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This Economic Commentary describes developments on the Swedish labour market during the coronavirus pandemic so far and what effects the corona crisis can be expected to have in the longer term, based on previous experience and research.

The comprehensive economic policy measures introduced during the pandemic have mitigated the negative effects on the labour market. But unemployment has risen and employment has fallen, and the crisis has hit young and foreignborn workers in particular. This is due to the restrictions aimed at limiting the spread of infection and changes in consumer behaviour having had a particularly adverse effect on sectors that employ many young people and foreign-born workers. These groups normally have short job tenure and therefore are the first to be made redundant.

How prolonged the crisis becomes will play a major role for the long-term effects on the labour market. Deep and prolonged crises can change the way the labour market works and cause unemployment to become entrenched at a high level. The coronavirus pandemic may also increase the pace of structural change, which in turn may have long-term effects on employment. How large the effects will be, however, is difficult to assess. The effects will probably differ between different sectors. If the majority of the changes in behaviour are temporary, the labour market will not be so adversely affected in the longer term.

Economic Commentaries



The corona crisis and the labour market – effects in the short and the long term

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The corona crisis has hit the Swedish labour market hard. Unemployment has risen and employment has fallen. At the same time, many employees have been put on short-time work compensation schemes, which has sustained employment but pushed down the number of hours worked. What the labour market will look like once the pandemic has subsided is difficult to assess. The consequences are affected by how long the pandemic goes on, how much unemployment rises, what measures are implemented to mitigate the effects on the labour market and how the support measures are phased out.

This Economic Commentary describes developments on the Swedish labour market during the coronavirus pandemic so far and what effects the corona crisis can be expected to have in the longer term, based on previous experience and research.² The corona crisis has been caused by a pandemic and is therefore different from previous economic crises. But low demand for labour and persistently high levels of unemployment can have similarly negative effects on the labour market regardless of what has caused the crisis. The coronavirus pandemic is expected to lead to a reduction in the number of persons employed and hours worked and a higher unemployment rate in the long term. How large the long-term effects on the labour market will be is very difficult to know, however, even in hindsight, as they are not directly observable but must be assessed with the help of different indicators and econometric models. However, the effects will not be permanent but will wear off after a while.

Comprehensive economic policy measures are mitigating the effects of the pandemic

When studying how different parts of the labour market have developed during the pandemic, it is important to be aware of the comprehensive fiscal and monetary policy measures aimed at mitigating the effects of the crisis and creating the conditions for an economic recovery. Without these measures, the labour market would have been hit much harder and the long-term effects of the crisis would have been greater.

The Riksbank has held the policy rate at zero per cent, expanded the balance sheet and offered liquidity to the financial markets.³ The monetary policy

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² The Riksbank has previously published an assessment of the long-term effects of the pandemic on output and employment in Sveriges Riksbank (2020a). This Commentary is partly based on this assessment. See also the article "The long-term economic effects of the pandemic are uncertain" in Sveriges Riksbank (2020b) for a discussion of the broader economic effects.

³ A detailed description of the Riksbank's measures during the coronavirus pandemic can be found in Sveriges Riksbank (2020b).

measures aim to keep interest rates low for households and companies and contribute to well-functioning credit supply and thereby reduce the risk of the corona crisis developing into a financial crisis. In this way, monetary policy is supporting general economic development and with low interest rates, fiscal policy will also be more effective. The strength of fiscal policy is that measures can be directed at the specific problems in the economy and in the labour market caused by the pandemic. During the pandemic, the Riksdag (the Swedish Parliament) has decided on fiscal policy measures of historic proportions. The measures that have probably had the greatest effect on the labour market include government support to the short-time work compensation scheme. The support aims to reduce the number of redundancies and is helping companies retain their labour force so that production can be rapidly resumed once demand picks up. Other fiscal policy crisis measures include temporarily reduced employers' social security contributions, extended government responsibility for sick-pay costs, the option of deferring tax payments and government loan guarantees for small and medium-sized enterprises. In addition, the hardest-hit sectors have received temporary rent discounts and reorientation support based on fall in turnover. Unemployment benefit has temporarily been made more generous to provide economic support to those who have become unemployed. The number of university and college places has been increased to provide more options to study when labour demand is low. Furthermore, municipalities and regions have received increased government subsidies to deal with the costs caused by the pandemic and so that they do not reduce their activities and make staff redundant.4

It is very difficult to assess which measures have been the most significant or which have worked best to support the economy and the labour market as many of the measures have been implemented at approximately the same time and may also have reinforced each other. Although it is difficult to estimate the magnitude of the effects, it is clear that the expansionary economic policy during the pandemic has had positive effects on the labour market and the economy at large. This is also something that should be borne in mind when studying what has happened on the labour market during the coronavirus pandemic.

