The Swedish Economy
April 2020

NATIONAL INSTITUTE OF ECONOMIC RESEARCH (NIER), FLEMINGGATAN 7, BOX 12090, SE-102 23 STOCKHOLM
+46 8 453 59 00, REGISTRATOR@KONJ.SE, WWW.KONJ.SE/ENGLISH

ISSN 0039-7296, KI 2020:07

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The COVID-19 pandemic will hit the Swedish economy hard. Just how hard is currently very hard to say, but a particularly deep economic downturn looms. Concern about infection and official advice on limiting social contact are putting a major damper on household demand, and delivery problems are disrupting production in parts of the business sector. Demand is also being adversely affected by drastic measures abroad to curb the spread of infection. The NIER estimates that Sweden's GDP will fall by just over 6 per cent in the second quarter. Economic policy has already been given a strongly supportive bias. The focus is on supporting the business sector and local government to prevent a wave of bankruptcies and mass unemployment. The NIER believes that this is an appropriate focus, but that more action than decided or announced to date will be needed to stem the rise in unemployment. Relatively low government debt means that there is substantial scope to provide further support for the economy.

The ongoing COVID-19 pandemic will have substantial negative effects on both the global and the Swedish economy. The global economy is expected to contract in 2020, and Swedish GDP falls by more than 3 per cent this year in the NIER's base scenario. However, there is extreme uncertainty about future developments. It is currently very unclear how long the pandemic will last and how many people will be badly affected. This is fuelling concern and affecting how both individuals and authorities act. The drastic measures taken in southern Europe and elsewhere to reduce the spread of infection and save lives will have severe negative economic effects in the near term. Just how severe is, however, very difficult to judge.

The rapid contagion and large number of deaths in countries such as Italy and Spain are creating a strong sense of pessimism and caution that is greatly reducing household demand for goods and services. Even if other countries escape more lightly, demand will still fall sharply there. Decisions by the authorities to restrict freedom of movement are further reducing household demand. The bleak economic outlook is also holding back business investment. Taken together, this means that there will be a deep downturn in demand in the economy. At the same time, the spread of infection is reducing people's willingness to go to work, and official restrictions are preventing many from doing so. This is affecting production in the economy, as is disruption of deliveries from suppliers. Economic activity is therefore being hampered by both decreased demand and constraints on production. Which channel is most significant is difficult to gauge and varies between countries. Constraints on production are having a greater impact on economic activity in countries where freedom of movement is severely restricted, such as Italy and Spain, than in those where it is less restricted.

Key assumptions in the base scenario

As a result of the COVID-19 pandemic, this edition of *The Swedish Economy* presents a picture of future economic developments based on a number of assumptions. The description of economic developments in 2020-2021 is therefore best viewed as a scenario rather than an actual forecast. The most important assumptions in the base scenario are as follows:

- The COVID-19 pandemic subsides in the latter part of 2020.
- 20 per cent of workers fall ill with COVID-19 or have symptoms similar to COVID-19 in 2020. These people stay home from work for two weeks. The vast majority of these cases occur in the second and third quarters.
- Parents stay home with their children for a period equivalent to the closure of nursery and compulsory education for one month in the second quarter. During this time, they are compensated with temporary parental benefit.
- An average of 100,000 people in Sweden work short-time under the short-time work scheme during the second, third and fourth quarters this year. This is consistent with far higher numbers working short-time in some months. These workers have their working hours cut by around 50 per cent on average.
- The Riksdag and the government take more action to counter the economic downturn than decided or announced to date. Such additional measures in the upcoming ordinary budget or additional amending budgets during the course of this year amount to around SEK 70 billion.

Official restrictions on freedom of movement in Sweden are currently less stringent than in most other European countries. The country has also not ordered the closure of nursery and compulsory education (up to the age of 16). In the current situation, it is reasonable to believe that economic activity will be affected most by dwindling demand, and that constraints on production will be less important, although not negligible. Should schools and preschools close across the country, or sickness absence rise sharply, supply constraints will become more significant.

There is little scope in the prevailing situation to stimulate the economy with measures designed to boost demand. The drop-off in demand is not a result of households and firms having weak finances. Changes in behaviour to avoid catching or spreading the virus and an increase in precautionary saving are putting a major damper on household consumption, and demand from abroad is also falling. In the near term, therefore, the response from the authorities is intended to provide various forms of support for the business and local government sectors in order to save jobs and, as far as possible, prevent a wave of bankruptcies. At a later stage, however, when concern about the pandemic subsides, there may be a substantial need for measures to stimulate household and business demand. Sweden's strong central government finances put it in a good position to take such action to the necessary extent.

The authorities have taken various steps during the course of March to cushion the effects of COVID-19 on the economy. The most important are presented below in the box "Fiscal and monetary action so far to mitigate the effects of COVID-19 on the Swedish economy".[1]

The NIER's short-term forecasting models are of extremely limited value in the present circumstances. The economic developments presented in this report are therefore best viewed as a base scenario conditioned on a number of assumptions rather than an actual forecast. The most important of these assumptions are described in the box "Key assumptions in the base scenario" in the margin. This base scenario is associated with very great uncertainty, and downside risks dominate. To illustrate this, we report a more negative scenario in a special analysis in the Swedish version of the report. We also present two calculation examples showing the direct effects on Swedish government finances of a higher number of people falling ill, and of parents staying home longer to look after their children, in the section "Government finances" below.

The presentation of the base scenario begins with a brief review of assumed economic developments outside Sweden. The international scenario builds on the assumption that the COVID-19 pandemic subsides in the latter part of 2020.

[1] The NIER has taken account of the government's proposals up to and including Friday 27 March.

Fiscal and monetary action so far to mitigate the effects of COVID-19 on the Swedish economy

The government, the authorities and the central bank have proposed a series of fiscal and monetary measures to cushion the impact of COVID-19 on the Swedish economy. The following lists the most important to date.

The *government* has proposed replacing the waiting-day deduction from sick pay for the first day of sickness absence with sickness benefit for that day for half of March and the whole of April and May. It will also assume responsibility for sick pay from firms in April and May. These two measures are expected to increase expenditure by around SEK 9 billion.

The government has also brought forward the implementation of the short-time work scheme and increased the rate of subsidy for 2020 in that scheme.[2] The short-time work scheme is where an employee's hours are reduced and the government covers a percentage of the lost wages. Government subsidies for the short-time work scheme are estimated at around SEK 20 billion in 2020.

To improve firms' cash position, the government is proposing a temporary tax credit for value-added tax, preliminary tax for employees and employer social security contributions. This could amount to as much as SEK 300 billion, but actual usage is estimated at SEK 30 billion. In addition, the government has increased the amount that the business development agency ALMI, the Swedish Export Credit Agency and the Swedish Export Credit Corporation can lend to firms by a total of SEK 130 billion. The National Debt Office has also been tasked with issuing credit guarantees to banks to the tune of SEK 100 billion to boost lending to Swedish firms.

To help firms pay their employees, the government has cut employer social security contributions in the period from March to June. This is estimated to cost SEK 33 billion. To reduce firms' overhead costs, the government has proposed rent subsidies of SEK 5 billion for hard-hit sectors of the economy.

It is also proposing extra support for local government to cover the cost of managing COVID-19, additional support for specific authorities, and special support for culture and sport. The government has set aside SEK 2.5 billion for this. In addition, the government has launched a number of initiatives to help firms make use of all these facilities, including the business advisory units.

[2] Short-time working in 2020 with a temporarily higher level of central government support is being referred to by the government as "short-time layoffs" (see the box "Assumptions about short-time working" in the section "Labour market and resource utilisation").

The *Financial Supervisory Authority* has relaxed the funding requirements for banks to prevent possible credit tightening. The deep economic downturn looming as a result of the spread of COVID-19 is also expected to be reason enough for banks to temporarily suspend amortization requirements for some mortgage customers.

The *Riksbank* has announced a SEK 300 billion increase in purchases of securities in 2020 and a broadening of its holdings to include not only government bonds but potentially also municipal bonds, covered bonds and commercial paper. Banks that increase their lending to households and firms are being offered loans of up to SEK 500 billion in total for two years at a variable interest rate equal to the repo rate. The Riksbank will also make it easier for banks to source funding from the central bank, partly by offering unlimited loans of SEK against collateral each week with an interest rate 0.20 percentage points above the repo rate. The collateral requirements for borrowing from the Riksbank have been relaxed. To make it easier for firms to finance their operations, the government has proposed the introduction of government guarantees whereby the central government guarantees 70 per cent of new loans from banks to firms that run into financial difficulties due to the coronavirus but are otherwise viable. The lending rate for overnight loans has been cut from 0.75 to 0.20 percentage points above the repo rate. The Riksbank is also offering banks loans in USD.

International situation

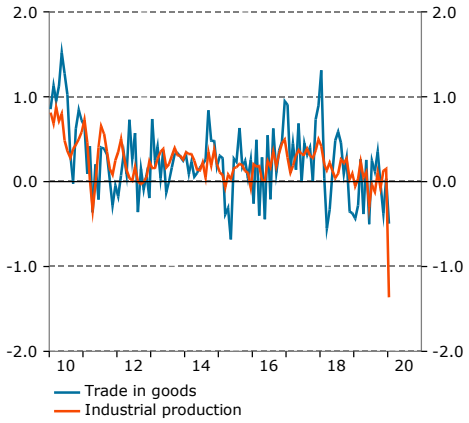
WORLD HIT HARD BY COVID-19

When COVID-19 began to spread beyond China early this year, there were a number of signs that the manufacturing climate was set to improve around the world. After agreement was reached on the phase 1 trade deal between China and the US at the end of 2019, the manufacturing sector in many countries showed signs of stabilising after a long period of decline (see Diagram 1). In some countries, hard manufacturing data showed positive growth. In Germany and other euro countries, where manufacturers had long been struggling, there were signs of improvement in survey data (see Diagram 2).

The improvement in sentiment in the manufacturing sector reversed abruptly when the COVID-19 pandemic escalated. The PMI in China plummeted to a record low, which also had effects on neighbouring countries (see Diagram 3). Data are now available for how production in China was affected in February, and these show a substantial decline (see Diagram 4). As the number of cases now rises in Europe and North America, and drastic

Diagram 1 Global goods trade and industrial production

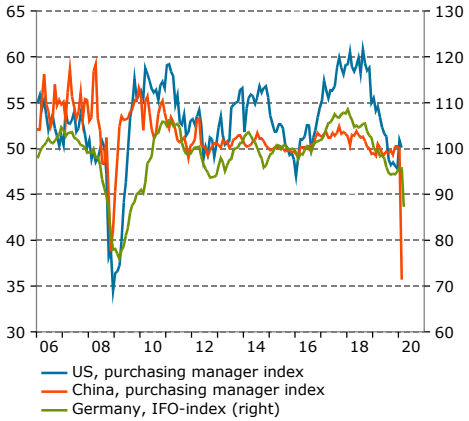
Percentage change, 3-month moving average, seasonally adjusted monthly values



Sources: CPB Netherlands Bureau for Economic Policy Analysis and Macrobond.

Diagram 2 Indicators of industrial confidence

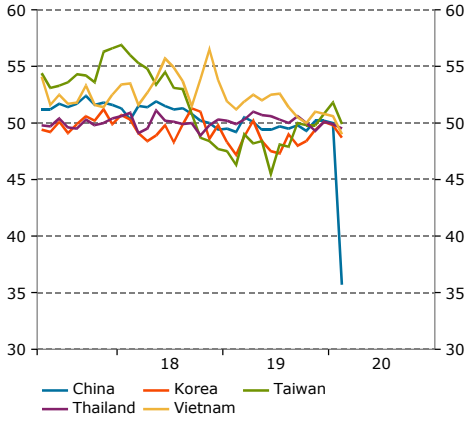
Index, monthly values



Sources: Institute for Supply Management, National Bureau of Statistics of China, IFO and Macrobond.

Diagram 3 Purchasing manager's index in the manufacturing industry in selected countries

Index, monthly values



Sources: China Federation of Logistics & Purchasing and Markit.

action is taken to limit the spread of the virus, considerable negative effects on production in the business sector are also expected there.

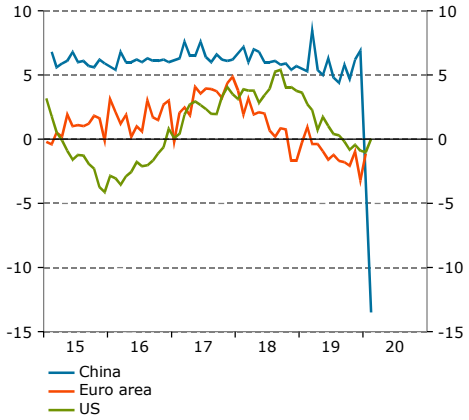
Many countries around the world have closed their borders, and far-reaching measures have been introduced to limit contagion and slow the increase in cases. These measures are having considerable economic consequences, and GDP is expected to fall sharply in many countries in the near term. The negative effects will be particularly strong in the service sector, but virtually all parts of the business sector will be affected to some extent. Although extensive economic support packages have been launched in many countries, not least the US, this will probably not spare the US and Europe as a whole from a particularly deep economic downturn this year. The virus is spreading rapidly and is now present on all continents. In the NIER's base scenario, global GDP decreases in 2020. The spread of infection is expected to subside towards the end of the year, and GDP grows relatively quickly in 2021. It is important to stress, however, that the situation is very uncertain and difficult to predict. The base scenario assumes that the sweeping measures taken in many countries to prevent contagion begin to be phased out in the third quarter. There is a risk that many countries will take both more drastic and more long-lasting action to halt the virus than assumed in the base scenario. That would lead to much more negative effects on GDP in the short term (see the special analysis in the Swedish version of the report). It should also be noted that, while the risks associated with the novel coronavirus are completely overshadowing other risks, many pre-existing risks remain (see the box "International risks overshadowed by COVID-19").

STEEP DROP IN DEMAND

Household consumption around the world has already been greatly affected by the spread of COVID-19 and the measures taken to limit contagion. Reduced consumer confidence and restrictions on individual freedom of movement in many countries have caused demand to plummet, above all in the service sector. This weak demand for firms' goods and services risks having considerable negative consequences for employment, further undermining demand. The weak demand has already made its mark on the PMI for the euro area, with the flash index tumbling to a record low in March (see Diagram 5). The big falls on global stock markets also mean that household wealth has decreased (see Diagram 6). This will be a limiting factor on household consumption once the restrictions on freedom of movement are eased and the pandemic subsides. There is also a risk of falling housing prices, which could further erode consumer confidence.

Diagram 4 Industrial production in selected countries and regions

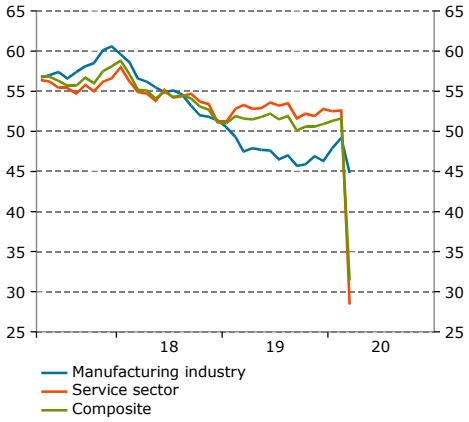
Annual percentage change, monthly values



Sources: Eurostat, Federal Reserve and NIER.

