



BANK OF FINLAND BULLETIN

BANK OF FINLAND ARTICLES ON THE ECONOMY

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Short-term economic outlook has deteriorated drastically in Finland, Sweden and Germany

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The outlook for the world economy deteriorated in the spring as the coronavirus (COVID-19) developed into a pandemic. Significant re-strictions on movement, business and social interaction have greatly weakened growth potential, while consumption and investment are both being depressed by the uncertainty raised by the virus. Short-term indicators point to a sudden and fairly simultaneous weakening of the Finnish, Swedish and German economies in March. During May, high-frequency indicators showed early signs of picking up, but uncertainty remains high and the recovery will be slow.



This article assesses and compares the short-term economic outlook of Finland, Sweden and Germany. Sweden and Germany are Finland's main trading partners, so developments in their respective economies are of particular interest for the Finnish outlook. In addition, various restriction measures of different stringency have been introduced in Finland, Germany and Sweden to control the spread of the coronavirus.

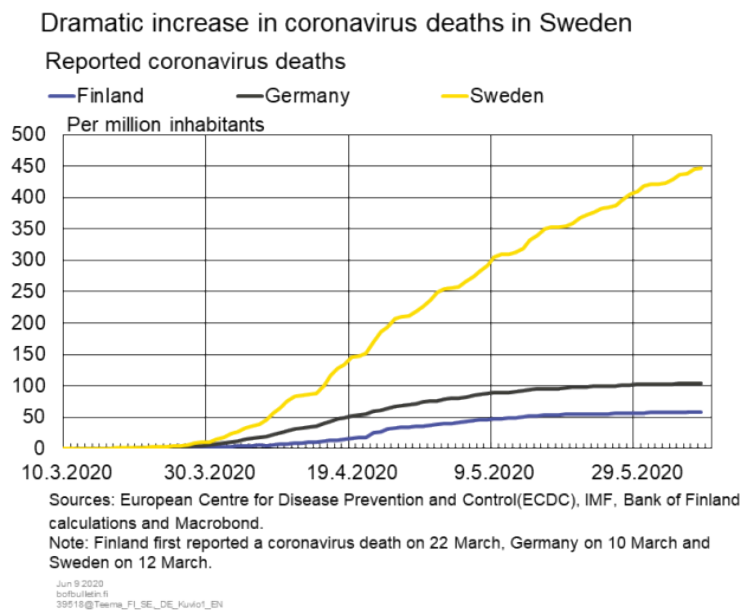
Efforts have been made by, for example, the Oxford Covid-19 Government Response Tracker to measure the stringency of restriction measures and epidemiological management measures in different countries. According to their stringency index, restrictions in Finland and Germany began to intensify at the same time as early as

January, when public information on the coronavirus was first circulated. Since late March, Germany's restriction measures have been slightly stricter than those imposed in Finland. In Sweden, on the other hand, restriction measures were only introduced at the beginning of March and have been clearly less stringent than in Germany and Finland^[1]

All three countries introduced stricter restrictions and recommendations in March. Finland adopted the powers laid down in the Emergency Powers Act in mid-March, around the same time as schools were closed and gatherings with more than ten people were banned. In Germany too, restrictions were introduced in mid-March, when schools and non-essential businesses were closed down. Later in March, Germany banned gatherings of more than two people and extended closures to further businesses, such as hairdressers.^[2] In mid-March, Swedish authorities recommended switching to remote work and avoiding travel, and in late March and early April its recommendations and restrictions were tightened further with measures such as banning gatherings with more than 50 persons.^[3]

There are also differences in the spread and severity of the epidemic. The increase in coronavirus deaths has been far more dramatic in Sweden than in Finland and Germany (Chart 1). The extent of the epidemic and the threat posed by it involve many country-specific factors, such as the population's age structure, population density and health care capacity. This may also have contributed to each country's selected virus management strategies.

Chart 1.



1. The Oxford COVID-19 Government Response Tracker and related background material can be found at <https://github.com/OxCGRT/covid-policy-tracker/>.

2. These were general restrictions introduced in all of Germany, but in some parts of the country, restriction were even stricter.

3. A more detailed list of restrictions can be found, for example, at (see appendices, Table 2) <https://www.bofbulletin.fi/en/2020/scenarios-of-the-finnish-economy-for-the-years-ahead/>.

The coronavirus affects the economy through several channels

The coronavirus has brought a large part of the world's economies to an unprecedented halt. Yet while the coronavirus pandemic is a global shock, the resulting economic losses in different countries and regions have varied.