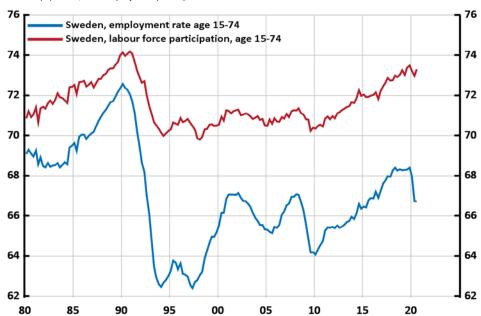
The pandemic has led to lower employment and a higher unemployment rate

The number of persons employed was 2 per cent fewer and the employment rate was 1.6 percentage points lower during the third quarter of 2020 than during the same quarter in 2019 (see Figure 1). At the same time, labour force participation has continued to be high, which has caused the unemployment rate to rise (see Figure 1 and Figure 2). The total number of hours worked was 5.3 per cent lower during the third quarter of 2020 than during the same quarter in 2019. Monthly statistics show that the labour market has stabilised somewhat in recent months. The unemployment rate has decreased several months in a row and employment has risen. However, the levels still differ considerably from those that prevailed prior to the pandemic.

⁴ A complete description of the Government's crisis measures can be found on the Government's website https://www.government.se/government-policy/the-governments-work-in-response-to-the-virus-responsible-for-covid-19/.

Diagram 1. Employment rate and labour force participation rate, 15-74 years

Per cent of population, seasonally adjusted quarterly data

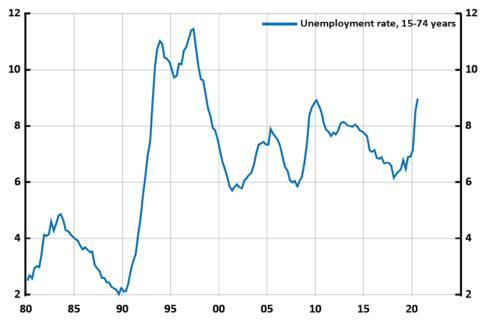


Note: Spliced data 1980-2001.

Sources: The Riksbank and Statistics Sweden

Diagram 2. Unemployment rate, 15-74 years

Per cent of labour force, seasonally adjusted quarterly data



Note: Spliced data 1980–2001.

Sources: The Riksbank and Statistics Sweden

The short-time work compensation scheme has sustained employment

The labour market has been hit much harder by the coronavirus pandemic than the unemployment and employment figures indicate as the economy has received support from very comprehensive economic policy measures. Support to the short-time work compensation scheme has sustained employment. The support has been granted for almost 600,000 employees since mid-March, which is equal to 19 per cent of private sector employees. These figures are probably higher than the number of people who have actually been put on short-time work compensation schemes as this number is adjusted afterwards and companies have not always utilised the schemes as much as they had applied to do. The final figures are not yet available. The Labour Force Surveys (LFS) conducted by Statistics Sweden show that 379,000 employees were absent from work in May due to short-time work compensation schemes or shortage of work. In November, this figure was 159,000. During the autumn, more extensive restrictions have been introduced to reduce the spread of infection, which may lead to the number of workers on short-time work compensation schemes increasing again.