Diagram 5 Purchasing manager index in the euro area

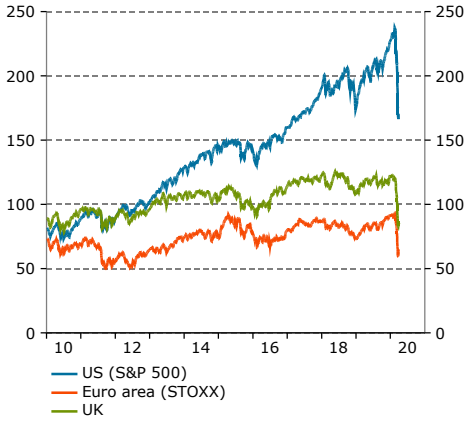
Index, monthly values



Note. Preliminary numbers for March 2020.
Source: Markit.

Diagram 6 Stock markets

Index 2006-12-29=100, daily values, 5-day moving average



Sources: Standard & Poor's, STOXX and Macrobond.

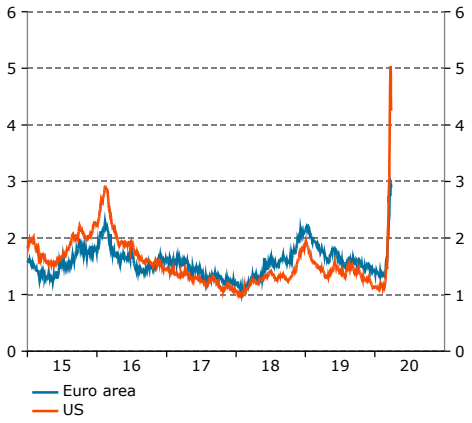
LOW OIL PRICES NO GREAT HELP IN THE SHORT TERM

Asset prices have fallen sharply since January, and an oil price war has erupted between Russia and Saudi Arabia. It began when the parties could not agree on quota reductions to support oil prices following the decline when the spread of COVID-19 escalated. Oil prices fell even further when global stock markets began to plunge (see Diagram 6). There are also other signs of investors increasingly avoiding risky assets. For example, the credit spread between corporate and government bonds has widened considerably (see Diagram 7).

The steep decline in oil prices is affecting oil-producing countries negatively, but net importers such as the euro area stand to gain. Lower fuel prices also provide slightly increased scope for consumption, but the effects are modest in comparison with the negative effects on consumption from the spread of COVID-19. What the effect will be in the US is difficult to gauge. US consumers will benefit comparatively more, because fuel taxes are lower and fuel consumption higher. On the other hand, investment in the oil sector there is being hit hard, as the US oil industry is sensitive to price reductions.

Diagram 7 Credit spreads

Per cent, daily values



Note. Last outcome is 27th of March. Refers to interest rate differentials between corporate bonds with credit rating BBB and government bonds with maturities of 5 years. For the euro area, German government bonds are used.

Sources: Macrobond and NIER.

SUBSTANTIAL DISRUPTION OF PRODUCTION AND REDUCED INVESTMENT

One major concern when COVID-19 began to spread in China was that it would impact on global supply chains and lead to operational disruptions. Now, the concern is more that the disruption will be so great that supply chains collapse altogether. There are clear signs that deliveries from China have been delayed as a result of the measures taken to reduce the spread of infection there. The foreign trade statistics for the first two months of the year show a drop in Chinese exports of 17 per cent. As more and more countries in the rest of the world take drastic action to slow the virus, these problems will escalate. The shutdown of production in parts of Europe, such as Italy and Spain, is expected to have considerable effects on supply chains. Together with uncertainty about the future and reduced demand, this is making firms more reluctant to invest. Financing costs have also increased despite the steps taken by the authorities (see Diagram 7). All in all, investment is expected to be subdued for most of 2020 before recovering towards the end of the year and in the course of 2021.

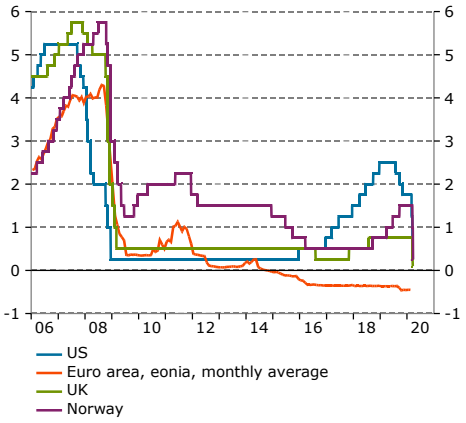
EXPANSIONARY POLICY TO SUPPORT THE SUPPLY OF CREDIT AND STRENGTHEN THE ECONOMY

Central banks worldwide have cut their policy rates and taken steps to boost liquidity in the interbank market to pre-empt any fears that might reduce the supply of credit to firms and households (see Diagram 8). An efficient supply of credit is important so that firms can finance their activities. If firms have problems with their cash flow, they could be forced into bankruptcy

despite being fundamentally profitable. This would make the economic downturn even worse. In many countries, extensive fiscal measures have also been introduced to support firms running into temporary problems with profitability. Ultimately, the aim is to temper the rise in unemployment as far as possible. The pandemic is assumed to subside towards the end of this year, at which point it will be more important to stimulate consumer demand. Some countries are less well placed than others to stimulate the economy through expansionary fiscal policy. This is a particular problem in southern Europe, where many countries' government finances were under pressure even before COVID-19. On the other hand, continued very low interest rates and other measures from central banks mean that borrowing will remain cheap in many countries, although the extensive government borrowing in many countries will put upward pressure on government bond rates. The EU has also relaxed its rules so that member states can budget for large deficits.

Diagram 8 Policy rates

Per cent, daily and monthly values



Note. The policy rate in the US refers to the upper limit of the Federal Reserve's policy rate range.

Sources: Federal Reserve, ECB, Bank of England, Norges Bank, Macrobond and NIER.

Table 1 GDP and consumer prices

Annual percentage change and per cent, respectively

	2018	2019	2020	2021
Sweden's Export Market[1]	3.5	3.1	–4.0	4.1
GDP[2]				
World	3.6	3.4	–0.8	4.4
KIX-weighted	2.6	2.0	–3.7	3.9
Euro Area	1.9	1.2	–5.5	3.8
US	2.9	2.3	–2.9	2.6
China	6.8	6.2	1.1	9.7
Sweden	2.3	1.3	–3.4	3.4
CPI[3]				
KIX-weighted	2.1	2.0	1.4	1.6
Euro Area	1.8	1.2	0.8	1.0
US	2.4	1.8	1.6	2.2
China	2.1	2.9	2.7	2.5
Sweden	2.1	1.7	0.5	1.4

[1] Export market growth refers to total import demand in the 32 countries that are Sweden's most important trading partners, each country weighted according to its share of Swedish goods exports.

[2] The table presents a selection of the countries for which the NIER makes GDP forecasts. The global aggregate is calculated using time-varying purchasing power parity GDP weights from the IMF. KIX-weighted GDP is an aggregate calculated using the Riksbank's KIX weights, which cover Sweden's 32 most important trading partners.

[3] CPIF (CPI with a fixed interest rate) for Sweden, CPIH (CPI including owner-occupiers' housing costs) for the UK, and HICP for the other EU countries and Norway. KIX-weighted CPI is an aggregate calculated using the Riksbank's KIX weights, which cover Sweden's 32 most important trading partners. The aggregate for the euro area has been calculated using consumption weights from Eurostat.

Sources: Eurostat, IMF, OECD, Macrobond and NIER.

International risks overshadowed by COVID-19

Although uncertainty around COVID-19 is completely dominating the global risk picture, there are also pre-existing risks.

Before the pandemic broke out, the trade conflict between the US and China was easing, but the underlying tensions remain and could flare up again. In the longer term, there is still a risk of a trade war between the US and the EU.

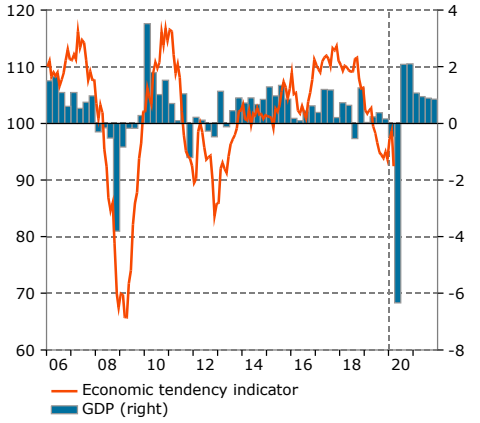
The UK exited the EU on 1 February. Now a transition period is ongoing, with negotiations between the UK and the EU on their future trading relationship. It is unclear what the outcome will be and whether the negotiations can be completed in 2020. The likelihood of the transition period being extended has increased given that the negotiations have been complicated in purely practical terms by the COVID-19 pandemic, but the risk of the parties failing to reach agreement is a downside risk to the base scenario.

There are also geopolitical risks, such as the military conflict in Syria, and the risk of a new wave of refugees heading for the EU cannot be discounted.

Two risks that have been present for some time are the risk of a hard landing in China and the risk associated with weak government finances and low growth in Italy. The latter risk is being exacerbated by the dramatic spread of COVID-19 in that country. There is also limited scope in many other countries to pursue expansionary economic policies to counter the sharp downturn in economic activity. In many countries, interest rates are record-low and debt levels already high by historical standards.

Diagram 9 Economic tendency indicator and GDP

Index mean=100, monthly values and percentage change, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Demand and production in Sweden

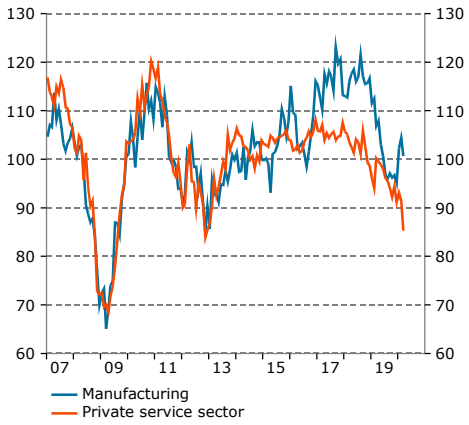
STEEP FALL IN SWEDISH GDP IN THE SECOND QUARTER

Swedish GDP growth slowed last year, and the output gap was set to turn mildly negative even before the spread of COVID-19 took off. GDP increased by a modest 0.2 per cent in the fourth quarter (see Diagram 9). As in the rest of the world, however, both monthly statistics and survey-based economic indicators suggested a slight easing of the downturn at the beginning of 2020, especially in manufacturing (see Diagram 10).

However, this information reflected the situation before COVID-19 began to spread widely around the world. In Europe, the effects of the pandemic will begin to show up in monthly statistics and economic indicators from March or April. In the NIER's Economic Tendency Survey for March, there were no dramatic falls in the main indicators, partly because

Diagram 10 Confidence indicators

Index mean=100, seasonally adjusted monthly values



Source: NIER.

many of the responses came early in the month before the extent of the pandemic began to become clear. The indicator for the service sector did, however, fall markedly to show very weak sentiment. The decline was due to firms being pessimistic about the outlook for demand. Expectations for production, sales and demand also deteriorated substantially in most industries. It is highly likely that the Economic Tendency Survey and other indicators will fall sharply in April.

As elsewhere, demand in Sweden is now in rapid decline as a result of concern about the spread of the virus and the authorities' countermeasures and advice on limiting social contact. Sweden's GDP is assumed to drop by slightly more than 6 per cent in the second quarter. This is a bigger quarterly decline than seen during either the global financial crisis in 2008 or the Swedish financial crisis in the early 1990s. Although growth will be positive again from the third quarter, the level of GDP will still be substantially depressed for a few quarters. Reduced import demand abroad, lower consumption (above all of certain services), fewer tourist visits to Sweden, decreased investment and less business travel will substantially reduce demand. Production will also be held back to some extent by cancelled deliveries of intermediate goods and high rates of absence from work due to more leave to look after children and more sickness absence. In the base scenario, GDP falls by just over 3 per cent in 2020 as a whole.

The pandemic is assumed to subside during the latter part of this year. This leads to a rebound as the economy catches up with the backlog of demand and investment, pushing GDP growth up to 3.5 per cent next year. Household consumption then rises by several percent. Outside Sweden too, there is a rebound after the downturn in 2020. Swedish exports are boosted by the recovery abroad and grow relatively quickly. The Swedish economy nevertheless continues to operate below capacity in 2021.

Table 2 Domestic economy

Percentage change, constant prices and percent, current prices respectively

	Level				
	2018	**2018**	**2019**	**2020**	**2021**
Household Consumption Expenditure	2 159	1.7	1.2	–2.9	4.0
General Government Consumption Expenditure	1 258	0.4	0.4	0.8	1.4
Gross Fixed Capital Formation	1 250	4.2	–1.2	–4.3	3.2
Domestic Demand Excl. Stockbuilding	*4 666*	*2.0*	*0.4*	*–2.3*	*3.1*
Stockbuilding[1]	47	0.4	–0.3	–0.5	0.2
Total Domestic Demand	*4 713*	*2.4*	*0.1*	*–2.8*	*3.3*
Exports	2 213	3.2	4.2	–5.0	5.1
Total Demand	*6 926*	*2.6*	*1.4*	*–3.6*	*3.9*
Imports	2 092	3.6	1.8	–4.5	4.7
Net Exports	*121*	*–0.1*	*1.1*	*–0.4*	*0.4*
GDP	**4 834**	**2.2**	**1.2**	**–3.2**	**3.5**
GDP. calendar adjusted	…	2.3	1.3	–3.4	3.4
GDP per Capita	475	1.0	0.2	–4.0	2.7
Current Account[2]	128	2.6	4.5	4.5	4.9

[1] Change in per cent of GDP the previous year. [2] Per cent of GDP, current prices.

Sources: NIER.

COVID-19 CASTS A SHADOW OVER THE SWEDISH EXPORT INDUSTRY

Import demand in Sweden's main export markets declined in the second half of 2019. Exports held steady in the third quarter, but fell steeply in the fourth.

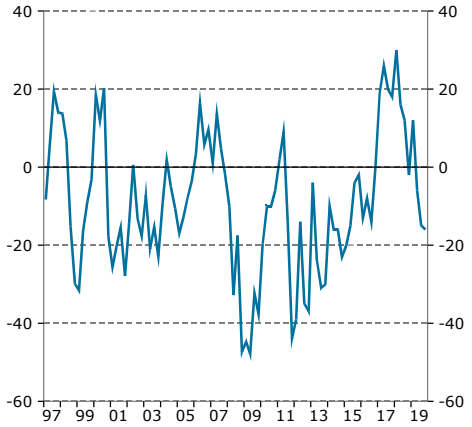
Even before COVID-19 made the outlook more unclear, the situation for Swedish exporters was complex. On the one hand, new orders had fallen and many firms were clearly dissatisfied with the size of their export order books (see Diagram 11). On the other hand, the year kicked off with very strong exports according to the foreign trade statistics, and many indicators made gains at the beginning of the year.

However, the effects of the pandemic on the global economy mean that Swedish exports will fall sharply in the second quarter. Exports of goods are expected to recover somewhat in the third quarter, but levels will still be depressed (see Diagram 12). COVID-19 will affect Swedish exports both through a drop-off in demand and through supply disruptions in global value chains. Import demand outside Sweden is assumed to pick up from the second half of this year, boosting Swedish goods exports.