On the one hand, restrictions imposed to combat the virus, such as restrictions on the operation of restaurants and on movement, are weakening the economic environment. On the other hand, economic activity and the consumption of services are also being dampened by the uncertainty and health fears stoked by the pandemic and, for example, the lack of knowledge about how dangerous the virus is and how easily it spreads. In addition, restrictive measures and the spread of the virus have disrupted global supply chains, thus weakening the situation in the manufacturing industry. The impact of the coronavirus pandemic on economic growth will also depend on the magnitude, targeting and timing of fiscal and monetary policies pursued in Finland and elsewhere in the world.

The relative economic impact of lockdown versus uncertainty has recently sparked much debate. In the early stages of the crisis, the OECD estimated that each month of strict lockdown would cut annual GDP growth by 2 percentage points (OECD, 2020). However, different countries have imposed different restrictions, and it has also been observed that people have voluntarily maintained social distancing. Efforts have been made to assess the impact of lockdown measures and other factors on the economy by analysing short-term economic indicators such as electricity consumption, population mobility, card payments and unemployment benefit applications.

One observation is that the economic impact is greater in areas with the most serious outbreaks. For example, European countries and US states with a particularly high rate of COVID-19 deaths per capita experience more severe economic losses than less affected areas, regardless of the restrictions in place (Chen et al. 2020). Short-term indicators measuring economic activity, such as electricity consumption, show a correlation with the stringency of mitigation policies in the early weeks of the pandemic, but no longer thereafter. At this point, the lack of economic activity has to be explained by other factors. One such contributing factor might be voluntary, self-imposed restriction measures. A wider spread of the epidemic has led to increased voluntary social distancing (Chudik et al. 2020). For example, Google searches related to fears over the virus are found to be associated with a decline in population mobility (Alfaro et al. 2020).

In the United States, mobility fell substantially in all states after the outbreak of the epidemic, even in states that did not adopt major restrictions (Gupta et al. 2020). This suggests that some of the decline in population mobility is caused by factors other than tight restrictions on movement alone. Early action and communication regarding COVID-19 appear to have played a greater role. Out of numerous indicators, announcements of the first coronavirus cases, emergency declarations and school closures reduced mobility the most.

In China and Hong Kong, it has been observed that intra-city travel was very closely linked to infections in the early stages of the epidemic. However, this correlation

weakened as the number of infections decreased over time. A rise in within-city movement no longer led to an increase in infections (Ainslie et al. 2020).

In the United States, it has also been observed that unemployment insurance claims are somewhat linked to lockdown measures, but even more so to the spread of the virus itself (Baek et al. 2020). Unemployment would have therefore increased even without the restrictions. If such is the case, lifting the restrictions will only provide limited relief to an economy buffeted by the coronavirus crisis.

The impact of the lockdown measures on household consumption in Sweden and Denmark has been studied based on transaction data from a large Nordic bank (Andersen et al. 2020). According to the estimate, aggregate spending dropped by around 25 percent in Sweden and, as a result of the shutdown, by an additional 4 percentage points in Denmark. This implies that most of the economic contraction is caused by the virus itself and occurs regardless of whether governments mandate stringent social distancing or not. Payment card data has also been used elsewhere in assessing the economic impact of the coronavirus crisis. Based on the data, it has been found, among other things, that the opportunity to make online purchases contributes to offsetting the negative impact of the lockdown on consumption (Bounie et al. 2020, Carvalho et al. 2020).

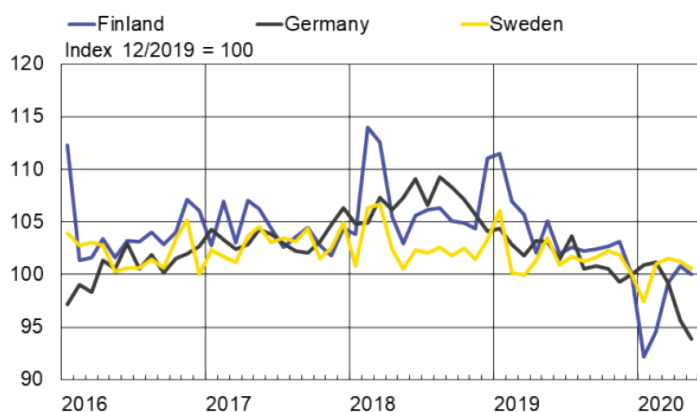
Electricity consumption declined in Germany during the spring

Since its onset in March, the coronavirus pandemic does not appear to have had a significant impact on electricity consumption in Finland or Sweden (Chart 2). This suggests that the manufacturing industry has not, at least yet, had to suspend a significant volume of its production. In Finland electricity consumption appears to have fallen sharply in the early part of the year, but according to temperature-corrected data published by Finnish Energy, a trade organisation for the energy sector, electricity consumption declined far less in January than what the raw data suggests. In addition to the exceptionally warm weather, strikes in the forest industry may have reduced electricity consumption early in the year. In Germany, on the other hand, electricity consumption decreased in April and May, which indicates a decline in economic activity.^[4] One cause may have been reduced activity in the manufacturing sector as a result of the pandemic creating supply chain problems, health concerns and lack of demand, among other issues. For example, Germany's car manufacturing was temporarily suspended in April.