It is difficult to compare developments in employment and unemployment with what has happened in earlier crises as the same short-time work compensation scheme has not existed previously. But experience from the financial crisis from other European countries shows that such schemes have significantly positive effects during recessions. They sustain employment, primarily among the permanently employed. 6 However, short-time work compensation schemes do not help groups that have a weak position on the labour market. This can also be seen in Sweden, where the number of permanently employed persons has remained virtually unchanged, while the number of employees on fixed-term contracts have decreased substantially in 2020 (see Figure 3 and Figure 4). Short-time work compensation schemes prevent redundancies in the acute phase of the crisis, but the effects are not only positive in the longer term. They may lead to inefficiency, for example. There is a risk of subsidising jobs that would otherwise have disappeared and of locking in labour that could have been utilised better somewhere else. This leads to lower productivity in the long run. There is also a risk of subsidising companies that would have coped without support, which means that the total number of hours worked may fall more than it would have done without support and lead to inefficient use of tax revenue.

⁵ The LFS only ask about the main reason for absence, which may mean that some of those on short-time work compensation schemes may have been classified as ill or on holiday depending on how they have answered.

⁶ See, for example, Cahuc (2019) for an overview.

⁷ See Cooper et al. (2017).

Thousands, seasonally adjusted quarterly data

4000

Employees with permanent contracts

3800

3600

3400

3200

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20

Diagram 3. Employees with permanent contracts, 15-74 years

Source: Statistics Sweden





Source: Statistics Sweden

Hysteresis effects lead to lower employment levels

How prolonged the crisis becomes will be crucial for the labour market. Deep and prolonged crises can change the way the labour market functions and long periods of high unemployment can therefore lead to hysteresis effects, with unemployment remaining at a higher level for a long time after the crisis. This is because long periods of unemployment can reduce the know-how and skills of unemployed persons and make it more difficult for them to find new jobs even when demand for labour rises again. Long-term unemployed persons

also lose important contacts in working life, making it more difficult for them to find a job. What might indicate less serious hysteresis effects in this crisis is that the adversely affected sectors are relatively dynamic, have substantial staff turnover and have relatively low educational and job-specific skills requirements. It may therefore be easier to re-employ people in these sectors. This may lead to more rapid recovery once the pandemic has subsided. But this requires labour demand in these sectors to return to previous levels.

In conjunction with the 1990s crisis, the unemployment rate was over 9 per cent for 5½ years and it has never come down to the levels that prevailed prior to the crisis. There are many explanations for this that are not directly related to the factors that triggered the crisis, but it shows that serious crises can have very substantial and long-term effects on the labour market. Even after the financial crisis of 2008–2009, it took a long time for the unemployment rate to recede, but this is partly due to the increase in labour supply and refugee immigration. It is worth noting that the coronavirus pandemic has so far not led to reduced labour force participation as happened in earlier crises. This is positive as it enables higher employment in the long term.

Young people and foreign-born persons hit hardest by the crisis

Groups entering the labour market, such as young people and foreign-born persons with a short period of residence, are hit hardest by economic crises. Unemployment rates among young people and foreign-born persons rose very quickly at the beginning of the pandemic at the same time as the employment rates fell. During the third quarter of 2020, the employment rate among young people and foreign-born persons was just under 7 and 3 percentage points lower respectively than during the same quarter in 2019 (see Figure 5 and Figure 6). Monthly statistics show that the situation has improved in recent months, but the labour market situation for young people and foreign-born persons is still much worse than before the pandemic. Research shows that economic crises have prolonged negative effects on employment and income in both these groups. The effects may now be greater than in previous recessions as sectors with a large percentage of entry-level jobs (retail, hotels and restaurants) have been hit hardest in the corona crisis. The number of employees in the hotel and restaurant business was 19 per cent lower in the third quarter of 2020 compared with one year previously. During the financial crisis, the manufacturing sector was worst hit in Sweden while the service sector was on average not affected to any great degree. The short persons with a financial crisis, the manufacturing sector was worst hit in Sweden while the service sector was on average not affected to any great degree.

Long-term effects for some young people due to the shortage of spare-time and summer iobs

During the corona crisis, it has been difficult for young people to find summer and spare-time jobs, which has led to high youth unemployment (see Figure 5). This can also lead to lower employment in the long term. Research shows that a third of those who have studied vocational upper secondary school programmes find their first permanent job with employers with whom they have previously had summer or spare-time employment during their upper secondary education. ¹² Furthermore, this proportion is higher during recessions. Research based on establishment closures indicates that the effects on employment and income for the young people affected are greatest immediately after they have completed upper-secondary school, but the effects do not disappear completely until ten years

⁸ See, for example, Holmlund (2011) for a detailed description of the effects of the 1990s crisis and the financial crisis on the labour market.

