# **ARTICLE** – The long-term effects of the pandemic on output and employment

In a short time, the coronavirus pandemic has led to an extensive economic crisis. The number of corporate bankruptcies has risen and the negative effects on the labour market can be seen, not least, in historically high levels of redundancy notices and the large number of workers on short-time work schemes. Output and employment also risk being affected negatively by the pandemic in the longer term. The changes in demand may be long-term and, in addition, investment usually falls during economic crises, which have negative effects on output and productivity in the longer term. Faster structural change during the pandemic, for example due to increased digitalisation, may raise productivity but also means higher unemployment for a period as the labour market has to adapt. In addition, unemployment could stay on a high level, even after economic activity has turned around. This is because long periods of unemployment can reduce the knowledge and abilities of the unemployed, which makes it more difficult for them to find new jobs when demand for labour has recovered. Various policy measures, such as short-time work schemes and more training places, are holding unemployment down and reducing the risk of long-term negative effects. Despite these, however, the growth potential of the Swedish economy is estimated to be negatively affected by the crisis.

## Comprehensive economic policy measures to mitigate the negative economic consequences

The restrictions introduced to hinder the spread of the coronavirus and people's changed behaviour have had major economic consequences in a short time. Demand has fallen sharply in many parts of the service sector, as well as in the manufacturing sector. The number of bankruptcies has increased (see Figure 3:40). Workers in short-time work schemes have grown in number, but redundancy notices and the number of newly-registered unemployed at the Public Employment Service have also increased (see Figures 3:22 and 3:40).

Together with the Riksbank and other authorities, the Government has taken comprehensive measures to mitigate the effects the coronavirus pandemic is having on the Swedish economy and to facilitate the recovery when the pandemic subsides.<sup>42</sup> Despite this, however, the labour market is expected to be negatively affected for some time to come, which also risks having long-term effects on development. Figure 3:40. Newly registered unemployed at the Swedish

**Public Employment Service and bankruptcies** 

# Deep economic crisis may have long-term effects on the labour market

Historical experience shows that sharp falls in growth and employment, like the one taking place now, can have longterm effects and can thereby change the growth potential of the economy. In normal cases, the long-term levels of the labour market are not affected by economic variations.<sup>43</sup>

Hundreds per week and numbers per month respectively, 2-month moving average 160 1200 120 900 80 600 40 300 0 0 13 14 15 16 17 18 19 20 Newly registered unemployed (left scale) Bankruptcies (right scale)

Sources: the Swedish Public Employment Service and Statistics Sweden

<sup>&</sup>lt;sup>43</sup> The long-run sustainable levels of unemployment, employment and participation in the labour force are the levels deemed to be achievable under the prevailing institutional conditions without the rest of the economy becoming unbalanced. Assessing how the actual development of the economy relates to what can be

<sup>&</sup>lt;sup>42</sup> See Chapter 1 for a description of the Riksbank's measures during the pandemic. A complete description of the Government's crisis measures can be found on the Government's website https://www.government.se/articles/2020/03/economic-measures-in-response-to-covid-19/.

However, very deep or prolonged economic crises can reduce long-term output and employment, and increase long-term unemployment. This is because deep crises can change the way the labour market functions and long periods of high unemployment can lead to what is known as hysteresis. This means that unemployment remains at a high level after the crisis. This is because long periods of unemployment can reduce the knowledge and abilities of the unemployed and make it more difficult for them to find new jobs when demand for labour rises again. This means that the long-term employment level becomes lower.

Short-time work schemes and other support measures are reducing hysteresis but, in a major crisis, it is usually difficult to avoid it completely, regardless of the policy measures implemented. The global nature of the coronavirus crisis is increasing the risk of long-term effects as international demand is important for small, exportdependent countries like Sweden.

#### Persistent changes in output and productivity

The coronavirus pandemic could lead to long-term changes in people's behaviour. For example, it may take a long time until travel, tourism or consumption of certain services and goods return to the levels that prevailed before the pandemic. Behavioural changes may also be more permanent, at least in those cases where the pandemic has strengthened a structural change that was already in progress.<sup>44</sup> An example of this is the increased digitalisation of the retail trade, where retail-outlet sales have been replaced, to a certain extent, by online shopping. The digitalisation of the retail trade is accelerating now that people are not making purchases in physical shops to the same extent as previously. It is probable that much of this structural change would also have occurred without the pandemic, but this would have been at a slower pace. Faster structural change may lead to productivity being raised if it is the least productive companies that close down.