4. More detailed information on German electricity consumption during the coronavirus crisis: <https://www.ifw-kiel.de/de/themendossiers/corona-krise/datenmonitor-corona-krise/>.

Chart 2.

Recent months show reduced electricity consumption primarily in Germany



Sources: ENTSO-E, Macrobond and Bank of Finland (seasonal adjustments). The data are seasonally adjusted but not temperature-corrected.

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The coronavirus has reduced population mobility

The consumption of services in particular relies on people being allowed and unafraid to move and meet others. Mobility data collected by Google^[5] show (Chart 3) that mobility in places defined by it as retail and recreational has decreased less in Sweden than in Finland and Germany, where restrictions have been more stringent. However, mobility began to decline simultaneously in all three countries, as early as the beginning of March. After mid-March, when restrictions were tightened in Finland and Germany, footfall in recreational and retail areas continued to drop in these countries.^{[6], [7]} The fall in population mobility in all three countries supports the conclusion put forward by Gupta et al. (2020) that part of the decline is caused by something other than strict restrictions on movement alone. Google's Community Mobility Reports data can thus be interpreted to reflect the effects of social distancing and mandatory lockdown but also voluntary restriction measures.

In Finland and Sweden especially, travel in recreational and retail areas remained at their mid-to-late March levels for a long time. These statistics did not begin to show initial signs of recovery until halfway into May. The fact that footfall in recreational and retail areas appears to have increased only slowly in Finland and Sweden, even though

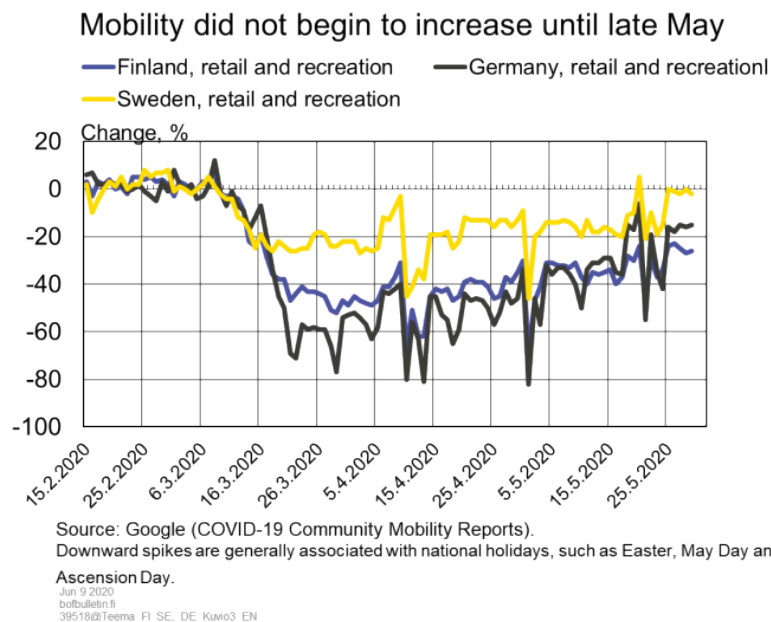
5. Source: <https://www.google.com/covid19/mobility/>. It should be noted that Google emphasises that the data is not necessarily comparable between countries due to variation in location accuracy and the understanding of categorised places.

6. In the Google mobility data, the baseline for comparing daily changes in mobility is the median value for the corresponding day of the week during the 5-week period between 3 January and 6 February 2020. The data do not take into account, e.g. seasonal fluctuations, which may distort statistics on the use of parks and public transport, in particular.