⁹ See, for example, Engdahl et al. (2019), Müller (2020) and Åslund and Rooth (2007).

 $^{^{\}rm 10}$ According to short-term employment statistics.

¹¹ Olsson (2020).

¹² Hensvik et al. (2017).

afterwards.¹³ Entering the labour market during the crisis can also have long-term social consequences, for example, when it comes to starting a family.¹⁴ If there are also flaws in the education system due to the pandemic so that fewer young people complete upper-secondary school, it may have even more negative effects on the labour market in the longer term, as young people with no upper-secondary qualification face a particularly difficult situation on the labour market.

Because labour market entry is exacerbated by the crisis, the labour force participation rate, employment rate and number of hours worked are expected to be lower among young people. The effects are not permanent, but they can be prolonged. Young people are more flexible, however, and fare better in the long run than older people who have lost their jobs. Experience from the 1990s crisis shows that older people who become unemployed risk leaving the labour force prematurely through retirement or becoming long-term unemployed. Recovery on the labour market could happen more rapidly now that the corona crisis has affected young people more than older people. It is easier for young people to retrain and the shortage of jobs will probably lead to more of them going on to higher education. This can be positive for productivity in the long run, even though labour supply among young people decreases during education. Employment is less affected than the number of hours worked, as many students do spare-time work in parallel with their studies but only for a few hours a week. The pandemic may prompt some young people to refrain from taking a year out, which is positive. 15 But many young people may also choose to study for longer and wait until after the crisis to graduate, which means it will take longer for them to find highly qualified work.

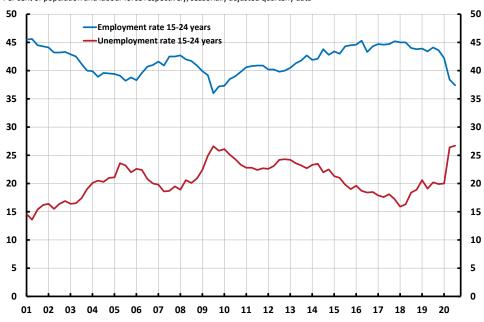


Diagram 5. Employment rate and unemployment rate among young people, **15–24** years Per cent of population and labour force respectively, seasonally adjusted quarterly data

Source: Statistics Sweden

 $^{\rm 14}$ See, for example, Engdahl et al. (2019).

¹³ Müller (2020).

¹⁵ Postponed higher education leads to lower income and salaries after completed studies. This is because working life experience prior to higher education generates much less return than working life experience after it. See, for example, Holmlund et al. (2008).

Per cent of population, seasonally adjusted quarterly data Swedish-born persons Foreign-born persons

Diagram 6. Employment rate for Swedish- and foreign-born persons, 15–74 years

Source: Statistics Sweden

High unemployment rate among foreign-born persons

Employment among foreign-born persons rose significantly during the last economic boom. But foreign-born workers with a short period of residence in Sweden have lost their jobs more easily during the pandemic. This is because the hardest-hit sectors employ many foreign-born persons and those with a short period of employment are made redundant first. The risk is that it will take longer for foreign-born persons to establish themselves on the labour market because of the pandemic, as it is now more difficult to participate in, for example, language courses and labour market policy measures, such as work placement schemes. The unemployment rate among foreign-born persons was around 15 per cent prior to the pandemic and has now increased to more than 20 per cent (See Figure 7). The risk of becoming unemployed has increased much more for foreign-born workers than for Swedishborn workers (see Figure 8). ¹⁶ For both Swedish- and foreign-born workers, the risk of unemployment has decreased again and for Swedish-born workers, it is back at prepandemic levels.

The job-finding rate¹⁷ fell rapidly at the beginning of the corona crisis but has now picked up again (see Figure 9). Statistics from the Swedish Public Employment Service also show that the number of successful job-seekers has increased in recent months. This indicates that those who have recently become unemployed have better chances of finding new work than those who have been unemployed for longer. The job-finding rate is also significantly greater for Swedish-born unemployed persons than for foreign-born persons.