Growth in exports of services will also fall sharply this year. For example, COVID-19 means that transport services and

Diagram 11 Export order books, assessment in manufacturing industry

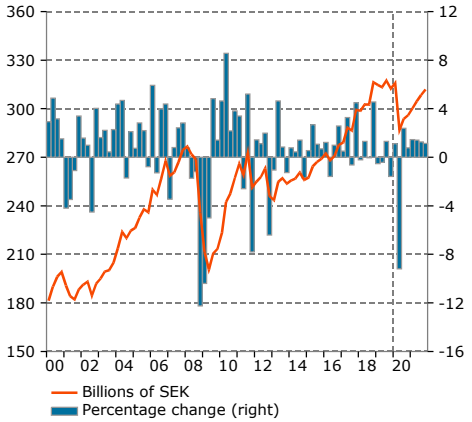
Balances, quarterly values



Source: NIER.

Diagram 12 Exports of processed goods

Billions of SEK, constant prices and per cent, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

foreign tourists' consumption in Sweden (which is classified as a service export) will plummet. Next year, growth in service exports will be relatively strong. Besides a rebound from COVID-19, the rollout of 5G networks in other countries will generate exports of ICT services.

WEAK INVESTMENT GROWTH AS FIRMS ADJUST

Gross fixed capital formation in the Swedish business sector fell in 2019 for the first time in six years (see Diagram 13). It is a normal pattern for investment to decline when the economy slows.

Housing investment was largely unchanged in 2019 (see Diagram 14). Survey data showed that sentiment in the sector had begun to pick up again until COVID-19 struck. The general uncertainty and concern about falling housing prices while the pandemic rages mean that housing investment will fall again slightly from the second quarter this year. Although housing investment will pick up from the second quarter next year, full-year growth will be slightly negative in both 2020 and 2021.

The service sector excluding housing is the sector being hit hardest by the public's concern about catching the virus and changes in behaviour to reduce its spread. This will contribute to a steep fall in investment in the first half of this year. Next year, there will be a relatively large investment backlog, and investment in the sector will grow rapidly.

Even before the pandemic, both domestic and foreign demand had entered a phase of more subdued growth, and capacity utilisation in the Swedish manufacturing sector had decreased. Now, we also have the effects of the pandemic in the form of weak demand, reduced profitability and increased uncertainty. Firms are therefore expected to continue to cut back on investment to adjust their production capacity. Manufacturing investment will therefore fall markedly this year with a slight recovery in 2021. In contrast to the situation in the business sector, government investment will rise rapidly this year and especially next year (see the section "Government finances" below).

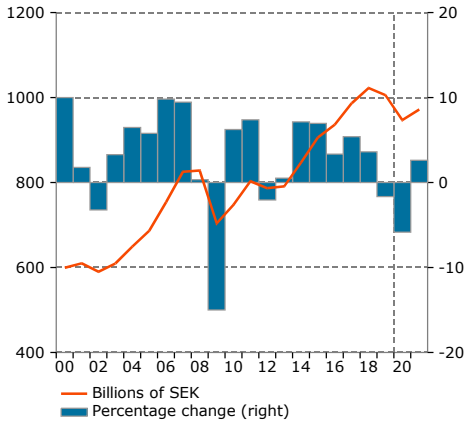
STRONG EFFECTS FROM COVID-19 ON PARTS OF HOUSEHOLD CONSUMPTION

Growth in household consumption accelerated in the fourth quarter of 2019 (see Diagram 15). The increase was driven primarily by a rise in car purchases due to changes in the system for vehicle taxation. We expect weak growth in household consumption in the first quarter this year. The mild winter reduced energy consumption, and spending on cars decreased as a result of purchases being brought forward to the end of last year.

COVID-19 is assumed to have begun to affect household consumption more markedly during the course of March, which means that there will not be that great an impact on the first quarter as a whole. In the second quarter, the effects will be

Diagram 13 Business investment

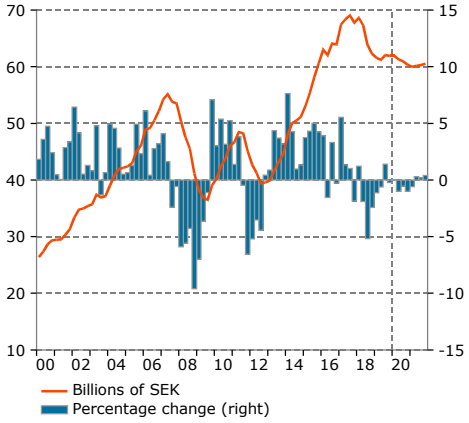
Billions of SEK, constant prices and percentage change



Sources: Statistics Sweden and NIER.

Diagram 15 Gross fixed capital formation, housing

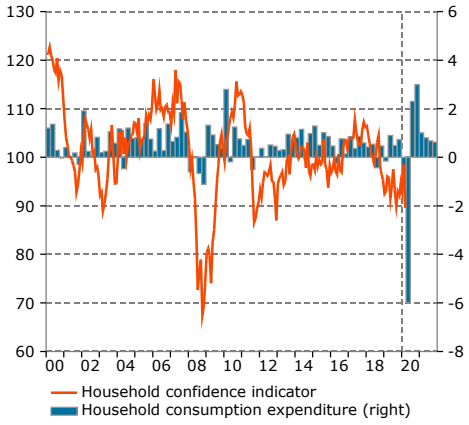
Billions of SEK, constant prices and percentage change, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 14 Household confidence indicator and consumption expenditure

Index mean=100, seasonally adjusted monthly values and percentage change, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

considerable, with household consumption falling a long way (see Diagram 15). Although consumption will begin to rise again from the third quarter, levels will remain depressed for the rest of the year. Consumption of hotel, restaurant, amusement and travel services will be hit particularly hard. Although they make up a small share of household consumption (see Diagrams 16 and 17), the decline in these services will still make a major contribution to the overall decline in consumption (see the box "Far fewer restaurant visits and travel bookings").

Once the pandemic subsides, consumption will rise relatively quickly for a couple of quarters as consumers catch up. The increase in unemployment and decrease in household incomes means that households' real disposable income will fall this year. Their wealth will decrease as well. All in all, household consumption will decrease considerably this year, and the saving rate will remain high (see Diagram 18). Next year, households will benefit from investment income and real disposable income beginning to climb again. Consumption will then rise rapidly.

Far fewer restaurant visits and travel bookings

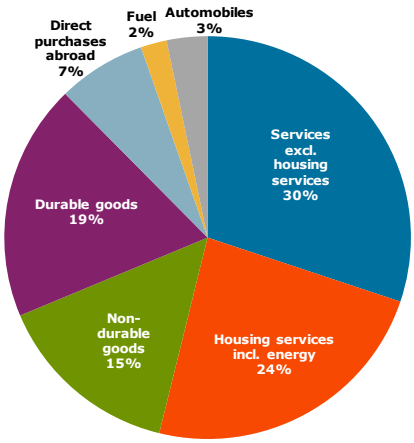
The novel coronavirus has had a huge and sudden impact on everyday life. Both the authorities' recommendations to reduce the spread of infection and the concern that many feel are resulting in greatly changed consumption patterns in the short term.

Sweden limited public gatherings to a maximum of 500 people in March, and many organisers also cancelled smaller events. Towards the end of the month, the limit was lowered to a maximum of 50 people, and only table service is now permitted in restaurants. Many countries have closed their borders, the Ministry of Foreign Affairs is advising against foreign travel, and the Public Health Agency is recommending only essential travel within Sweden. This has led to a dramatic decline in households' travel bookings. Household consumption abroad is therefore plummeting, and few foreign visitors are coming to Sweden. Reduced travel both internationally and domestically has meant that hotel bookings have dropped off sharply. Restaurant visits have also decreased considerably, due partly to fewer people being at work and partly to the advice on reducing social contact. The retail sector is also being adversely affected by people avoiding stores, although this is being offset to some extent by an increase in online shopping.

Households' concern about the future situation can also be expected to affect their consumption patterns. Durable goods such as electronics and cars are cyclically sensitive, which means that, in troubled times, households will choose to cut back on this expenditure ahead of other spending.

Diagram 16 Household consumption 2019

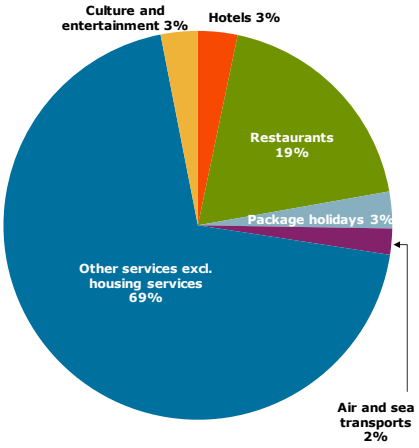
Share in per cent of total consumption



Source: Statistics Sweden.

Diagram 17 Household consumption of services 2019

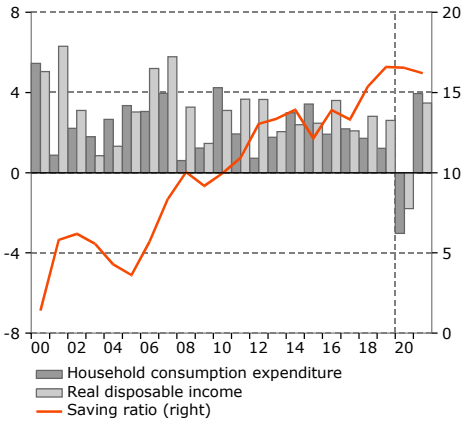
Share in per cent of consumption of services excl. housing services



Source: Statistics Sweden.

Diagram 18 Household consumption, real disposable income and saving ratio

Percentage change and per cent of disposable income plus collective savings



Note. The savings ratio is defined as households' total savings incl. savings in premium and occupational pensions as a share of household disposable income plus savings in premium and occupational pensions.

Sources: Statistics Sweden and NIER.

On the other hand, when households are spending more time at home and making fewer restaurant visits, they will be spending more on items such as food and drink.

SUPPLY DISRUPTIONS AND REDUCED DEMAND TO PULL DOWN PRODUCTION IN THE BUSINESS SECTOR

Business sector production increased by just 0.1 per cent in the fourth quarter last year. Production decreased in manufacturing, but performed better in services and construction. The weak situation in manufacturing mirrored a global pattern, and although there were signs of greater optimism among manufacturers at the beginning of 2020, the outlook was still relatively weak even before COVID-19 began to spread worldwide.

Manufacturing production is expected to remain subdued in the first quarter before falling markedly in the second. Besides decreased demand, not least from outside Sweden, cancelled deliveries of intermediate goods will hamper production, as, to some extent, will more employees leave to look after children and more sickness absence. For example, the automotive industry has suspended production until Easter. As demand abroad grows more quickly next year and the supply restrictions ease, manufacturing production will pick up again (see Diagram 19). Since many service firms supply the manufacturing sector, providing both intermediate services and staffing, the downturn in manufacturing this year will put a further damper on production in the service sector. Wholesalers, technical consulting and staffing agencies will be hit hardest. The same segments will be boosted next year when manufacturing production recovers. The production of ICT services will also contribute to the recovery.

Measures such as social distancing mean that a number of service industries are being hit very hard by plummeting demand. This is particularly the case in the hotel and restaurant, travel and tourism, and retail industries (see the box "Far fewer restaurant visits and travel bookings"). These industries were already under pressure, and one consequence of the spread of COVID-19 is likely to be a marked rise in the number of bankruptcies there.

Diagram 19 Production

Percentage change, constant prices, calendar-adjusted values

Note. Production refers to value added.
Sources: Statistics Sweden and NIER.

Table 3 Production

Percentage change, calendar-adjusted values

	Level				
	2018	**2018**	**2019**	**2020**	**2021**
Business Sector	3 359	2.8	1.7	–4.4	4.3
Goods Producers	1 158	2.1	1.5	–3.5	3.4
Of which: Industry	671	3.1	0.4	–5.6	4.5
Construction	290	3.4	1.5	–1.0	2.3
Service Producers	2 200	3.2	1.9	–4.8	4.8
General Government	874	0.4	0.1	–0.7	1.2
Total Economy[1]					
GDP at Basic Prices	4 289	2.3	1.4	–3.6	3.6
GDP at Market Prices	4 839	2.3	1.3	–3.4	3.4

[1] Including production in non-profit institutions serving households.

Note. Production refers to value added.

Sources: Statistics Sweden and NIER.

Labour market and resource utilisation

The labour market performed relatively poorly in 2019, with unemployment rising. This year, unemployment will surge as the Swedish economy plunges into a particularly deep downturn in the wake of COVID-19. However, the increase in unemployment will be significantly reduced by the new short-time work scheme and other steps being taken by the government. Our base scenario assumes that an average of 100,000 people work short-time under the short-time work scheme for the remainder of 2020, with their working hours cut by an average of around 50 per cent. In 2021, the number of people working short-time will be much lower, partly because the economy will be stronger and partly because government support will be reduced (see the box "Assumptions about short-time work").

Assumptions about short-time work

Amendments to Act 2013:948 on Support for Short-time Work is planned to come into effect on 7 April this year and apply retroactively from 16 March. The first change is permanent and is set out in the bill submitted to the Council on Legislation on 5 March.[3] It means that the short-time work scheme may now be activated even without the prospect or reality of a "particularly deep economic

[3] "A more competitive system for support for short-time work", bill submitted to the Council on Legislation on 5 March. The government is referring to this temporary scheme for short-time working with increased support from central government through to 31 December 2020 as "short-time layoffs" even though the legislation uses only the term "short-time work" regardless of the level of central government support. We have chosen to use the government's terminology in the Swedish version of this report to avoid confusion. Note, however, that the Swedish term has been translated into English as "short-*term* layoffs" in current government documents.

downturn". The second change is temporary and means that central government's share of the cost of short-time work will increase from one third to three quarters, and is referred to by the government as "short-time layoffs".[4] This increase in the government's share of the cost will apply from 16 March to 31 December 2020.

For various reasons, it is difficult to predict how many will apply for and be granted support for short-time work in 2020. The law has never previously been applied, and the current crisis is in many ways unique. The NIER's base scenario assumes that an average of 100,000 people work short-time under the short-time work scheme for the remainder of 2020. This is consistent with far higher numbers working short-time for a shorter period of, say, a month. These people are assumed to work just under 50 per cent of their normal hours, and so their hours worked will decrease by just over 50 per cent. Most short-time work will be in manufacturing and services.

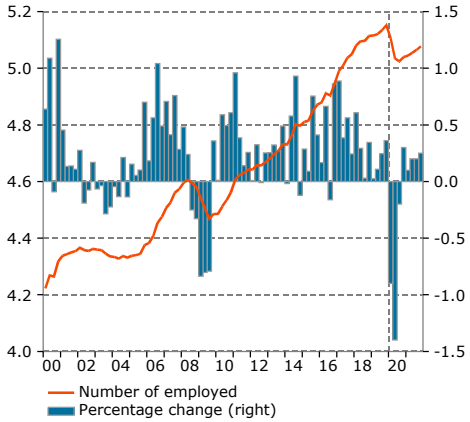
In 2021, the new temporary legislation on short-time work will no longer apply, but there will still be the option of short-time work where the government pays one third of the cost. Firms using the short-time work scheme for a full nine months in 2020 (March-December) will only be able to apply under the original act (2013:948). Under this act, the government may activate short-time work only in a particularly deep economic downturn or if one is imminent. The NIER expects the economy to remain in a particularly deep downturn for parts of 2021. We therefore assume that the government will activate this system for short-time work in 2020 and 2021. Firms using the short-time work scheme for less than nine months in 2020 may be able to apply for support for short-time work in 2021 even if the economy is not in a particularly deep downturn for parts of 2021 under the terms of the bill submitted to the Council on Legislation, for example if a firm runs into temporary and severe difficulties that are outside its control. Since the economic situation will be better in 2021 than in 2020, and the government will be covering a substantially smaller share of the cost, the NIER assumes that the average number of people working short-time in 2021 will be much lower at 13,000.