7. The report of the Finnish Competition and Consumer Authority examines mobility statistics in more detail (in Finnish): <https://www.kkv.fi/globalassets/kkv-suomi/julkaisut/muut/koronan-ja-rajoitustoimien-vaikutukset-liikkumiseen-2020.pdf>.

payment card transaction data indicate that consumption has begun to recover, may be a sign of increased online purchases as consumers seek out new ways to spend money. According to Nordea's card transaction data, online purchases with payment cards issued by Nordea increased by about 20% year-on-year in week 21. The almost 25% year-on-year increase in e-commerce sales in Germany suggests that, in Germany too, consumers have switched from brick and mortar to online stores. Thus, mobility statistics may provide an inaccurate description of economic activity or consumption if consumers have the option to switch to alternative consumption practices. Similarly, reduced physical presence at workplaces does not necessarily directly indicate a reduction in value added if remote work is possible.

Chart 3.



Payment card transaction data give indication of developments in consumption

As the coronavirus pandemic has hit consumption and services particularly hard, weekly payment card transaction data published by commercial banks has become an especially interesting short-term indicator. In Finland, for example, Nordea has published a weekly Coronavirus Barometer, which indicates that card transactions fell sharply in week 12.^[8] During Easter Week (week 15), consumption with payment cards issued by Nordea fell by almost 30% compared with Easter Week 2019. Based on payment card transactions, consumption has begun to recover after week 16, and in May, during weeks 19–21, consumption was only around 5–10% lower than earlier in 2020 and around 10–15% lower year-on-year. The weekly payment card transaction data published by Savings Bank Finland shows that at most, transactions dropped by just under 25% compared with early 2020.^[9] Data by the Savings Bank also show that, in May, payment card transactions have almost recovered to early 2020 levels. Corresponding data published

8. Source: <https://e-markets.nordea.com/api/research/attachment/113800>.

9. Source: <https://twitter.com/HennaMikkonen1/status/1263792648160186368>.

by the S-Bank also indicate that payment card transactions recovered to early year levels in euro terms, although the number of transactions was around 10% lower in week 21 than in early 2020.^[10]

In Sweden at least Swedbank has published high frequency payment card transaction data, on the basis of which Swedish consumption on Swedbank cards decreased by up to around 25% year-on-year (around mid-April). According to the latest Swedbank statistics, consumption in May has been around 10% lower than at the same time last year.^[11] Due to different reporting methods, these figures are not directly comparable with Finland. Nonetheless, it is evident that the coronavirus abruptly reduced consumption in both countries and that in both countries, consumption is also gradually recovering.

The analysis of payment card transaction data also reveals clearly that the pandemic has affected different sectors in very different ways. In Finland, the year-on-year volume of transactions with payment cards issued by Nordea in week 21 dropped by around 90% in the hotel industry and by nearly 70% in the restaurant industry. In Sweden, the volume of Swedbank payment card transactions in hotels and restaurants was around 40% lower in week 21 than the year before, i.e. these statistics suggest that the decrease in these sectors was slightly smaller than in Finland.^[12]

While the payment card transaction data of individual commercial banks cover only a part of aggregate consumption, they provide important high frequency information on the development of consumer spending. A more comprehensive picture of consumption can be obtained by examining, for example, retail trade directly. However, figures on retail turnover have only been published for April.

In March, retail trade turnover decreased by just under 3% in Finland, by around 2% in Sweden and by around 4% in Germany compared with the previous month, but remained almost unchanged compared with March 2019 (Chart 4). In April, retail trade continued to contract sharply in Germany: turnover decreased by around 5% compared with both the previous month and the previous year. In Finland and Sweden, retail trade turnover remained largely unchanged in April compared to March. However, the sectoral differences are considerable. In Germany, for example, April figures for trade in textiles, clothing and shoes are estimated to have decreased by about 70% year-on-year.

In addition to its impact on retail trade, the pandemic affects the consumption of durables. For instance, first registrations of passenger cars decreased by almost 40% in both Finland and Sweden in April, but by over 60% in Germany. In May, the number of first registrations decreased by about 50% year-on-year in all three countries.

The services sector has seen turnover plummet in accommodation and restaurant activities. In March, turnover decreased at an annual rate of about 30% in Sweden, 35% in Finland and 45% in Germany (Chart 5). In April, the decline will probably have been

10. Source: <https://dokumentit.s-pankki.fi/tiedostot/s-pankin-korttitilastot-toukokuu-2020>.

11. Source: <https://research.swedbank.se/default.aspx?cdguid=A8C852A9-B3AC-4036-BE75-CA092591F193>.

12. As the percentages used in the text have been approximated on the basis of figures published by commercial banks, inaccuracies may occur.

even greater. Germany, for example, has only allowed overnight stays related to business trips. Tourist overnight stays fell in March at an annual rate of 47% in Finland, 53% in Germany and 38% in Sweden. According to preliminary data, overnight stays in Finland fell by 88% in April. Service sector activity has thus slowed dramatically in all three countries, generally speaking most in Germany and least in Sweden.