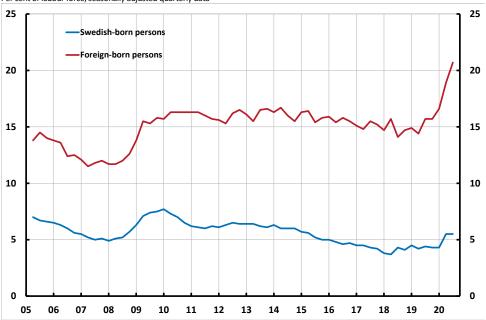
The structural problems on the labour market, made apparent by the low job-finding rates among low-educated and foreign-born workers, will persist after the pandemic. It may become even more difficult for these groups to gain a firm foothold in the labour market as competition for jobs will become tougher when unemployment is higher.

¹⁶ The risk of unemployment is the probability of a person employed in quarter t-1 becoming unemployed in quarter t. Flow statistics are used to understand and interpret what drives changes in the levels of various labour market variables, such as unemployment and employment.

¹⁷ The job-finding rate is the probability of an unemployed person in quarter t-1 becoming employed in quarter t.

Diagram 7. Unemployment rate among Swedish- and foreign born persons, 15–74 years

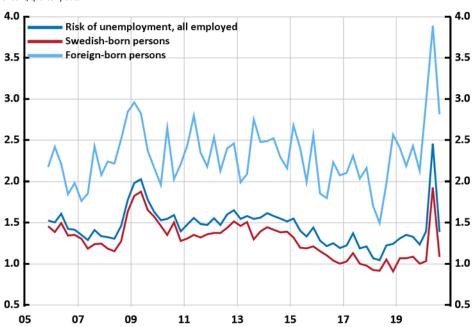
Per cent of labour force, seasonally adjusted quarterly data



Source: Statistics Sweden

Diagram 8. Risk of unemployment

Per cent, quarterly data



Note. Risk of unemployment measures the share of employed persons in quarter t-1 who have become unemployed in quarter t. Source: Statistics Sweden

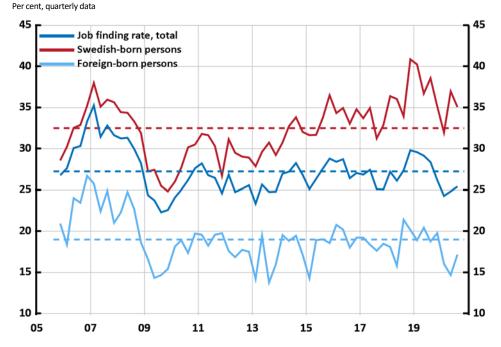


Diagram 9. Job-finding rate for unemployed persons

Note. Job-finding rate measures the share of unemployed persons in quarter t-1 who have become employed in quarter t. Source: Statistics Sweden

Structural change affects the labour market

Structural change is normally faster during economic crises. Although it is positive for productivity and prosperity in the long term, it also causes higher unemployment for a period. Previous crises show that this period can be long. It is better for the labour market if structural change happens gradually as this means that not as many become unemployed at the same time. Digitalisation of the retail sector can be taken as an example. Many who work in retail have skills and know-how that are in general demand on the labour market. If digitalisation occurs gradually, these people will find new jobs, for example in other service sectors. But if many physical shops disappear simultaneously during the pandemic when labour demand has also fallen substantially in other sectors, the adjustment will be more difficult for those who lose their jobs as there are many unemployed competing for only a few jobs. How great the effects will be on unemployment of such a structural change naturally depends on the ability of the labour force to adjust and on the flexibility of the labour market. Even in hindsight, it will probably be difficult to say in what way and how much the coronavirus pandemic has affected the structural change.

Demand in many sectors has recovered quite considerably from the sharp fall in the spring. The changes in demand will be prolonged, or even permanent, for some sectors while they will be relatively short-lived for others. If the majority of the changes in behaviour are temporary, the labour market will not be so adversely affected in the longer term.