BIG INCREASE IN REDUNDANCY NOTICES IN MARCH

Employment grew weakly in January and February. Together with the expected decline in March, this means that employment is expected to fall over the first quarter as a whole (see Diagram

Diagram 20 Employment

Millions and percentage change, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

[4] See government bill 2019/20:132.

20).[5] Falling employment and a growing labour force translate into rising unemployment. The jobless rate climbed to 7.2 per cent in January and 7.6 per cent in February.

The number of redundancy notices rose sharply in March, primarily in the hotel and restaurant and transport industries. As at 27 March, 36,800 people had been given their notice, which is much higher than in any month during the financial crisis in 2008-2009 (see Diagram 21).

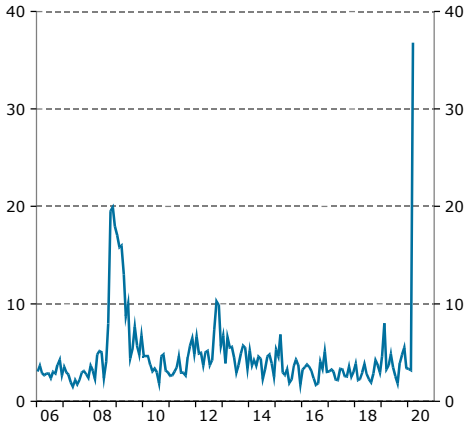
DECREASE IN EMPLOYMENT IN 2020 TEMPERED BY SHORT-TIME WORK

Demand for firms' goods and services will decline across the business sector in the second quarter this year. A number of service industries, such as hotels and restaurants and retailers, will be hit particularly hard, but demand will also drop off sharply in other parts of the business sector. Demand is then expected to recover gradually from the third quarter, albeit from a low level. The relatively brief but dramatic dive in demand means that firms are expected to make extensive use of short-time work scheme. This will soften the decline in employment, but it will still plummet in the second quarter, especially among those on hourly contracts and fixed-term contracts. The combination of lower employment and short-time work will bring a substantial reduction in the number of hours worked in the second quarter (see Diagram 22).

The decline in employment in the second quarter will be driven mainly by hotels and restaurants, airlines and travel agents. Hotels and restaurants employ large numbers of part-time staff with low union membership, and also many temporary staff. The downturn in demand due to the spread of COVID-19 has already led some firms to issue redundancy notices for many employees. Further redundancy notices – and so a large number of actual redundancies – are to be expected. The airline industry, with greater unionisation and larger employers, is expected to make more use of the short-time work scheme, resulting in a smaller decrease in employment. Reduced household consumption will pull down employment across much of the retail sector. Transport firms will also be hit hard. Overall, as many as 2-3 per cent of jobs in the economy are expected to disappear within a couple of months as a result of reduced employment in these industries, especially among part-time workers and those on fixed-term contracts.[6]

Diagram 21 Redundancy notices

Thousands, monthly values

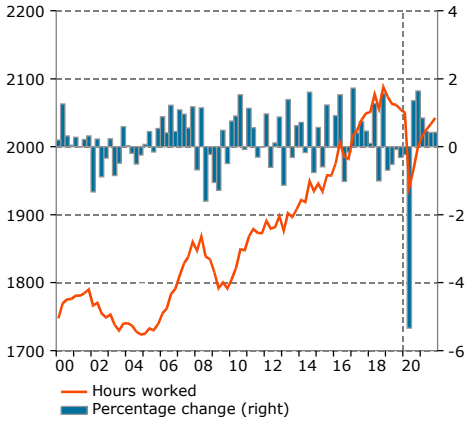


Note. For March, redundancy notices received up to and including March 27.

Sources: The Swedish Public Employment Office and NIER.

Diagram 22 Hours worked

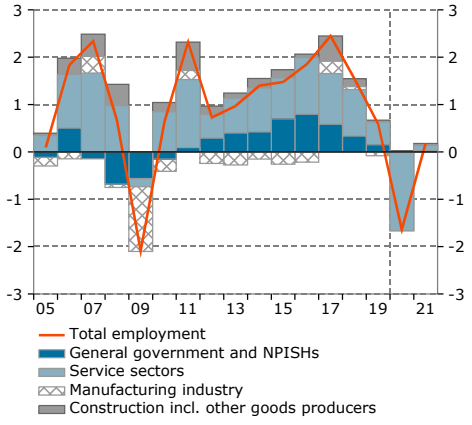
Million hours and percentage change, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 23 Contribution to employment growth

Percentage change and percentage points



Note. NPISH refers to non-profit institutions serving households.

Sources: Statistics Sweden and NIER.

[5] Employment fell by 0.4 per cent in January but rose by 0.2 per cent in February, which means that employment in the first two months of the year was lower than in the fourth quarter of 2019.

[6] Half of workers in the hotel and restaurant industry are employed part-time, and around 70 per cent are not union members, and together they make up 2.5-3.5 per cent of employees in the business sector as a whole, and around 2 per cent of employees in the economy as a whole. In addition, there are part-time employees in the retail trade (0.5 per cent of employees across the economy) and employees in the airline, culture and sport industries.

All in all, we expect employment to fall particularly far in the service sector (see Diagram 23). In manufacturing, firms are expected to turn first to the short-time work scheme, with the result that employment is not greatly affected. This has already happened to a great extent, and Volvo AB, Volvo Cars and Scania have temporarily sent home much of their workforce. The measures are intended by these companies to constitute of a temporary reduction in hours worked as a part of the short-time work scheme. In the business sector as a whole, therefore, employment will fall far less than the number of hours worked. The NIER's base scenario assumes that an average of 100,000 people work short-time under the short-time work scheme for the remainder of 2020, with their hours cut by just over 50 per cent on average. Had this option not been available, and firms had instead made staff redundant to reduce the number of hours worked to the same degree, employment would have fallen by about another 1 per cent on average for the remainder of 2020, assuming that all concerned were in full-time positions. As detailed below, the government has also taken other steps to limit the downturn in employment. It is also assumed that active labour market policies will increase in scope through training initiatives and increased numbers on job creation schemes.

Employment is expected to continue to fall in the third quarter, albeit more slowly, before beginning to recover in the fourth quarter and in 2021. This is because demand in the service industries hit hard in the second and third quarters will then gradually pick up (see Diagram 24). However, employment is still expected to be lower at the end of 2021 than at the end of 2019 (see Diagram 25). This is partly a result of lingering uncertainty among employers, and partly a result of many employers being able to step up production again without needing to recruit. In addition, despite the government's measures, some firms will go bankrupt as a result of reduced revenue in 2020, which will also contribute to a slower recovery.

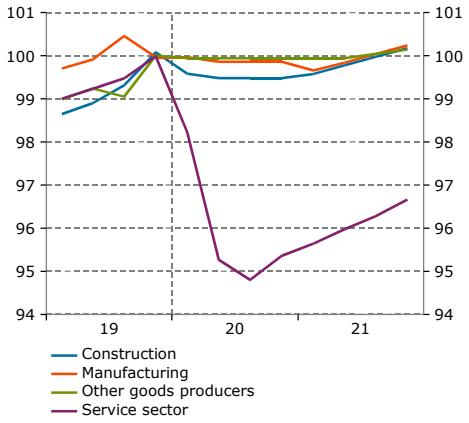
When the recovery does begin, employers will initially have existing employees work more, which means that average working hours will increase in 2021 (see Diagram 26). Employers are also assumed to make use of the general rules on short-time work in 2021 as well, albeit to a much more limited extent – namely an average of 13,000 people over the course of the year (see the box "Assumptions about short-time working").

LABOUR FORCE AND UNEMPLOYMENT TO GROW

Lower employment means that unemployment will rise sharply in the second and third quarters of 2020 to more than 9 per cent (see Diagram 27). Unemployment will nevertheless be reined in somewhat by a lower labour force participation rate in the first and second quarters, especially among older people. Unemployment is then expected to fall but remain comparatively high in 2021.

Diagram 24 Employment at sector level

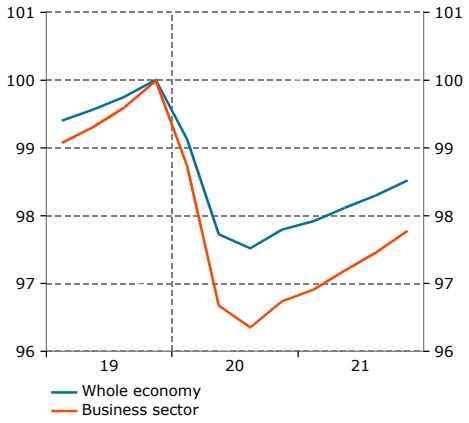
Index, 4th quarter 2019=100, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 25 Employment in the business sector and the whole economy

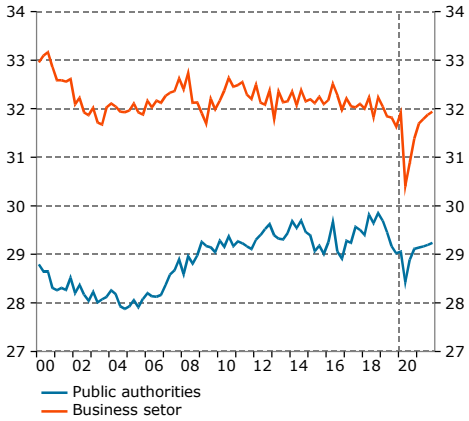
Index, 4th quarter 2019=100, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 26 Average hours worked

Hours per week, seasonally adjusted quarterly values



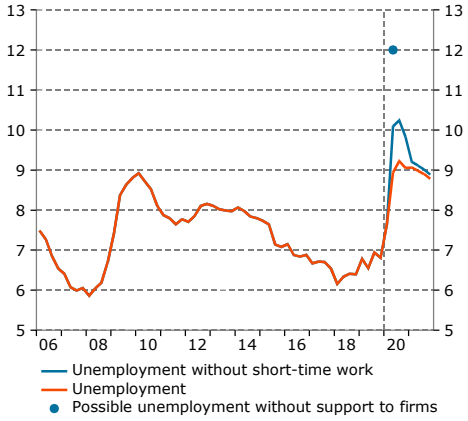
Sources: Statistics Sweden and NIER.

Several of the government's initiatives will temper the rise in unemployment, but to what extent is hard to gauge. Short-time work with increased government support is a measure that will directly slow the rise in unemployment. The NIER's base scenario assumes that an average of 100,000 people work short-time during the final three quarters of the year. Had firms not been able to make use of short-time work and instead had to make staff redundant in order to reduce the number of hours worked to the same degree, this might have increased the number of unemployed by around 1 per cent on average in the second quarter, taking the jobless rate up to 10.4 per cent (see Diagram 27). However, there is reason to believe that, in the absence of the new short-time work scheme, the social partners would have reached agreement on reduced working hours in return for reduced wages as happened during the financial crisis. This figure of 1 per cent should therefore be seen as an upper limit for the average impact of the short-time work scheme on unemployment.

The above level of short-time work is estimated to cost central government around SEK 17 billion. The government has also introduced other measures that will reduce firms' costs. The temporary reduction in social security contributions from March to June will lower firms' costs by around SEK 23 billion,[7] the assumption of responsibility for sick pay corresponds to around SEK 20 billion, and the rent subsidies for hard-hit sectors will cut costs by around SEK 5 billion. The NIER is also assuming that further targeted support for the business sector of SEK 20 billion will be introduced during the course of 2020. Altogether, the measures other than short-time work amount to support for firms of SEK 68 billion.[8] Although these other measures do not have the same direct link to unemployment as the short-time work scheme, unemployment would probably be much higher without them. Together with cash flow support and other support, these measures mean that firms will be better able to retain workers and so avoid having to make staff redundant and then recruit again as demand gradually picks up from the third quarter. Firms will therefore be better positioned to respond quickly to an increase in demand when it comes. A rough estimate is that the measures above will reduce unemployment by around 3

Diagram 27 Unemployment with and without short-time work

Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

[7] The reduction in employer contributions is equivalent to around 10-15 per cent of labour costs for the groups at the greatest risk of becoming unemployed. The reduction lasts until 30 June. In a more normal situation, such a cut could have a significant effect on demand for labour. Small and medium enterprises (SMEs) employ around 0.8-1 million people. Assuming a demand elasticity of -0.3, demand at these firms will increase by around 4 per cent, which would mean that unemployment decreases by around 0.6 percentage points when only SMEs are considered. The effect on employment at SMEs in June will probably be lower, however, partly as a result of the short duration of the reduction. On the other hand, it will probably also mean lower costs for larger firms, which could to some extent boost employment there.

[8] Labour costs per employee in the business sector are around SEK 42,000 per month, which means that the cost per employee for the remaining nine months of the year is around SEK 380,000. The government's support of SEK 68 billion is therefore enough to cover the cost of around 180,000 jobs until the end of the year.

percentage points in the near term. Without these measures, unemployment would therefore be around 12 per cent (see Diagram 27).[9]

Table 4 The labour market

Percentage change and per cent, respectively

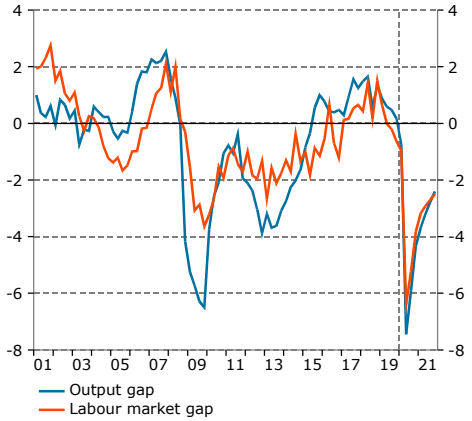
	Level				
	2018	2018	2019	2020	2021
GDP at Basic Prices[1]	4 289	2.3	1.4	–3.6	3.6
Productivity. Total Economy[2]	518	0.5	1.7	0.1	1.5
Productivity. Business Sector[2]	573	1.0	1.9	0.2	1.9
Hours Worked[3]	8 280	1.8	–0.3	–3.6	2.0
Average Hours Worked per Person Employed[4]	31	0.3	–0.9	–2.1	1.8
Number of Employed	5 097	1.5	0.7	–1.6	0.2
Employment Rate[5]	…	68.3	68.3	66.9	66.8
Labour Force	5 442	1.1	1.1	0.5	0.4
Labour Force Participation Rate[6]	…	72.9	73.3	73.3	73.3
Unemployment[7]	344	6.3	6.8	8.7	8.9
Population Aged 15–74	7 461	0.8	0.7	0.5	0.4
Productivity Gap. Business Sector[8]	…	0.4	0.8	–0.3	0.1
Labour Market Gap[9]	…	0.9	–0.1	–4.1	–2.8
GDP Gap[10]	…	1.3	0.5	–4.6	–3.0

[1] Billion of SEK, calendar-adjusted values. [2] SEK per hour, calendar-adjusted values. [3] Million of hours, calendar-adjusted values. [4] Hours per week, calendar-adjusted values. [5] Number of employed in per cent of the population aged 15–74. [6] Number of people in the labour force in per cent of the population aged 15–74. [7] Per cent of labour force. [8] Difference between actual and potential productivity in per cent of potential productivity in the business sector [9] Difference between actual and potential hours worked in per cent of potential hours worked. [10] Difference between actual and potential GDP in per cent of potential GDP.