Chart 4.

Retail trade turnover has declined especially in Germany

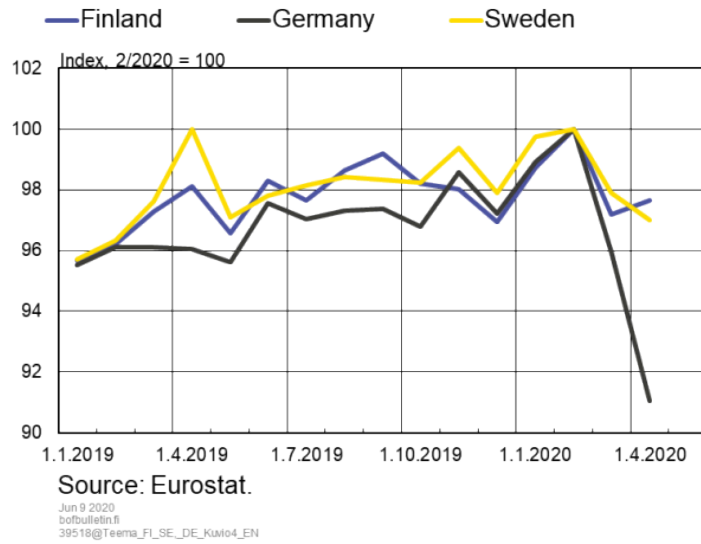
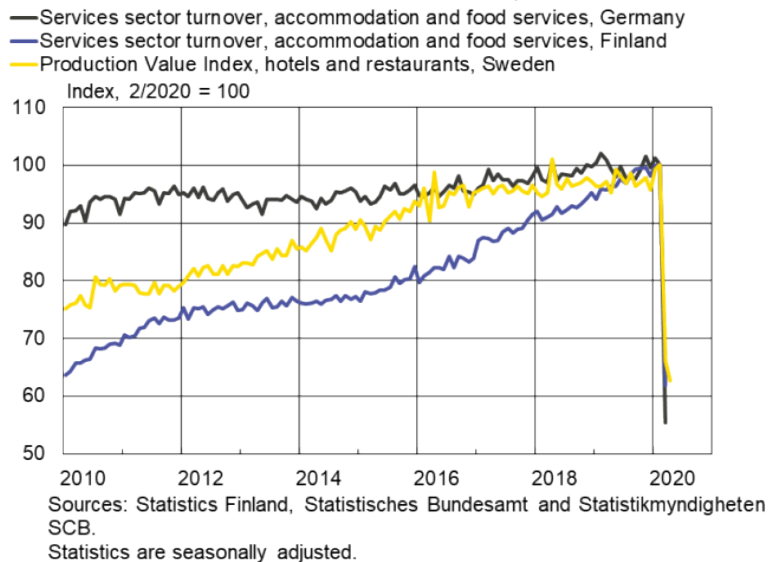


Chart 5.

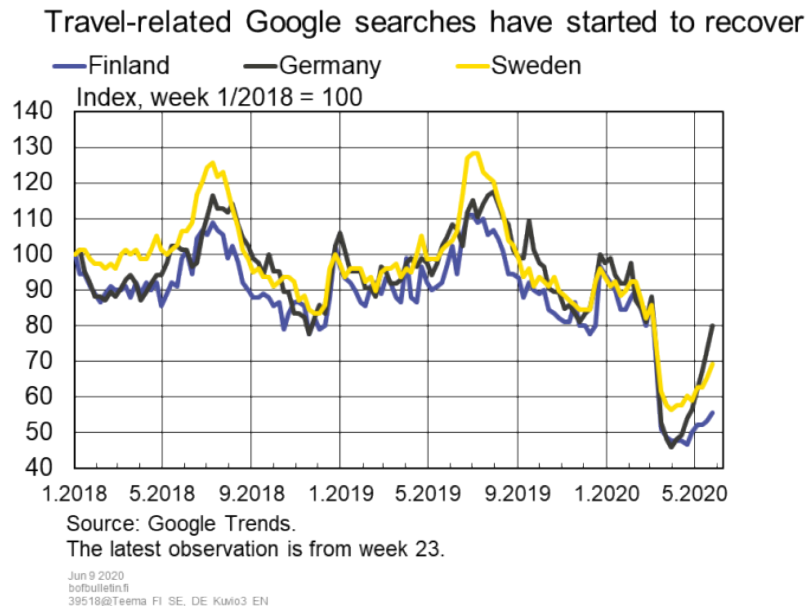
Turnover in accommodation and restaurant services plummeted in March



