¹⁵ The financial crisis primarily affected exporting firms in manufacturing and their domestic suppliers in Sweden, see Olsson (2020).

appear to be strongest among workers aged 25-29 and this pattern remains if we look at the current situation (in Panel B).

Figure 5 shows that the number of posted summer-job vacancies has decreased by 18 percent after the onset of the crisis.¹⁶ 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.¹⁷

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

Table 3: New registrations in unemployment by age and gender

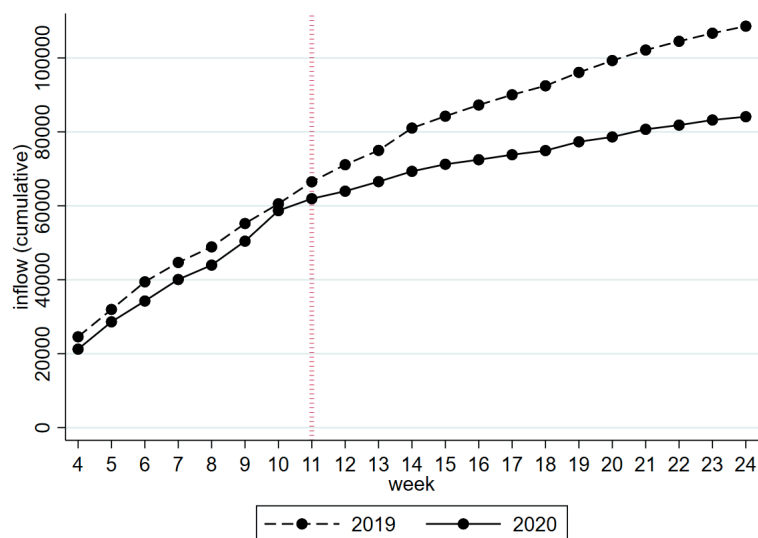
Measure	By week 24 2019	By week 24 2020	Percent change
By age:			
- 24	43,941	70,675	60.8
25-29	28,725	48,121	67.5
30-39	43,110	67,422	56.4
40-49	29,196	44,439	52.2
50-59	23,286	35,269	51.4
60+	6,924	10,212	47.5
By gender:			
women	85,582	132,995	55.4
men	89,600	143,143	59.8

Measure	By week 39 2019	By week 39 2020	Percent change
By age:			
- 24	81,346	125,268	54.0
25-29	47,573	73,623	54.8
30-39	70,891	103,363	45.8
40-49	47,964	67,750	41.3
50-59	37,797	53,128	40.6
60+	11,327	15,628	38.0
By gender:			
women	146,791	213,576	45.5
men	150,107	225,184	50.0

Source: Public Employment Service

¹⁶ The drop is substantially higher - 30 percent - in Stockholm (the region hit hardest by the outbreak).

¹⁷ Concerns 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.

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

Source: Public Employment Service

Policy innovations and labor market trends

Figure 6 illustrates how the number of noticed workers and workers covered by the short-time work program were distributed across industries during the early onset of the crisis. The patterns are, however, very similar if we extend the study period. 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.¹⁸

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 defense. 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 bar tenders, dentists, and fast-food workers. On the other extreme, they show that the demand for journalists and health care specialists remain relatively resilient.

Overall, it seems plausible that the distribution of the shock speeds up ongoing structural transformation. The large impact in retail 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

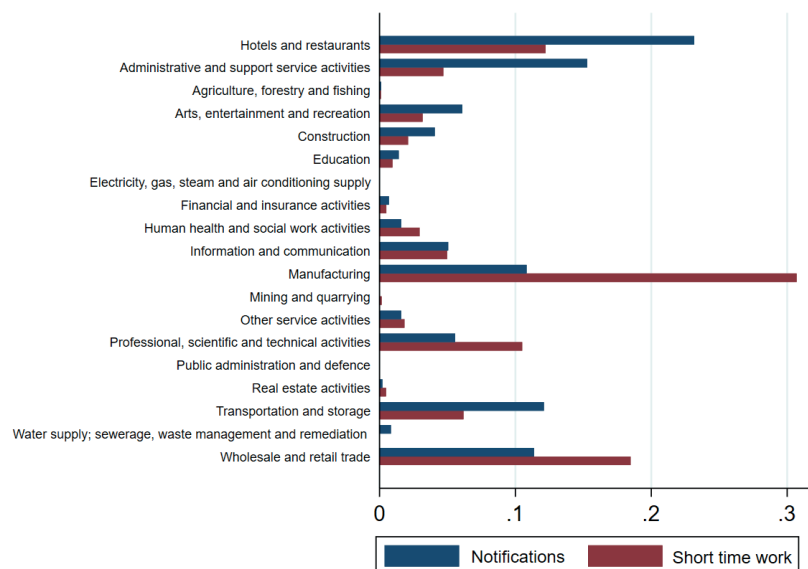
¹⁸ See e.g. Riksbank (2020).

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 2,000 to 3,000 workers) suggesting that the structural change was ongoing already before the current crisis.¹⁹ 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).²⁰ 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.

It should also be noted that it is likely that several of other service-industries (personal services, tourism industry, etc.) that are hit very hard may be the jobs of the future for low skilled workers. The reason is that many of these jobs involve close human interactions, which makes them harder to automate, but also more sensitive to recommendations about social distancing.

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,²¹ 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.

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.

¹⁹ We see the same rate of increase between February 2019 and February 2020.

²⁰ Data is from scb.se. We do not see a corresponding pre-trend in other hard-hit industries such as hotels and restaurants and wholesale.

²¹ Applications closed on April 15. 1st option applications increased from 9,400 to 12,200. Data are from the national admissions office uhr.se.

Next steps and fiscal viability

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 was estimated to be 240 billion SEK,²² i.e. 4.8 percent of GDP during the spring. The most expensive measure was the short-time work scheme (95 billion SEK). However, several of the measures have cost much less than anticipated and the current estimate for idiosyncratic measures is 193 billion SEK instead. Spending on short-time work is at the moment at 29 billion SEK and the full year estimate is only 43 billion SEK now.

On top of this, there is of course a substantial additional financial burden incurred from lost tax revenues and payments related to the automatic stabilizers. The most recent figure from the Government's fall budget for 2020 suggests a total estimated public sector deficit of 268 billion SEK, i.e. 5.5 percent of GDP during 2020.

On the positive side, Sweden benefits from reasonably sound public finances, and in particular, low public debt (35 per- cent 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.

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. We hope to 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 was hit very hard initially, and the effects linger on. 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 the restrictions were announced, 9 percent of the labor force was covered by the short-time work scheme. The crisis led to a rapid increase in registered unemployment by 1 percent of the labor force and the growth continued to accumulate thereafter. Over time, however, the situation appears to have stabilized but at a higher level of unemployment. Layoff notices increased dramatically early on, but stabilized fairly rapidly. Second, the negative impact has arisen even though economic 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 the support for struggling firms 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.

²² Source: Government press conference on May 14, 2020

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 appear to be mitigated as restrictions are lifted across multiple countries at the same time.

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