Sources: Statistics Sweden and NIER.

Diagram 28 Output gap and labour market gap

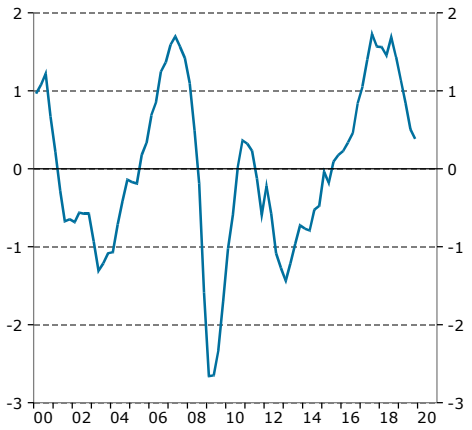
Per cent of potential GDP and potential hours worked, seasonally adjusted quarterly values



Source: NIER.

Diagram 29 Resource utilisation indicator

Normalised seasonally adjusted quarterly values



Source: NIER.

PARTICULARLY DEEP ECONOMIC DOWNTURN IN 2020

According to the NIER's estimates, resource utilisation in the Swedish economy as measured by the output gap began to decline in 2019 (see Diagram 28). This picture is supported by the NIER's indicator for resource utilisation in the business sector, which decreased gradually last year but was still slightly higher than normal in the fourth quarter (see Diagram 29).

Resource utilisation is now assumed to be falling rapidly as a result of the decline in demand due to COVID-19. As yet, there are limited statistics to support this picture of a rapid downturn in resource utilisation, as it did not begin until March. The Economic Tendency Survey's monthly indicators for demand and orders, among others, in the business sector as a whole and its

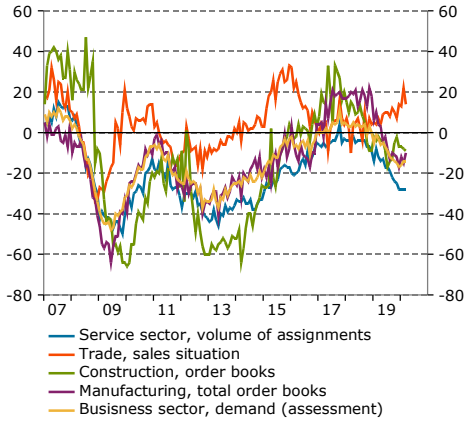
[9] When it comes to the extra resources for local government, it is reasonable to assume that these will serve to prevent tax increases rather than affect employment to any great extent.

component sectors did not drop in March (see Diagram 30). Although the indicator for business volumes in the service sector was low, it was low in February too. On the other hand, expectations for production, sales and demand fell sharply in manufacturing, construction, retail and services. Confidence in the manufacturing and service sectors in the euro area fell overall to a record-low level in March in the flash PMI. The NIER expects Sweden's output gap to deteriorate considerably in the second quarter this year, taking Sweden into a particularly deep economic downturn. In the base scenario, the recovery begins in the second half of 2020, but the economy continues to operate below capacity in 2021 (see Diagram 28). In this scenario, the output gap is approximately as negative as in the financial crisis in 2008-2009. Should the decline in GDP be even greater than in the base scenario, the output gap will be even more negative (see the special analysis in the Swedish version of the report).

The labour-intensive service sector is being hit very hard by the current crisis, unlike during the global financial crisis. The sector generally has relatively low productivity levels (compared to manufacturing), and so average productivity will be higher than in a scenario where a downturn in manufacturing dominates. Productivity is also being propped up by the assumption that an average of 100,000 workers work short-time under the short-time work scheme for the remainder of 2020. This will reduce the degree of labour hoarding by firms. Taken together, this translates into a sharp decline in resource utilisation in the labour market as the number of hours worked plummets in the second quarter this year. This is reflected in the labour market gap being almost as negative as the output gap. The decline in resource utilisation in the labour market is therefore expected to be deeper than in the financial crisis in 2008-2009, and the labour market gap will remain negative in 2021 (see Diagram 28).

Diagram 30 Economic tendency survey indicators

Balances, seasonally adjusted monthly values



Source: NIER.

Wages, prices and monetary policy

COLLECTIVE BARGAINING POSTPONED

This year's round of collective bargaining is a major round covering 2.8 million workers. Had everything gone to plan, the agreement in the manufacturing sector would have been signed at the end of March, with most of the other big pay deals following later in the spring and central government in the autumn. As a result of the spread of COVID-19, however, the negotiations have been postponed until 1 October, and the existing agreements extended. The workers concerned will not therefore have any collectively agreed pay increases for the time being. Wage growth over the next six months will therefore come mainly from individual negotiations between employers and employees. Given the deep economic downturn and the difficult labour market situation from the second quarter of 2020, there is a

Short-time work will push up hourly wages in the national accounts

Under the short-time work scheme, an employee's working hours will be reduced more than his or her pay (see the explanatory box in the section "Labour market and resource utilisation"). This automatically leads to an increase in hourly wages. This statistical effect is very strong: those with their working hours cut by 60 per cent will retain 92.5 per cent of their pay, which corresponds to an increase in hourly wages of more than 130 per cent.

The NIER monitors two measures of hourly wages: those in the monthly short-term earnings statistics and those in the official national accounts. The short-term earnings statistics for the business sector are based on a survey of firms conducted by the National Mediation Office, while the hourly wages in the national accounts are calculated by dividing total wages (from the Tax Agency) by the number of hours worked (based primarily on the Labour Force Survey).

Short-time work are expected to affect how hourly wages move in the national accounts this year. The Mediation Office's intention, however, is that the short-term earnings statistics should not be affected by these temporary statistical effects. As a result, hourly wages in the national accounts will be stronger this year than in the short-term earnings statistics for the business sector. Given that central government will be paying some of firms' wage costs, short-time work will also mean that unit labour costs this year will not paint a fair picture of the cost pressure on the business sector.

tangible risk of wage growth for large parts of the workforce temporarily slowing sharply from April and May (depending on when the different deals run out). The NIER assumes, however, that the negotiations in the fourth quarter will result in agreements that to some extent compensate workers retroactively for the months without collectively agreed pay increases.

SLOWER WAGE GROWTH IN THE BUSINESS SECTOR DUE TO THE WEAK ECONOMY

When the economy peaked in 2018-2019, wages in the business sector were growing at 2.5 per cent annually (see Diagram 31).[10] This year, wage growth will drop back in the second and third quarters as a result of lower demand for labour, reduced mobility in the labour market due to the countermeasures to limit the spread of COVID-19, and the postponement of collective bargaining. However, the gradual economic recovery in the second half of 2020, together with the new pay deals reached in the latter part of the year, will contribute to wages accelerating towards the end of the year. The temporary reduction in employer contributions means that hourly labour costs will rise less quickly than hourly wages this year. Short-time work will also alleviate the cost pressure on the business sector in 2020. This latter factor is not captured in the labour cost statistics, however, which means that the cost pressure this year as measured by unit labour costs is overestimated (see the box "Short-time work will push up hourly wages in the national accounts" in the margin, Diagram 32 and Table 5).

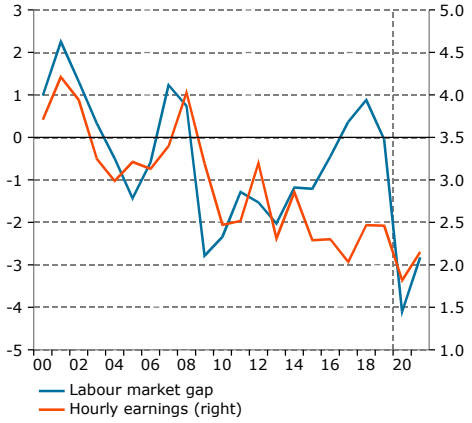
Wage growth in the business sector will accelerate from 1.8 per cent this year to 2.1 per cent next year. Higher unemployment, lower resource utilisation and slightly lower collectively agreed pay increases mean that wage growth will nevertheless remain lower than when the economy peaked in 2018-2019. Despite moderate wage growth and high productivity growth, the cost pressure remains roughly unchanged in 2021 when the government measures to reduce costs are phased out (see Table 5).

HIGHER WAGE GROWTH IN THE GOVERNMENT SECTOR

The spread of COVID-19 will not have the quite the same negative impact on wage formation in the government sector. Some pay deals in the sector expire during the autumn or later and will not therefore be affected by the postponement of collective

Diagram 31 Labour market gap and hourly earnings in business sector

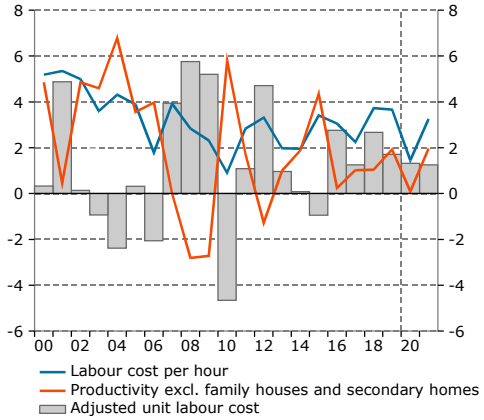
Per cent of potential hours worked and percentage change



Sources: National Mediation Office and NIER.

Diagram 32 Adjusted unit labour cost in the business sector

Percentage change, calendar-adjusted values

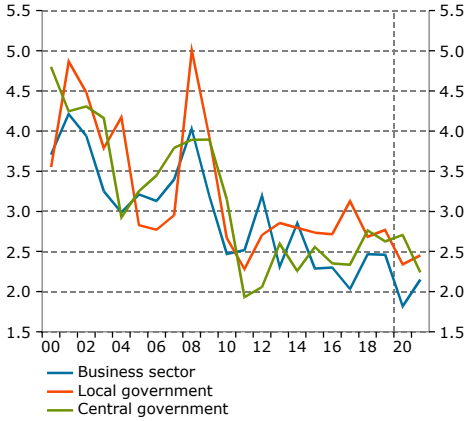


Note. The unit labour cost is adjusted for the number of hours worked by the self-employed and excludes value added of one and two family houses and secondary homes.

Sources: Statistics Sweden and NIER.

Diagram 33 Hourly earnings

Percentage change



Sources: National Mediation Office and NIER.

[10] The figures for wage growth are taken from the National Mediation Office's short-term earnings statistics. These statistics calculate wages on an accrual basis, such that retroactive payments lead to gradual revisions over a 12-month period. The figures reported in this section are the realised data from the earnings statistics plus expected retroactive payments estimated by the Mediation Office on the basis of the historical revision pattern.

bargaining.[11] Strong demand for labour in health and elderly care will contribute to higher wage growth this year than in the business sector, as has also been the case in recent years. Next year, wage growth in the government sector will drop back as a result of the generally lower wage growth in the economy, but will remain higher than in the business sector (see Diagram 33).

Table 5 Wages and labour costs

Percentage change

	2018	2019	2020	2021
Hourly Earnings, Total Economy[1]	2.5	2.6	2.0	2.2
Hourly Earnings. Business Sector[1]	2.5	2.5	1.8	2.1
Hourly Labour Costs. Business Sector[2]	3.7	3.7	1.5	3.3
Productivity. Business Sector[2]	1.0	1.9	0.1	2.0
Unit Labour Cost. Business Sector[3]	2.7	1.7	1.3	1.2

[1] According to the Short-Term Earnings Statistics. [2] According to the National Accounts, calendar-adjusted values. [3] Excluding one- and two-family houses and secondary homes, and adjusted for the number of hours worked by the self-employed.

Sources: Statistics Sweden, Swedish National Mediation Office and NIER.

INFLATIONARY PRESSURES GONE WITH THE WIND

Inflation climbed steadily from 2014 through to 2017-2018. CPIF inflation – the increase in the consumer price index with a fixed interest rate – peaked at 2.5 per cent in September 2018, largely as a result of soaring energy prices. CPIF inflation has fallen since and stood at 1.0 per cent in February 2020 (see Diagram 34). Power prices have fallen sharply due to a mild, windy start to 2020, and reductions in network charges have also played a role (see Diagrams 35 and 36). Lower energy prices will pull inflation down by more than half a point in 2020 (see Table 6 and Diagram 37).

CONFLICTING EFFECTS OF COVID-19 ON INFLATION

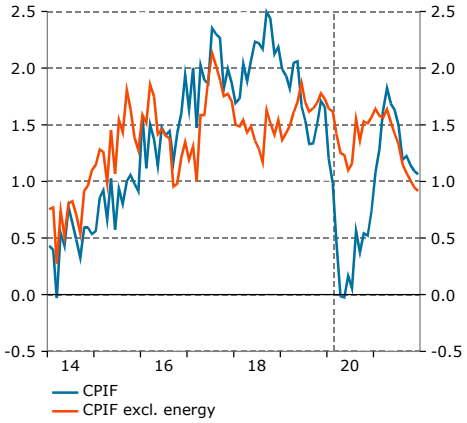
The spread of COVID-19 spells reductions in both demand and the supply of goods and services. The composition of demand for different goods and services is also changing. For example, demand for travel has fallen, while demand for hygiene products has increased. The impact of the COVID-19 pandemic on prices will therefore vary between goods and over time.

The most immediate effect of the COVID-19 pandemic has been on crude oil prices and, by extension, fuel prices. The decline in crude prices was exacerbated by a price war erupting in

[11] In the central government sector, the most recent wage review was in autumn 2019, and the agreement runs until the end of September this year. This means that wages for 2020 are largely already set. In the local government sector, most agreements expire at the end of March or in April this year, but several run until later – for example, the OFR agreements for education and health care do not expire until 2021 and 2022 respectively.

Diagram 34 Consumer prices

Annual percentage change, monthly values



Sources: Statistics Sweden and NIER.

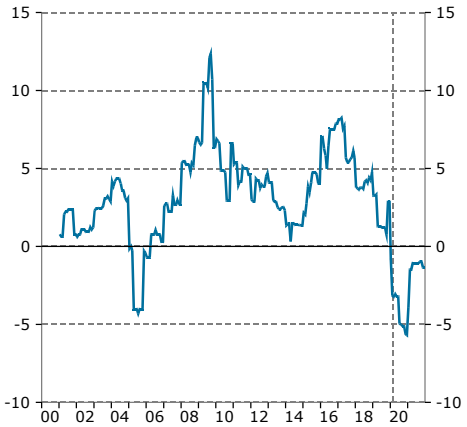
Diagram 35 Spot price on electricity, Sweden

Öre per kilowatt hour (KWh), monthly values

Sources: Nord Pool Spot and NIER.

Diagram 36 Electricity network prices

Annual percentage change, monthly values



Note. Domestic market price index for product D3513 according to SPIN 2015. This refers to the price for all customer categories, excluding tax.