During the crisis, some companies have experienced shocks to global supply and production chains, which may now lead these companies to reorganise their value chains and move some production from other countries to Sweden or nearby countries.<sup>45</sup> If this is a permanent behavioural change, it could increase demand for labour in Sweden. However, productivity is expected to be affected negatively in such a scenario, as companies will no longer be able to take advantage of the specialisation of work tasks in global value chains.<sup>46</sup> Falling productivity could increase companies' investments in labour-saving technology in the longer term, which could reduce their demand for labour and increase productivity again.<sup>47</sup> However, it is common for deep economic crises to have long-term negative effects on productivity as risk propensity normally decreases and causes large downturns in investment. In addition, prolonged high unemployment leads to the labour force becoming less productive.

# Increased structural change leads to higher unemployment for a time

When structural change proceeds more rapidly, unemployment increases for a time. The reason for this is that it takes time for those losing their jobs to find new ones, particularly if the new jobs require different skills to the ones possessed by the unemployed. One sign of more rapid structural change is that the number of bankruptcies has increased (see Figure 3:40). Faster structural change combined with falling demand in most sectors is further increasing the risk of rising long-term unemployment.<sup>48</sup>

To avoid unemployment remaining at a high level over a long period, it is important that those who have been made redundant apply for the jobs that exist and are prepared to change profession. Job searching has fallen during the coronavirus pandemic, but there are some signs that the unemployed have shifted focus and have started to apply for work in professions that have not been affected as severely and for jobs that can be carried out at a distance.<sup>49</sup> This shows that job-seekers in Sweden have the ability to adjust, which is positive for long-term employment.

# Groups with weaker footholds on the labour market are hit hardest in crises

So far, the measures adopted to mitigate the effects of the pandemic on the labour market have mainly been aimed at people with relatively stable jobs, and many fixed-term employees have lost their jobs.<sup>50</sup> Protecting more stable jobs is natural since it is desirable that the companies are able to resume production rapidly when demand returns. But the groups hit hardest are those just entering the labour market: the young and foreign-born. Entry into the labour market becomes harder in a crisis, and this has long-term negative effects on individuals' employment and incomes.<sup>51</sup> These effects may become particularly severe during the coronavirus crisis as sectors with a large number of entry level jobs (the retail trade, hotels and restaurants) have been

regarded as sustainable over the long term is an important part of the business cycle analysis.

<sup>&</sup>lt;sup>44</sup> See, for example, J. M. Barrero, N. Bloom and S. J. Davis (2020) "Covid-19 is also a reallocation shock", NBER working paper no. 27,137.

<sup>&</sup>lt;sup>45</sup> See The Riksbank (2020), Business Survey, May, and B. Javorcik (2020), "Global supply chains will not be the same in the post-Covid-19 world", chapter 8 in R. Baldwin and S. Evenett (eds.), Covid-19 and trade policy: Why turning inward won't work, VoxEU e-book, CEPR Press.

<sup>&</sup>lt;sup>46</sup> Se K. Kilikoch and D. Marin (2020), "How COVID-19 is transforming the world economy", VoxEU.org.

 <sup>&</sup>lt;sup>47</sup> However, total demand for labour does not need to decrease as new jobs are usually created in other parts of the economy in the longer term.
 <sup>48</sup> See L. Hensvik and O. Nordström Skans (2020), "IZA Covid-19 crisis response

monitoring: Sweden", May 2020, IZA. <sup>49</sup> See L. Hensvik, T. Le Barbanchon and R. Rathelot (2020), "Job search during the

COVID-19 crisis", IZA Discussion Paper 13237.

 $<sup>^{\</sup>rm 50}$  For example, short-time work schemes are aimed at employees with permanent jobs or fixed-term employment contracts.