Similar developments in card payments and retail trade in Finland and Sweden support the conclusions of Andersen et al. (2020), who compared Denmark and Sweden and found that most of the reduction in economic activity is caused by the virus itself and not by government restrictions. Based on card payment statistics, consumption can be

expected to gradually recover in May, but the differences between sectors will remain large. At the same time, Google searches related to tourism have trended up in recent weeks, especially in Germany, but also in Finland and Sweden (Chart 6), and are indicative of a gradually returning interest in travel. In any case, the persistent uncertainty caused by the pandemic is likely to weigh on consumption for a long time to come.

Chart 6.

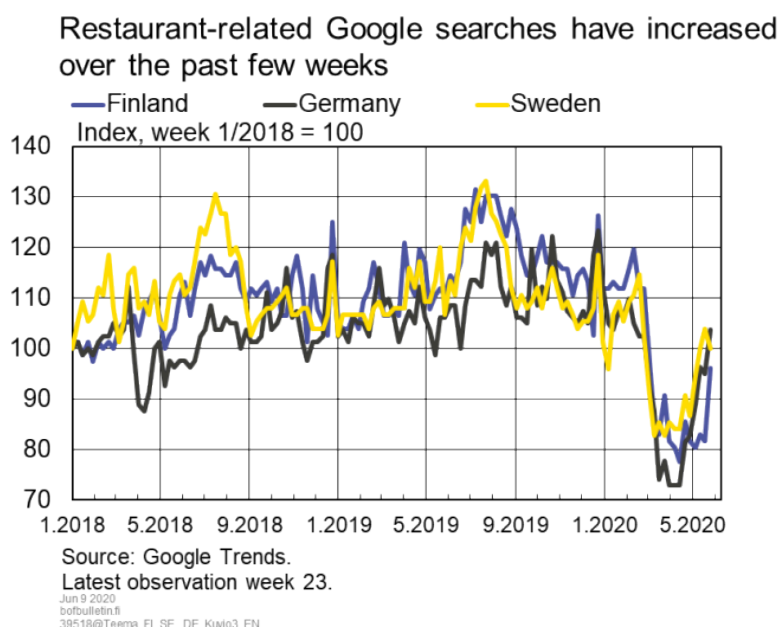


Google searches can also be used more generally when trying to assess how much activity has slowed in different countries.^[13] For example, weekly Google searches related to restaurants decreased simultaneously in all three countries as early as the beginning of March (Chart 7). After a sharp decline, there has been a clear upswing in searches in the last couple of weeks, particularly in Sweden and Germany. At the same time, the coronavirus situation has eased, and governments have begun to lift restrictions. In Finland, the reopening of restaurants at the beginning of June boosted restaurant-related Google searches markedly.

To sum up, Google searches tell a similar story as data on population mobility and card payments: activity contracted sharply in March in all three countries; but the most in Germany and the least in Sweden. In recent weeks, activity seems to have picked up cautiously in all three countries.

13. It should be noted that the statistics are subject to a considerable degree of uncertainty as to, for example, what kinds of searches are made in different countries, and for what purposes.

Chart 7.



Labour markets have deteriorated sharply

The coronavirus pandemic has been rapidly reflected in labour markets, as the crisis has hit the labour-intensive services sector exceptionally hard. The challenge in comparing labour market indicators is that countries have, for example, disparate practices in categorising who is registered as unemployed, differing lay-off systems and different possibilities to adjust the price of labour. This means that short-term labour market effects may not be properly reflected e.g. in the labour force survey, which is in any event published with a lag. Indicators that react more rapidly are, for example, various statistics on short-time work or lay-offs. These statistics are not directly comparable between countries, however.

On the whole, it is clear that the labour market situation has deteriorated dramatically in all countries. The number of furloughed employees has increased significantly in Finland since mid-March. According to an estimate by the Ministry of Economic Affairs and Employment (MEAE)^[14], the number of furlough and unemployment periods caused by the pandemic is 224,000 and 21,000, respectively, which in total accounts for about 9% of the Finnish labour force.^[15] During the spring, Sweden has introduced a system of short-time work (“korttidsarbete”), under which employers can shorten employees’ working hours and obtain financial support for labour costs.^[16] At the end of May,

14. In its calculations, the MEAE uses a time series model to estimate the normal number of lay-off and unemployment periods commenced. The figures were obtained from the MEAE website on 1 June 2020.