Sources: Statistics Sweden and NIER.

the oil market after the OPEC negotiations on quota reductions collapsed in March 2020.[12]

The global spread of COVID-19 meant that demand for air travel collapsed at the beginning of March. Since then, political decisions such as closed borders and the Ministry of Foreign Affairs' advice against travelling abroad have also led to a drastic reduction in the supply of flights, easing the pressure on prices. Prices for domestic services such as taxi journeys and hotel visits are expected to fall as a result of decreased demand. Prices for services will be subdued in the longer term too in response to low wage growth and a weak labour market (see Diagram 38).

Table 6 Consumer prices, interest rates and exchange rates

Percent, percentage change and index, respectively. Annual average unless otherwise indicated

	Weight				
	2020	2018	2019	2020	2021
CPI	100.0	2.0	1.8	0.5	1.3
Interest Costs. Interest Rate[1]	...	–4.9	1.8	1.1	–0.5
CPIF	100.0	2.1	1.7	0.5	1.4
Goods	43.7	0.6	1.0	0.9	1.4
Services	29.8	1.9	2.1	1.8	1.0
Housing ex Mortgage Interest Costs and Energy[2]	16.3	1.8	1.9	1.5	1.1
Energy	7.0	10.5	3.1	–11.3	2.1
Interest Costs. Capital Stock[1]	3.1	7.1	5.8	5.3	4.6
CPIF ex Energy	93.0	1.4	1.6	1.4	1.3
HICP	...	2.0	1.7	0.7	1.3
Repo Rate[3]	...	–0.5	–0.3	0.0	0.0
Ten-Year Government Yield	...	0.7	0.1	0.0	0.3
Effective Krona Exchange Rate Index (KIX)[4]	...	117.6	122.1	123.3	122.4

[1] The CPI's mortgage interest cost component is the product of the capital stock and interest rate components. Energy denotes costs for electricity, gas, heating and fuel. [2] Rent, repair costs, depreciation (renovation costs), ground rent and property tax, insurance, water, sewage, cleaning and chimney sweeping. [3] At year-end. [4] Effective exchange rate index based on the Riksbank's KIX weights for 32 countries with a base of 100 at 18 November 1992. A higher index corresponds to a weaker krona.

Source: Statistics Sweden and NIER.

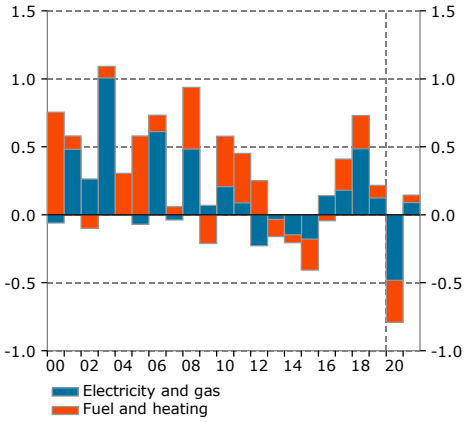
SUPPLY DISRUPTIONS TO PUSH UP PRICES OF GOODS

The measures to reduce contagion are affecting firms' production to varying degrees. In China, many firms were closed for several weeks after Chinese New Year, but production has since started up again, albeit slowly. These production constraints have reduced the supply of goods, counteracting the downward

[12] The assumption underlying the NIER's forecast for crude prices is that a new OPEC agreement on quota reductions is reached towards the end of this year. If no agreement is reached, inflation in both Sweden and the rest of the world could be lower than anticipated in the NIER's base scenario.

Diagram 37 Energy prices, contribution to CPI inflation

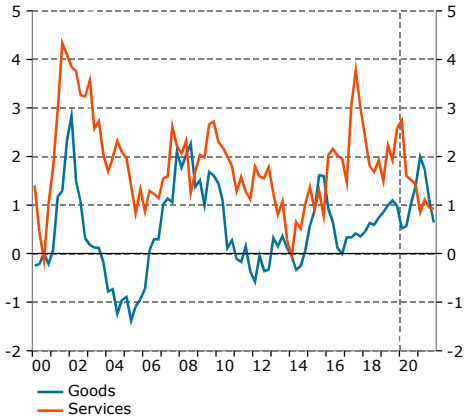
Percentage points



Sources: Statistics Sweden and NIER.

Diagram 38 Goods and service prices in the CPI

Annual percentage change, quarterly values

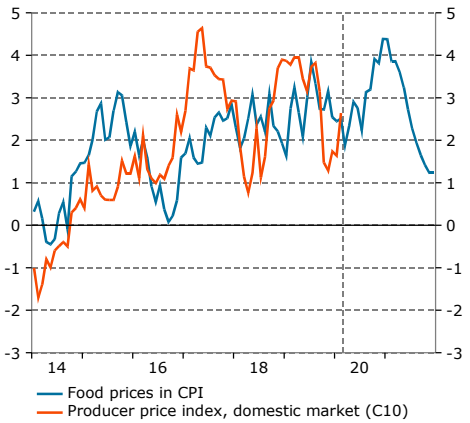


Note. Goods excl. energy products and services excl. services directly linked to housing.

Sources: Statistics Sweden and NIER.

Diagram 39 Food prices

Annual percentage change, monthly values



Sources: Statistics Sweden and NIER.

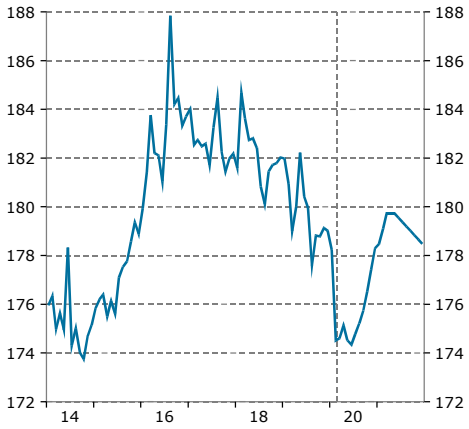
pressure on prices from reduced demand. Factories are also shutting down in Europe, which will decrease the availability of goods such as cars later this year.

It is not only factory closures that are affecting supply. Travel restrictions and closed borders mean that foreign seasonal workers and other labour will not always be available to work in areas such as farming across large parts of Europe. This may impact on the supply of – and so prices for – vegetables, fruits and berries, for example. Together with the recent decline in the krona, this may lead to a faster increase in food prices in Sweden (see Diagram 39).[13]

The development and launch of new products such as home electronics may also be delayed by the pandemic, which could lead to a faster rise in prices for goods.

Diagram 40 Price index for clothes and shoes

Index 1980=100, seasonally adjusted monthly values



Sources: Statistics Sweden and NIER.

PRICE PRESSURE ON WINTER GOODS AFTER A MILD WINTER

The mild winter in Scandinavia in 2019/2020 has reduced demand for everything from winter tyres to clothing and equipment for winter sports. Many of the firms concerned have reported downward pressure on prices and cut-price sales during the spring. This trend is visible in prices for clothing and footwear as well as for sports equipment and leisure goods. Prices for these items have, however, been falling for a long time (see Diagrams 40 and 41). Once stock levels come down, there may be a rebound in prices to more normal levels. This could lead to a higher rate of inflation for goods year-on-year during the corresponding months next year (see Diagram 38).

Diagram 41 Price index for sports and leisure goods

Index 1980=100, monthly values

Source: Statistics Sweden.

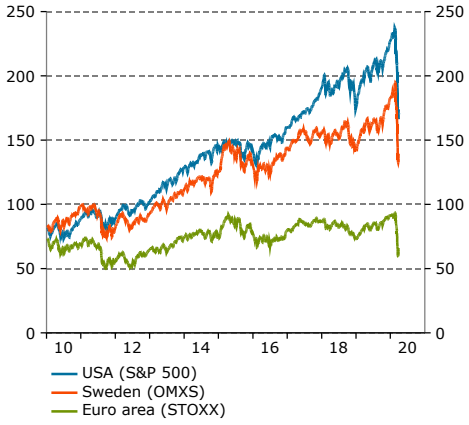
RIKSBANK TO MAKE SUPPORT PURCHASES OF SECURITIES AND RETAIN LOW-RATE POLICY

As in the rest of the world, the stock market in Sweden has fallen sharply in recent weeks in reaction to the marked decline in the economic outlook (see Diagram 42). The growing uncertainty has also contributed to a fall in the krona (see Diagram 43).

Like many other central banks, the Riksbank has taken various steps to allay fears in financial markets and boost the supply of credit. The bank has announced that it will expand its purchases of securities by up to SEK 300 billion in 2020, if necessary also buying securities other than government bonds. It is offering loans of up to SEK 500 billion at a variable rate corresponding to the repo rate to banks whose lending to non-financial enterprises develops satisfactorily in an assessment to be made by the Riksbank. Additionally, banks are being offered an unlimited volume of loans against collateral at an interest rate

Diagram 42 Stock markets

Index 2006-12-29=100, daily values, 5-day moving average



Sources: Standard & Poor's, Nasdaq OMX, STOXX and Macrobond.

[13] Prices for fruit and vegetables could also be affected indirectly by the tax on plastic carrier bags. If stores choose to replace thin plastic bags with more expensive alternatives, it is possible that they will raise prices for fruit and vegetables rather than charge for the bags.

corresponding to 0.2 percentage points above the repo rate.[14] The Riksbank has entered into currency swap agreements with other central banks so that it can offer Swedish banks loans in USD. The collateral requirements for borrowing from the Riksbank have also been relaxed.[15]

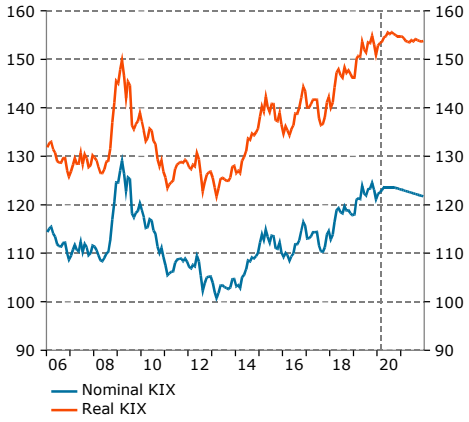
On top of these measures, the Riksbank has cut its rate for lending to banks overnight from 0.75 to 0.20 percentage points above the repo rate. The repo rate itself, however, has been unchanged since it was raised to 0.0 per cent in December 2019. The Riksbank's communication regarding the adverse effects of a negative repo rate mean that the repo rate is assumed to remain unchanged this year and next in the base scenario despite the deep economic downturn and low inflation. This is in keeping with both the Riksbank's most recent projections and market expectations (see Diagram 43). The NIER does, however, believe that there are grounds to cut the repo rate in the short term given the expected low inflation and the particularly deep economic downturn that is looming. The krona will recover slowly as the pandemic subsides and as financial markets and the Swedish economy recover (see Diagram 44).

Government finances

Government finances will deteriorate significantly as a result of the effects of COVID-19 on the Swedish economy. This is a consequence of both the abrupt downturn in the economy and the government's expansionary measures to support the economy. In the NIER's base scenario, net lending falls by a total of SEK 192 billion from 2019 to 2020 and amounts to -3.5 per cent of GDP this year. Structural net lending – net lending adjusted for cyclical effects – falls from 0.3 per cent to -1.3 per cent of potential GDP. This gives fiscal policy a clear expansionary bias, which is justified given the sudden economic downturn.

Diagram 44 Effective exchange rate of the Swedish krona (KIX)

Index 1992-11-18=100, monthly values

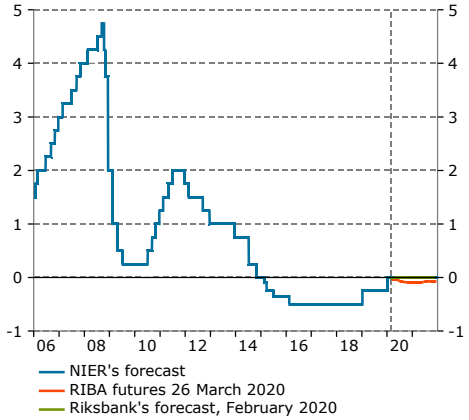


Note. KIX is a trade-weighted index based on currencies from all OECD countries as well as China, India, Brazil and Russia. A higher index corresponds to a weaker krona.

Sources: The Riksbank, Macrobond and NIER.

Diagram 43 Repo rate

Per cent, daily- and quarterly values



Note. RIBA are forward contracts based on future repo rates. The Riksbank's forecast relates to quarterly values.

Sources: Nasdaq OMX, the Riksbank, Macrobond and NIER.

[14] It should be noted that the Riksbank's lending to banks will not have any direct effect on banks' lending to households and firms. Banks create their own electronic money when they grant loans, and do not need to borrow central bank money from the Riksbank in order to increase their lending. In the current situation, it is demand for loans from households and firms that is the main constraint on bank lending. The banks are probably also more cautious about lending when uncertainty is high, because this affects expected credit risk. In a situation of considerable financial turmoil, as seen during the financial crisis of 2008, the Riksbank's offer of loans to banks will have a more tangible impact on bank lending. Financial turmoil can cause the interbank market to stop functioning, in which case the Riksbank's lending is needed for banks' funding. In the current situation, however, the supply of central bank money is considerable due to the Riksbank's asset purchases, and the interbank market is functioning. It is therefore likely that the Riksbank's offer of loans at the repo rate will not have any appreciable impact on bank lending in the current situation. The government's proposed so called emergency program for firms (företagsakuten), in which it guarantees 70 per cent of new loans from banks to firms facing difficulties, could help increase lending to firms to some extent.

[15] For a summary of recent fiscal and monetary policy measures in Sweden, see the box "Fiscal and monetary action so far to mitigate the effects of COVID-19 on the Swedish economy".

BASE SCENARIO FOR FISCAL POLICY IN 2020

The NIER's base scenario for government finances in 2020 is based on the fiscal policy decided in connection with the budget bill for 2020[16] and the additional amending budget for 2020 approved by the Riksdag on 19 February. It also takes account of measures announced by the government ahead of the spring amending budget, and additional support for firms, local government and households due to COVID-19. The NIER further assumes that additional measures will be introduced during the course of the year.

MEASURES RELATED TO COVID-19

The government has announced various support measures for firms and households that have been approved by the Riksdag during the course of March (see the box "New fiscal measures for 2020" in the margin).[17] The NIER assumes that some of these proposals will be needed for longer than the government has so far indicated. The base scenario assumes that the central government assumes responsibility for sick pay throughout the second and third quarters of 2020. Firms will also have the option of using the short-time work scheme[18] where the government covers three quarters of the labour costs. The base scenario assumes that an average of 100,000 workers work short-time under the short-time work scheme for the remainder of the year. These and other measures mean that central government expenditure on transfers to firms will rise. The local government sector too will receive support from the central government for sick pay costs. It will also receive increased central government grants to compensate for the rise in costs due to COVID-19. The base scenario further assumes that parents stay home with their children and receive temporary parental benefit to an extent corresponding to one month's closure of nursery and compulsory education during the second quarter, over and above the normal number of days taken off work to care for sick children.[19] Measures to shore up household incomes are also anticipated. This might, for example, take the form of an expansion of unemployment benefits to cover more of those who are without work.