So far, companies and employees in the service sector have been hit hardest by the pandemic. Services that require physical proximity, gather many people together or are linked to travel have been particularly hard-hit. These include hotels, restaurants, various personal services, physical shops (with the exemption of grocery stores), travel agencies, airlines, shipping companies, passenger transport, sport, theatres and other cultural services.

It seems likely that demand for, for example, taxi, restaurant, hairdresser and cultural services will recover relatively quickly once the pandemic subsides. There is a stable demand for the consumption of such services, even if many are not using them during the pandemic due to the risk of infection and the general guidelines. Many such services require physical contact and are therefore difficult to digitalise or automate. They are also important for the future labour market and in certain cases for employment of low-educated workers, making it imperative to help companies in these sectors to survive the crisis. Sectors in which structural change was already underway prior to the crisis will probably not recover to the same extent. A case in point is physical retail outlets, which are being replaced by growing e-Commerce. ¹⁸

There are also sectors where it is more difficult to make forecasts. For example, demand for all types of travel has fallen very sharply during the pandemic. It may take a long time for demand to pick up again. Digital meetings may also replace some business trips more permanently. Many airlines already had problems with their profitability before the corona crisis and our growing awareness of climate problems may also reduce business travel and tourism in the long run. In turn, this would also reduce the demand for services such as taxis and restaurants in the longer term.

At the same time, there are sectors that have not been as adversely affected by the corona crisis. For example, much of the manufacturing industry has seen demand fall, but it has been possible to continue production approximately as normal (apart from at the start of the crisis when there was a shortage of some input goods). Industrial companies have also reported a recovery and increased order inflow and output during the autumn. ¹⁹ The effects of the coronavirus pandemic on structural change in the industrial sector may therefore be approximately the same as during previous recessions, unless continued lockdowns around the world lead to new major disruptions in supply chains and more permanent changes in investment and production.

Some sectors have not been affected at all by the pandemic or have seen a rise in demand for their goods and services. For example, food retailers have seen an upswing during the pandemic as more people are preparing food at home. The same is true for companies offering various digital services and home furnishing companies. It is difficult to assess how permanent such behavioural changes are. It depends, for example, on how remote working develops after the pandemic.

Support measures can have negative long-term effects

It is not economically efficient to allow businesses to fail if they are to restart a few months later. It is therefore justified to help companies survive the crisis and give them support so that they can retain their employees. In addition, the long-term costs will often be lower if measures manage to keep unemployment down. But there are other risks associated with allowing generous support measures to continue for too long. Support to short-time work compensation schemes, for example, risks suppressing a company's production even when demand rises, as companies may be wary of bringing employees off the schemes prematurely when the future is very uncertain. If large companies keep their production down, it also restricts the ability of sub-contractors to increase their capacity utilisation.

Going from survival to supporting activity in a pandemic is therefore somewhat of a balancing act. But as the spread of infection subsides, demand will also return. The smaller

¹⁸ The growing e-Commerce sector means, however, that there are more jobs in mail order, warehousing and logistics, which is reducing the effect on employment.

¹⁹ See Sveriges Riksbank (2020c).

the risk of infection, the more appropriate it will be to implement measures that bolster activity rather than support that hinders production and structural change.

Targeted labour market policy measures important for long-term labour market performance

To prevent persistently high unemployment, more labour market policy measures may be required, including labour market training, job-search assistance and subsidised employment. Enhanced possibilities for retraining and further education can also reduce the risk of unemployment becoming entrenched at a high level. The better various training initiatives can be designed in accordance with the needs of the labour market, the better the labour market will recover. To ensure a decrease in the unemployment rate over the long term, measures to reduce unemployment among low-educated, foreign-born workers are required. Research shows that the job-finding rate among low-educated, newly arrived refugees can be significantly improved through intensified language training, work practice and job-search and matching assistance.²⁰

The effects of the pandemic will be long-lasting but not permanent

The coronavirus pandemic is expected to lead to a reduction in the number of persons employed and hours worked and a higher unemployment rate in the long term. However, the effects will not be permanent but will wear off after a while. How serious the consequences will be depends on how long the pandemic goes on, how much the unemployment rate rises during the pandemic, what measures are implemented to mitigate the effects on the labour market and the way the support measures are phased out. How large the long-term effects on the labour market will be is very difficult to know, even in hindsight, as they are not directly observable but must be assessed with the help of different indicators and econometric models. In addition, it will be more difficult than usual to assess future developments on the labour market due to the changes in LFS data collection that are implemented in January 2021 (see article). It is therefore important to continue to follow other labour market statistics as well, including the unemployment figures from the Swedish Public Employment Service and short-term employment statistics from Statistics Sweden.