15. The calculation does not take into account the fact that the same person may have had several periods of furloughs and that some of the furlough periods have already ended, meaning the percentage relative to the labour force is only indicative. At the end of April the number of employees on furlough totalled 164,000. The MEAE statistics only cover persons that are furloughed full-time and have registered as unemployed jobseekers. Therefore, a share of all persons furloughed due to the pandemic are excluded from the statistics.

16. More information on the Swedish system and the source of the statistics: <https://tillvaxtverket.se/om-tillvaxtverket/information-och-stod-kring-coronakrisen/statistik-om-korttidsarbete.html>.

approved applications within this scheme covered over 500,000 employees, or nearly 10% of the workforce. In addition, in March and April the number of newly registered unemployed jobseekers amounted to almost 2% of the workforce, and more than one per cent of the workforce had been warned of the risk of redundancy.

According to the German Federal Employment Agency (BA), in March–April, German companies had registered 10.66 million employees for short-time work (“Kurzarbeit”), which accounts for about 25% of the workforce.^[17] The actual figures reveal that 2.02 million employees were in fact working shortened hours in March. The Agency estimates that around 6 million employees, or about 14% of the workforce, could have ended up working on a short-time basis by the end of April. The IFO Institute’s estimate puts the number of short-time workers in May at 7.3 million. During the financial crisis, the monthly peak in the number of employees on short-time work in Germany – 1.44 million – occurred in May 2009. The comparison with the current situation highlights the suddenness of the labour market deterioration as a result of the pandemic.

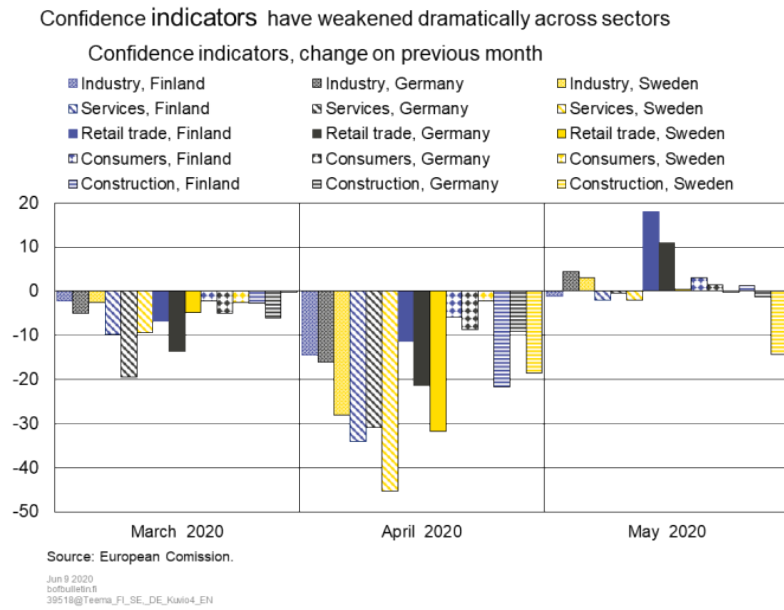
Even though the statistics on short-time work are not directly comparable between countries, they nevertheless point to a substantial deterioration of the labour market in all three countries. An abrupt weakening of the labour market leads to a significant increase in economic uncertainty and may boost saving, if households reduce or postpone consumption.

Confidence indicators display a dramatic increase in uncertainty

Confidence indicators of various economic agents offer a way of assessing near-future developments in different sectors of the economy. Confidence indices also reflect the overall sentiment of society, which, among other factors, is influenced by the coronavirus restrictions and fear of the spread of the virus. In March, confidence surveys were mainly conducted in the first half of the month, before the tightening of restrictions and the marked increase in concern surrounding the coronavirus. In March, confidence weakened most in Germany and mainly in services and retail trade (Chart 8). In April, confidence indicators fell on a broader front, as expected, and still notably steeply in the services and retail trade sectors, whose business activities are the most affected by coronavirus restrictions and the spread of the virus. Consumer confidence, in turn, has so far declined relatively moderately. In April, confidence declined particularly sharply in Sweden, which reinforces the notion that uncertainty and caution are major factors contributing to the deterioration of economic activity. In May, overall sentiment did not become gloomier, and confidence in the retail sector was even seen to improve in Finland and in Germany. The German Purchasing Managers’ Indices indicate that activity contracted in May, but to a lesser extent than in the previous month. Thus, confidence indicators support the view garnered from data on mobility, card payments and Google searches, namely that activity has shown early signs of recovery in May.

17. The figure indicates the total number of employees covered by Kurzarbeit notifications. Companies may have filed a notification as a precautionary measure, so the actual figure may turn out to be smaller.