New fiscal measures for 2020

Measures announced ahead of the spring amending budget for 2020

On 20 January, the government presented various proposals ahead of the spring amending budget for 2020. These entail an additional SEK 5 billion in central government grants to the local government sector this year. They also included proposals for spending SEK 750 million on the law courts, the migration courts, the National Board of Institutional Care and various other bodies to increase security for the individual and for society. At the press conference, the Ministry of Finance made it clear that the SEK 5 billion in grants to local government would continue in 2021.

Additional amending budget for 2020

On 19 February, the Riksdag approved an additional amending budget for 2020. This included a further SEK 2.5 billion in general central government grants to the local government sector. These are to be financed by postponing the reduction in employer contributions for those with a weak attachment to the labour market, the central government grant for teaching assistants, and professional development leave.

Government measures in response to COVID-19

- Support for various authorities
- Central government grants to local government
- The short-time work scheme
- Sickness benefit instead of a qualifying-day deduction from sick pay for the first day of sickness absence for half of March and in April and May
- Central government assumes responsibility for sick pay in April and May
- Support for culture and sport
- Temporary reduction in social security contributions from March to June
- Rent subsidies
- Measures to boost firms' cash position and loan quarantees.

Additional measures assumed in the NIER's base scenario for 2020

- Further compensation for local government in the form of central government grants
- Government continues to be responsible for sick pay from June to September
- Sickness benefit instead of the qualifying-day deduction from sick pay for the first day of sickness absence continues from June to September
- Measures to support household incomes, such as expansion of unemployment benefits
- Further support for firms

[16] See the special analysis "Budgetpropositionen för 2020" [The budget bill for 2020] in the Swedish version of *The Swedish Economy*, October 2019.

[17] The NIER has taken account of the government's proposals up to and including Friday 27 March.

[18] "Short-time work" refers to what is Act 2013:948 on Support for Short-time Working (see the box "Assumptions about short-time work" in the section "Labour market and resource utilisation").

[19] This could happen if the government decides to close nursery and compulsory education for a month during the second quarter. It could also happen if children in nursery and compulsory education are kept home due to illness and/or individual schools are closed to an extent corresponding to one month during the second quarter.

Table 7 Fiscal measures for 2020

SEK billion

	BP2020	M+C AAB	SAB	Gov AAB+ announced	NIER extras	Total
Expenditure (a)	**16.5**	**1.7**	**5.8**	**41.7**	**68.6**	**134.2**
Central government consumption	5.0	–0.1	0.8	0.1		5.7
Central government grants to local government	7.4	2.0	5.0	1.5	10.0	25.9
Transfers to firms	–1.1	0.0	…	36.5	26.9	62.3
Transfers to local government	0.0	0.0	…	1.7	3.3	5.0
Transfers to households	–0.1	–0.2	…	1.8	28.4	29.9
Transfers to abroad	1.3	…	…	…	…	1.3
Government investment	4.0	…	…	…	…	4.0
Revenue (b)	**–14.4**	**1.7**	**0.0**	**–33.0**	**0.0**	**–45.7**
Household direct taxes	–12.2	…	…	…	…	–12.2
Production taxes	–2.6	1.7	…	–33.0		–33.9
Product taxes	0.5	…	…	…	…	0.5
Impact on central government net lending (b-a)	**–30.9**	**0.0**	**–5.8**	**–74.7**	**–68.6**	**–179.9**

Note. "M+CD AAB" refers to the additional amending budget put forward by the Moderates and Christian Democrats and approved by the Riksdag on 19 February.

"SAB" refers to the measures announced by the government on 20 January ahead of the spring amending budget accompanying the Spring Fiscal Policy Bill.

"Gov AAB + announced" refers to the additional amending budget (bill 2019/20:132) presented by the government on 19 March and measures announced but not yet included in a bill; some of these measures may be included in the spring amending budget.

"NIER extras" refers to the additional fiscal measures assumed by the NIER in the base scenario beyond those decided or announced by the government in response to COVID-19.

Source: NIER.

Table 7 presents the fiscal policy assumed in the base scenario for 2020. The measures to counter the effects of COVID-19 on the Swedish economy correspond to almost 3 per cent of GDP, or just over SEK 140 billion (the sum of columns 5 and 6). Total fiscal measures for 2020 come to SEK 180 billion, or almost 4 per cent of GDP.

A number of steps have been taken to improve firms' cash position. They are being allowed to defer payments of value-added tax, employer social security contributions and preliminary tax for employees. A similar system was introduced in response to the financial crisis in 2009. This will impact on the central government budget balance and push central government debt up by around SEK 30 billion, but net lending will be

unaffected.[20] In addition, the central government will guarantee over more than SEK 200 billion in loans.

GOVERNMENT EXPENDITURE TO RISE SHARPLY IN 2020

The measures to reduce the spread of COVID-19 and support the economy will result in substantial expenditure. The extraordinary situation means that primary expenditure – total expenditure less interest costs – will rise strongly in 2020, while GDP will fall, with the result that the expenditure-to-GDP ratio will rise markedly (see Diagram 45).

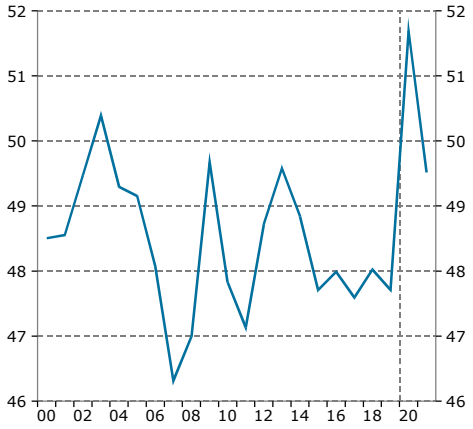
Transfers to households have been falling as a share of GDP for a long time but are now rising again as in previous economic downturns (see Diagram 46). This is due to a number of factors. The government has decided on temporary measures to limit households' loss of income due to illness. Instead of a qualifying-day deduction from sick pay for the first day of sickness absence, individuals will receive sickness benefit for that day. As many people will fall ill with COVID-19, and the Public Health Agency recommends that those respiratory symptoms stay at home, sickness absence will be higher than normal in 2020. The base scenario assumes that 20 per cent of workers fall ill with COVID-19 or have symptoms similar to COVID-19 in 2020. These people are assumed to stay home from work for two weeks, with their sick pay covered by central government. Payments of temporary parental benefit will also increase as parents stay home to look after children who cannot attend school or preschool. The weak economy also means that unemployment will be high, and so spending on unemployment insurance and job creation programmes will rise. In addition, it is assumed that the government supports household incomes with transfer payments – for example, in the form of a temporary expansion of unemployment benefits.

Investment in the government sector is at high levels and will remain so in 2020 and 2021. It is assumed that some investment projects will be delayed slightly as the sector has its hands full coping with the consequences of large numbers of people falling ill with COVID-19. Investment will nevertheless increase as a share of GDP in 2020 and 2021 (see Diagram 47) as a result of GDP falling sharply this year and making up only some of the lost ground next year. Investment in roads, schools and accommodation for the elderly will stay at comparatively high levels. The big increase in defence investment now under way will also begin to show up more clearly in the government statistics in 2021.

More than 1 percentage point of the rise in government expenditure as a share of GDP in 2020 is the result of increased transfers to firms. This increase is due partly to the proposed short-time work scheme, and partly to the NIER's assumption

Diagram 45 Primary expenditure in general government

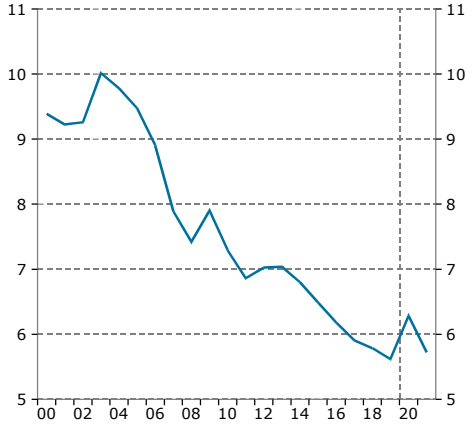
Per cent of GDP



Sources: Statistics Sweden and NIER.

Diagram 46 Social transfers to households

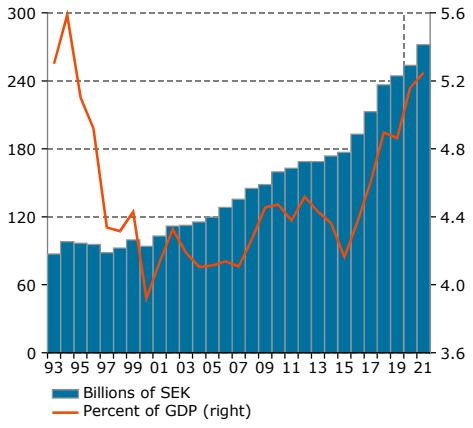
Per cent of GDP



Sources: Statistics Sweden and NIER.

Diagram 47 Gross fixed capital formation in general government

Billions of SEK and per cent of GDP



Sources: Statistics Sweden and NIER.

[20] This is because the budget balance is cash-based, whereas net lending is accrual-based.

that additional transfer payments to firms, such as increased support for short-time work and other subsidies for firms' wage costs, will be introduced to limit the rise in unemployment.

GOVERNMENT PRODUCTION AND CONSUMPTION TO WITHSTAND COVID-19

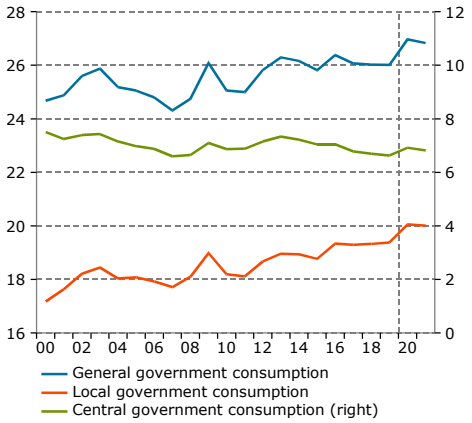
The government sector too will be affected by higher sickness absence and leave to care for children, which means that hours worked will decrease this year. However, the pressure on the health and elderly care sectors will be high in many areas due to COVID-19, and workers in parts of the government sector will need to work overtime and longer shifts. This will partially offset the decrease in hours worked in the sector as a whole. Production in health care will be affected only marginally, however, as it is measured in terms of care events, etc. These will increase rather than decrease. The closure of universities and upper secondary education will not affect production, because students are still enrolled and teaching is continuing remotely, so teachers and lecturers are still working. If compulsory education is also closed, production will again be unaffected, as pupils will still be enrolled in school and classes will continue remotely. This production corresponds to almost 70 per cent of consumption and will be affected by COVID-19 to a lesser extent than the number of hours worked in the government sector for the reasons discussed above.[21] Productivity in the government sector will therefore increase.

The second largest share of consumption is intermediate consumption, which accounts for almost 30 per cent of the total and consists primarily of rent costs. Rents still need to be paid even if, for example, teaching continues remotely or a large part of the workforce in the government sector falls ill. These costs will not therefore be affected by COVID-19.

Since production of individual services (primarily education, health care and elderly care) will continue despite sickness absence, and rents still need to be paid, government consumption in constant prices will grow despite the number of hours worked decreasing this year.

Government consumption will also increase in current prices, while GDP will fall, with the result that government consumption as a share of GDP will rise relatively strongly this year. The same effect was seen during the financial crisis that began in 2009 when GDP growth was weak but government

Diagram 48 Government consumption
Per cent of GDP

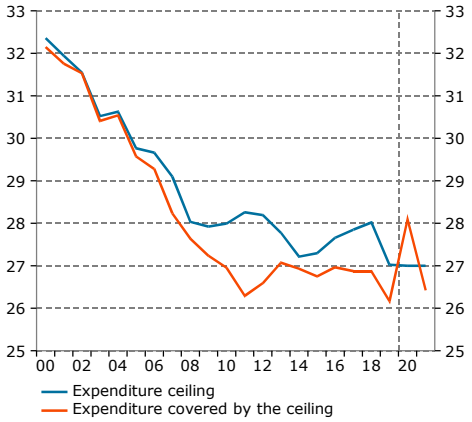


Sources: Statistics Sweden and NIER.

[21] Government consumption consists of production, intermediate consumption, social benefits in kind, minus production for own financial use and sales. Production accounts for almost 70 per cent of consumption. It can be divided into individual and collective services. Collective services include defence and justice. Individual services are linked to the individual and include education, health care and elderly care. In constant prices, production of individual services is measured according to the number of pupils enrolled in schools, number of children in nursery education, number of days of hospital care, number of visits to surgeries, etc. In current prices, production is determined by the cost of the personnel providing the services.

consumption followed demand for health care, education and elderly care (see Diagram 48).

Diagram 49 Expenditure ceiling and restricted expenditure
Per cent of potential GDP



Sources: the Swedish National Financial Management Authority, the Riksdag and NIER.

THE MARGIN TO THE CENTRAL GOVERNMENT EXPENDITURE CEILING WILL BE USED TO STIMULATE THE ECONOMY

In the budget for 2020, the Riksdag decided on a ceiling for central government expenditure through to 2022. The ceiling will move roughly in line with potential GDP during this time. Expenditure subject to the ceiling will surge in 2020 as a result of the support for firms, local government and households related to the economic effects of the COVID-19 pandemic (see Diagram 49).

According to the guidelines, there is to be a margin between the expenditure ceiling and the expenditure subject to the ceiling this year of 1 per cent of this expenditure. The margin is there for use in extraordinary circumstances. The spread of COVID-19 and its impact on the Swedish economy is just such an extraordinary circumstance.

The NIER's base scenario for government finances in 2020 assumes that central government expenditure increases by almost 3 per cent of GDP as a result of COVID-19 (see Table 7). These measures include those approved by the Riksdag and the additional measures announced by the government, plus extensions to these measures and additional fiscal measures to support households, firms and local government assumed by the NIER. Excluding this spending, the margin to the expenditure ceiling would be more than 7 per cent. Taking account of measures approved by the Riksdag and measures announced by the government in connection with COVID-19, the margin is just under 1 per cent, or SEK 12 billion. If we also take account of the further increases in spending assumed by the NIER, expenditure will exceed the ceiling.[22] If the increases in expenditure assumed by the NIER materialise as a result of the particularly deep economic downturn, it is therefore likely that the expenditure ceiling will be breached in the absence of any countermeasures. If there is a risk of the approved expenditure ceiling being exceeded, the Budget Act requires the government to take such action as is within its powers, or propose that the Riksdag takes the necessary action. One such measure would be for the government to propose to the Riksdag in the amending budget that the ceiling for 2020 is raised, which would be justified in view of the extraordinary economic situation.

The margin to the expenditure ceiling in 2021 is just over 2 per cent in the NIER's base scenario for government finances. This is more than the 1.5 per cent required by the guidelines for that year.

[22] The Riksdag's decision on the expenditure ceiling is a guideline decision. The ceiling may therefore be breached without breaking any laws.

TRANSFERS RELATED TO COVID-19 TO REDUCE LOSS OF INCOME FOR HOUSEHOLDS

Primary revenue as a share of GDP will be largely unchanged from 2019 to 2020 despite the sharp downturn in the economy. Primary revenue consists mainly of taxes and duties, which often move in line with GDP. Employer social security contributions are to be cut for four months this year. This will reduce tax revenue by SEK 33 billion, equivalent to 0.7 per cent of GDP. In isolation, this would mean a fall in the tax-to-GDP ratio from 2019 to 2020.