If the majority of the changes in behaviour that have occurred among the population during the pandemic are temporary, the labour market will not be so adversely affected in the longer term. But the unemployment rate was already relatively high before the pandemic and the structural problems on the labour market, such as the low job-finding rate among low-educated and foreign-born workers, will persist even after the pandemic. Reforms that promote a more inclusive labour market, greater mobility and possibilities for education and workplace training could counteract the high unemployment rate in the long term.

²⁰ See Dahlberg et al. (2020).

²¹ See also Commission Implementing Regulation (EU) No. 2019/2240.

Article: Changes in LFS 2021 will make it more difficult to follow up the effects of the pandemic on the labour market

As from January 2021, some changes in data collection for LFS will occur as a result of a new EU Regulation. The changes will entail a stricter definition of employed persons and clarification of the term "actively seeking work". Persons who are absent from work for longer than three months and have no work-related income or benefits will no longer be defined as employed. This applies, for example, to persons on parental leave without income-related compensation or those on leave of absence for studies. The number of unemployed persons according to LFS may also be affected as the question about job-seeking will be asked in a different way to previously. The changes will lead to a lower recorded employment level, while the effect on the unemployment measure is more difficult to assess. It is also unclear how substantial the effects will be. The changes will probably cause a break in the time series in the statistics and it will be more difficult to compare LFS outcomes with previous outcomes. Statistics Sweden will publish statistics that link the old survey with the new one and thus correct for the break in the time series, but this cannot be done until late 2021. The changes to LFS will therefore make it more difficult to follow up the effects of the pandemic on the labour market at least during 2021.

References

Cahuc, P. (2019), "Short-time work compensation schemes and employment", IZA World of Labor 2019: 11v2.

Cooper, R., M. Meyer and I. Schott (2017), "The Employment and Output Effects of Short-time Work in Germany", NBER Working Paper 23688.

Dahlberg, M., J. Egebark, U. Vikman and G. Özcan (2020), "Labor market integration of low-educated refugees – RCT evidence from an ambitious integration program in Sweden", IFAU working paper 2020:21.

Engdahl, M., M. Godard and O. Nordström Skans (2019), "Early Labor Market Prospects and Family Formation", IZA Discussion Paper 12092.

Hensvik, L., D. Müller and O. Nordström Skans (2017), "Connecting the Young: High School Graduates' Matching to First Jobs in Booms and Great Recessions," IFAU Working Paper 2017:2.

Holmlund, B. (2011), "Svensk arbetsmarknad under två kriser" (The Swedish labour market in two recessions), working paper 2011:12, Uppsala Center for Labor Studies, Department of Economics, Uppsala University.

Holmlund, B., Q. Liu and O. Nordström Skans (2008), "Mind the gap? Estimating the effects of postponing higher education", *Oxford Economic Papers*, 60, October 2008, pages 683–710.

Müller, D. (2020), "Lost Opportunities: Market Work during High School, Establishment Closures and the Impact on Career Prospects," in Social Networks and the School-to-Work Transition, *Economic Studies 189*, Uppsala University.

Åslund, O. and D.-O. Rooth (2007), "Do when and where matter? Initial labour market conditions and immigrant earnings," *The Economic Journal*, 117, pages 422–448.

Olsson, M. (2020), "Labor Cost Adjustments During the Great Recession," in Essays on Macroeconomics: Wage Rigidity and Aggregate Fluctuations, *Economic Studies 188*, Uppsala University.

Sveriges Riksbank (2020a), Monetary Policy Report, July 2020.

Sveriges Riksbank (2020b), Monetary Policy Report, November 2020.

Sveriges Riksbank (2020c), Business Survey, December 2020.