Chart 8.



Bleak outlook for the current year

The abrupt deterioration of the economic environment is also reflected in the forecasts for 2020 as well as in nowcasting models and short-term indicators gauging the current economic situation. According to the Bank of Finland's most recent forecast, the Finnish economy will contract by about 7% and the unemployment rate will rise to around 9% in 2020. Uncertainty is high, however, and according to the forecast's *risk assessment*, GDP will shrink by 5–11% in the current year. The unemployment rate is estimated to range between 8% and 10%. In Sweden, according to the Riksbank's most recent forecast published at the end of April, the economy will contract by 7–10% and unemployment will rise to 10–11% in 2020.^[18] The forecast published by Konjunkturinstitutet at the end of April is in line with the Riksbank's projections (GDP -7 %; unemployment rate 10.2%).^[19] In Germany, the Bundesbank has begun to publish a new weekly activity index (WAI) for the German economy, according to which German GDP shrunk by 1.9% in the first quarter of 2020.^[20] This is fairly close to the actual economic contraction of 2.2%. At the beginning of June, the WAI suggested that activity over the past 12 weeks was 5.75% weaker than in the preceding 12 weeks. The Bundesbank's most recent forecast projects a contraction of 7% for the German economy in 2020.^[21]

The European Commission published its spring forecast at the beginning of May. The

18. More information on the forecast: <https://www.riksbank.se/sv/penningpolitik/penningpolitisk-rapport/2020/penningpolitisk-rapport-april-20202/>.

19. More information on the forecast: <https://www.konj.se/english/publications/swedish-economy-report/swedish-economy/2020-05-04-updated-economic-outlook.html>.

20. More information on the Bundesbank activity indicator: <https://www.bundesbank.de/en/statistics/economic-activity-and-prices/weekly-activity-index>.

21. More information on the forecast: <https://www.bundesbank.de/en/press/press-releases/bundesbank-projections-german-economy-will-recover-after-deep-recession-834296>.

Commission estimates that the economic contraction in 2020 is 6.3% in Finland, 6.1% in Sweden and 6.5% in Germany.^[22] The economic outlook for the current year is therefore estimated to be weak but very similar in all three countries.

The coronavirus pandemic weighs on growth prospects

The current state of the economy and the outlook for the near future can be assessed by comparing indicators that are available with a short publication lag. In addition to the diverging strategies for combatting the coronavirus, countries differ e.g. in terms of their economy's starting position and structure going into the crisis as well as their crisis management measures. Differences in economic developments may therefore result from a number of factors. On the other hand, the uncertainty caused by the virus is, at least in principle, similar in all countries.

Short-term indicators paint a gloomy picture for growth prospects especially in the second quarter of 2020 – in Finland, Germany and Sweden alike. A number of indicators suggest that the contraction in Sweden would be slightly smaller than in Finland and notably smaller than in Germany, but the difference is moderate. The recommendations-based strategy in Sweden has not protected the country's economy, at least in the short term, from a sharp deterioration in the services sector. The labour market has weakened abruptly and confidence indicators have fallen as sharply in Sweden as in Finland and Germany. Growth forecasts for 2020 as a whole are also similar in all three countries. Based on these observations, it cannot be concluded that the potentially slightly smaller decline in the Swedish economy compared with the other two economies would result from the absence of stringent restriction measures. As a small open economy, Sweden is also dependent on the developments in the rest of the world. As Finland and Germany have lifted their restrictions, the gap in the restrictive impact of their coronavirus containment measures has also narrowed in May. The economic situation in Finland's main trade partners is weak, which is likely to be reflected as subdued export demand this year. However, it should also be noted that, over the course of May, many high-frequency indicators have shown early signs of a pick-up in activity in all three countries.

It is worth noting that developments in Finland, Sweden and Germany have been very similar and simultaneous. This highlights the global nature of the pandemic and reinforces the perception that the uncertainty caused by the pandemic in itself has a major impact on economic activity. The lifting of restrictions alone will not necessarily be enough to restore the normal functioning of the economy. Confidence must also recover. Uncertainty in itself plays a major role, especially when there is a risk of a virus threatening people's lives. Uncertainty may therefore curb the recovery of consumption and investment well after the lifting of restrictions. Households may postpone larger purchases in response to the weak labour market and economic situation, and companies in turn may postpone investment due to uncertain demand and vulnerable supply chains.

22. More information on the forecast: https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/spring-2020-economic-forecast-deep-and-uneven-recession-uncertain-recovery_en.

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