<sup>&</sup>lt;sup>51</sup> See, for example, M. Engdahl, M. Godard and O. Nordström Skans (2019), "Early Labor Market Prospects and Family Formation", IZA Discussion Paper 12092.

hit the hardest.<sup>52</sup> But it may also be the case that the recovery will proceed more rapidly when the crisis is over as, even in normal times, these sectors are relatively dynamic, with considerable staff turnover and relatively low demands for job-specific skills. It may therefore be easier to re-employ people in these sectors.

However, the structural problems on the labour market, namely that many low-educated and foreign-born people face difficulties in finding work, will persist after the coronavirus crisis. 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.

## The labour force participation rate usually decreases in crises

Deep or prolonged economic crises usually lead to people who have long been without work leaving the labour force. This leads to lower unemployment but also entails a lower long-term employment level.

However, it is also important what people do upon leaving the labour force. Many older people who lose their jobs may choose to leave the labour force permanently by retiring. But among younger people, many usually choose to study when demand for labour decreases and the education system is expanded. This leads to the labour force participation rate becoming lower for a period, but it can be positive for both employment and productivity in the slightly longer run. The more successfully education and training measures are aimed at shortage occupations and the skills demanded by the labour market, the greater the positive effects are.

At present, there seems to be greater demand for education with more secure job prospects. For example, applications for courses in nursing and civil engineering have increased by 31 and 17 per cent respectively ahead of the autumn term for 2020.<sup>53</sup>

The coronavirus crisis is expected to lead to higher longterm unemployment and lower long-term employment Developments on the labour market are important for monetary policy, both in the short and long terms. Employment and unemployment affect wage formation and thereby inflation. The long-term levels of the labour market also affect the development of output in the long term. These long-term levels cannot be observed directly but must be assessed on the basis of results from models and indicators. The assessments are always uncertain and, in addition, this uncertainty is even greater when the economy is far from being balanced, for example in deep economic crises.

The Riksbank's overall assessment is that the coronavirus crisis will affect the growth potential of the Swedish economy negatively, even if it is difficult to determine how large the effects will be. It is particularly difficult to assess how productivity will be affected by the crisis over the long term, as there is no consensus in the research over why productivity growth has been weak since the financial crisis of 2008.<sup>54</sup> If digitalisation increases and low-productivity companies close down due to the pandemic, long-term productivity growth may become higher. At the same time, however, reduced globalisation, reduced investment and long-term high unemployment tend to reduce productivity. The Riksbank thus does not consider it possible, at present, to assess how long-term productivity growth will be affected by the coronavirus crisis.

The Riksbank's overall assessment for the labour market is that the crisis will lead to lower long-term levels for the number of persons in employment and the number of hours worked, and to higher long-term unemployment. The increase in unemployment will be counteracted by the longterm labour force participation rate becoming slightly lower. However, these effects will not be permanent but will wear off after a while. How large persistent effects the coronavirus crisis will finally have on the labour market depends on how long the crisis lasts and on which measures are adopted. Reforms that contribute to a more inclusive labour market, greater mobility and possibilities for education, training and continuing professional development could counteract the negative effects. The Riksbank is carefully following developments and reviewing its assumptions as new information is received. Considering the effects of the coronavirus crisis and other factors, long-term unemployment is expected to be in the interval of 6-8 per cent (see Figure 3:41). This relatively high assessment of longterm unemployment is due to there being structural problems on the labour market which are expressed as unsatisfactory matching of unemployed people and vacant jobs. Unemployment is largely concentrated in groups with a low level of education.

<sup>&</sup>lt;sup>52</sup> See, for example, P. Andersson Joona (2020), "Pathways to work for refugees and family migrants, SNS Research Report and L. Hensvik and O. Nordström Skans (2020), "IZA Covid-19 crisis response monitoring: Sweden", May 2020, IZA.
<sup>53</sup> Swedish Council for Higher Education (2020), "Antagning till högre utbildning

höstterminen 2020, statistik i samband med sista anmälningsdagen" (Admission to

higher education, autumn term 2020, statistics in conjunction with final date for application).

<sup>&</sup>lt;sup>54</sup> See, for instance, National Institute of Economic Research (2017), Wage Formation in Sweden 2017.



 Unemployment rate 
 Interval for long-term unemployment Sources: Statistics Sweden and the Riksbank