Total wages are the largest tax base. Given the sharp downturn in the economy, growth in total wages will be weak in 2020. Some of the measures in the NIER's base scenario to shore up households' disposable income can be assumed to take the form of taxable transfer payments. This means that households' taxable income as a share of GDP will rise from 2019 to 2020 and largely cancel out the drop in the tax-to-GDP ratio resulting from the reduction in employer contributions. Overall, therefore, the tax-to-GDP ratio will decrease only marginally this year (see Diagram 50).

STEEP DECLINE IN NET LENDING IN 2020

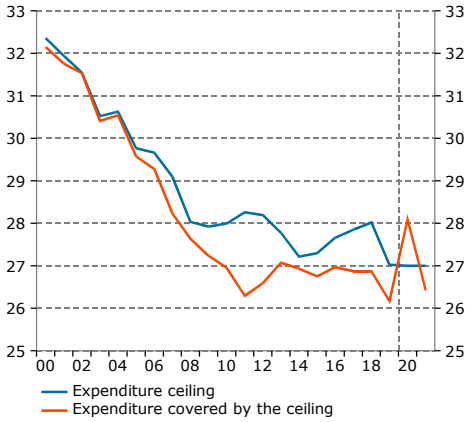
General government net lending was 0.4 per cent of GDP in 2019 and deteriorates in the base scenario to -3.5 per cent in 2020 (see Diagram 51). The decline is due partly to the negative GDP growth this year, resulting in weak growth in tax revenue while unemployment-related expenditure rises, and partly to the spending and tax measures described above in response to COVID-19.

Structural net lending, which shows what net lending would have been with the economy operating exactly at capacity, also falls from 2019 to 2020, from 0.3 per cent to -1.3 per cent of potential GDP. Fiscal policy is therefore expected to have a clear expansionary bias. The spending measures presented or assumed in response to COVID-19 amount to just over SEK 140 billion. Total fiscal measures in 2020 are expected to be around SEK 180 billion in the NIER's base scenario (see Table 7). This corresponds to almost 4 per cent of potential GDP, while structural net lending will decline by just 1.7 percentage points. There are a number of reasons for this.

With unchanged policy – in other words, when no new fiscal decisions are taken – structural tax revenue will normally move more or less in line with potential GDP, giving a fairly constant tax-to-GDP ratio. Structural expenditure grows more slowly than potential GDP, resulting in a decrease in the expenditure-to-GDP ratio. When the tax-to-GDP ratio is fairly constant and the expenditure-to-GDP ratio falls, there is an automatic improvement in government finances which means that structural net lending gradually improves in the absence of new fiscal

Diagram 50 Expenditure ceiling and restricted expenditure

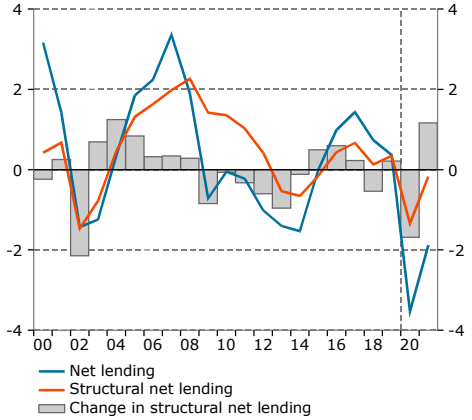
Per cent of potential GDP



Sources: the Swedish National Financial Management Authority, the Riksdag och NIER.

Diagram 51 Net lending and structural net lending in general government

Per cent of GDP and per cent of potential GDP



Sources: Statistics Sweden and NIER.

measures.[23] Normally, this automatic fiscal tightening amounts to around 0.5 per cent of potential GDP.

The reason why structural net lending is not expected to decline further in 2020 despite the strong fiscal response to COVID-19 is that there will be an unusually large degree of automatic fiscal tightening this year. One contributing factor is that the volume of government consumption will be held back by decreased immigration-related spending and tight local government finances. Government consumption expenditure in current prices will be even weaker, due to the small increase in the government consumption deflator.[24] Structural tax revenue will grow more quickly than normal, especially household direct taxes.

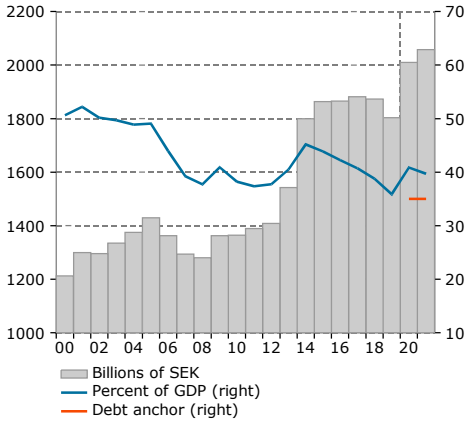
Since 2019, the fiscal policy framework has included a debt anchor, which means that general government consolidated gross debt – Maastricht debt – is to be 35 per cent of GDP in the medium term and stay within a band of 5 percentage points either side. Maastricht debt amounted to 36 per cent of GDP in 2019 but will rise this year to 41 per cent, which is outside the permitted band (see Diagram 52). The Maastricht debt will increase as a share of GDP partly because net lending will be negative and partly because GDP will fall. The cash flow support that central government is expected to provide for firms will also contribute to the Maastricht debt increasing by around SEK 30 billion. The level of Maastricht debt forecasted in the scenario is more than 5 percentage points away from the debt anchor. The balance of probability, therefore, is that the government will need to write to the Riksdag to explain what has caused this deviation and how it intends to deal with it.

Net lending will remain negative in 2021, which means that the Maastricht debt will continue to grow. It will decrease as a share of GDP, however, as GDP growth will be strong next year.

The NIER's base scenario makes a number of assumptions about COVID-19 that are presented in the introduction to this report. These assumptions are naturally very uncertain. A special analysis in the Swedish version of the report presents an alternative scenario which assumes that the economic downturn is deeper and longer-lasting, both in Sweden and abroad. In that scenario, GDP growth is -4.9 per cent this year, rather than -3.4 per cent, and net lending is -4.7 per cent, rather than -3.5 per cent. As can be seen in dthe box below, the direct effects on government finances could also be greater if schools and preschools close for longer, or more people fall ill, than assumed in the NIER's base scenario.

Diagram 52 Maastricht debt

Billions of SEK and per cent of GDP



Sources: Statistics Sweden and NIER.

[23] A description of how various rules contribute to this automatic fiscal tightening can be found in the special analysis "Automatic fiscal tightening provides scope for unfunded measures" in *The Swedish Economy*, October 2019.

[24] The deflator for government consumption shows how the price per volume of government consumption moves. Since 1994, it has increased by an average of 3.2 per cent annually, but it will rise by just 1.0 per cent in 2020.

Taken together, these calculations show that the effects of COVID-19 could have a major impact on government finances. Since Sweden has low levels of debt, however, the country has the resources to tackle these challenges.

Direct effects on net lending of higher levels of illness and longer school closures

This box presents calculations of the direct effects on government net lending of alternative assumptions for the number of people on sick leave and the closure of nursery and compulsory education. These calculations do not take account of effects in the form of fewer hours worked and lost production. GDP would be lower in both of these examples, but how much lower is very uncertain.

More fall ill

When a person is unable to work due to illness, there is normally a qualifying-day deduction from sick pay for the first day, but the government's decision means that people can now apply for sickness benefit for that day. For the following 13 days, sick pay is paid at 80 per cent of normal wages. The employer will subsequently be reimbursed for this sick pay by the central government. In this example, we assume that 50 per cent of workers fall ill with COVID-19 or show similar symptoms, rather than the 20 per cent assumed in the base scenario. As in the base scenario, these people are assumed to spend an average of two weeks off work.

Central government's costs for helping employers with the cost of sick pay are then estimated to be SEK 24 billion higher, and costs for sickness benefit (to replace the qualifying-day deduction from sick pay) will be SEK 5 billion higher than in the base scenario. Households receive sickness benefit on the first day and sick pay for the following 13 days rather than their normal wages. Households' taxable income will therefore be somewhat lower, resulting in lower tax revenue. Altogether, the direct effects mean that net lending deteriorates by around SEK 30 billion.

In the event that the number falling ill rises to 50 per cent, government consumption expenditure on health and elderly care will be higher than in the base scenario. This is due to both more care events and more overtime. In an emergency, various rules may also come into play on additional payments, on what counts as normal working hours, and on daily rest periods. These costs have not, however, been taken into account in these calculations.

Schools closed longer

In the following calculations, we assume that nursery and compulsory education is closed for the equivalent of two

months longer than in the base scenario.[25] During the time that schools and preschools are closed, it is assumed that parents who need to stay home to look after their children will receive temporary parental benefit.

The NIER estimates that the cost of temporary parental benefit would rise by SEK 22 billion. Temporary parental benefit is paid at 80 per cent of income qualifying for sickness benefit, but subject to a cap. This means that only those with a monthly income below SEK 29,600 will receive the full 80 per cent of pay.

Employers will be affected by more people being off work. They will not pay wages or employer contributions for these people.

There is a relatively big difference for households between normal wages and temporary parental benefit. The NIER estimates that households' taxable income would be around SEK 10 billion lower. This means that government revenue from household income taxes would be around SEK 3 billion lower. In addition, central government revenue from employer contributions will decrease, as no such contributions are made for temporary parental benefit. Payments into old-age pensions will, however, still be made in respect of temporary parental benefit. Since households' disposable income will be hit relatively hard in this scenario, it is assumed that they also receive increased support in the form of housing allowance and social assistance.

In this example too, most of the changes are on the expenditure side. However, the impact on the revenue side will be greater than was the case above with increased numbers falling ill. Altogether, net lending is reduced by around SEK 40 billion.

As in the calculations for increased sickness absence, only the direct effects are taken into account here. In addition to these direct effects, fewer hours worked would lead to a drop in production. Reduced household disposable income could also affect household consumption and so central government revenue from value-added tax. These effects are not, however, accounted for in these calculations.

APPROPRIATELY TARGETED FISCAL RESPONSE

When the economy slows, fiscal policy's automatic stabilisers help increase disposable income in the household and business sectors at the expense of the government sector's net lending. This keeps up demand somewhat, which stabilises the economy. The size of the automatic stabilisers' effect on government net lending in Sweden is estimated at just under 0.5 percentage

[25] The base scenario does not assume any explicit closure of nursery or compulsory education. Parents are nevertheless assumed to stay home with their children to an extent corresponding to schools and preschools closing for one month in the second quarter.

points of the output gap. With an output gap of -4.6 per cent, net lending will therefore decline by just over 2 per cent of GDP with unchanged policies.[26]

As discussed above, the government has decided on a series of measures for firms and households to cushion the impact of COVID-19 on the economy. Since the central government is bearing a substantial share of the cost of short-time work, firms are able to cut their costs quickly, unlike prolonged and costly redundancy processes, which are then followed by the cost of recruiting again once demand recovers. The government's decision to temporarily cut employer and employee social security contributions, subsidise rents and assume responsibility for sick pay for parts of 2020 will also help lower firms' costs. The option of deferring tax payments (value-added tax, preliminary tax for employees and employer contributions) will further alleviate the pressure on firms' cash position. Taken together, these measures will reduce both the rise in unemployment and the number of bankruptcies.

The measures targeting households focus on compensating for reductions in disposable income for those affected by the spread of COVID-19. This applies particularly to the short-time work scheme, which means that employees retain much of their normal pay despite working reduced hours. Without this option, unemployment would have risen much further, and the consequent benefits would have been much lower than those paid out in the short-time scheme. In addition, those who fall ill do not now have a qualifying-day deduction from sick pay for the first day of sickness absence.

All in all, the targeting of the fiscal response is well-considered. While it is uncertain exactly how the crisis will pan out, it is a temporary situation. It is therefore good that the government is helping prevent a rapid surge in unemployment. It is also appropriate to support firms' cash flow in various ways and to reduce their costs and so limit the number of bankruptcies and, in turn, redundancies. On the other hand, it is important to stress that these measures will have only a limited impact on the depth and duration of the economic downturn. When it comes to the support for households' disposable income, the macroeconomic effects in this situation are more uncertain than normal. These measures will probably help prop up consumption among those who are affected or are at risk of being affected by bankruptcies and unemployment. On the other hand, consumption will be undermined to a great extent by the restrictions on freedom of movement due to the spread of COVID-19. The macroeconomic effects of shoring up disposable income will therefore be smaller than normal in the short term.

The NIER believes that it will probably instead be appropriate to make more general reinforcements of household

[26] See NIER, "Automatiska stabilisatorer i Sverige 1998–2018" [Automatic stabilisers in Sweden 1998-2018], *Special Studies* 2018:29.

disposable income during the second half of the year, provided that the scenario's assumptions that concern about contagion gradually subside holds true. In the calculations, these measures amount to SEK 10 billion for 2020.

Given the pressure on the health care system, the tight finances of many municipalities, and weak revenue growth due to economic developments, the NIER believes that further increases in central government grants to local government are warranted in order to avoid redundancies or tax increases in the local government sector. In the calculations, these additional grants amount to SEK 10 billion for 2020.

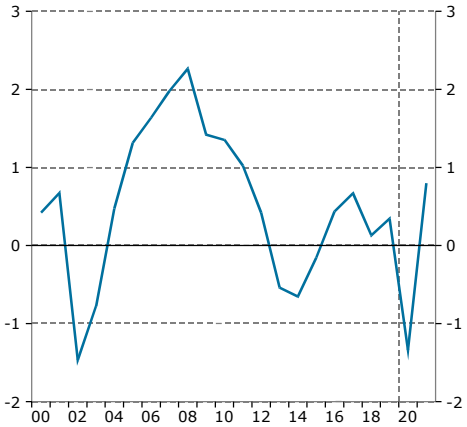
The sharp downturn in the labour market would also justify further measures being taken to reduce labour costs at small and medium sized firms in particular and further strengthen the level of subsidy in the short-time work scheme. In our calculations, these measures amount to SEK 20 billion for 2020.

FISCAL SPACE AND FISCAL FORECAST FOR 2021

As discussed above, there is an automatic fiscal tightening mechanism in the absence of new fiscal policy decisions which results in stronger structural net lending (see Diagram 53). In 2021, as in 2020, this automatic fiscal tightening will be unusually strong. The large degree of automatic fiscal tightening in 2021 is a result of fiscal measures introduced in 2020 in response to COVID-19 being temporary and no longer applying for the most part in 2021. The phasing out of spending measures to the tune of around SEK 100 billion means that structural spending with unchanged rules will be lower in 2021 than in 2020. At the same time, structural revenue will increase considerably, thanks mainly to the temporary cut in employer social security contributions no longer applying. This will result in automatic fiscal tightening of SEK 112 billion. Structural net lending needs to be strengthened by 1.7 percentage points in 2021, from just over -1.3 per cent of potential GDP in 2020 to one third of a percent, for net lending to be in line with the surplus target. This corresponds to an increase of SEK 87 billion. Taken together, this equates to fiscal space in 2021 of SEK 25 billion (see Table 8).

Diagram 53 Structural net lending in general government with unchanged rules

Per cent of potential GDP



Source: NIER.

Table 8 Fiscal forecast for 2021

SEK billion

	2021
Fiscal space	**25**
Measures affecting government consumption and investment	**36**
Central government	22
Consumption	8
Investment	14
Local government	14
Consumption	12
Investment	2
Transferred to households and firms in the form of changes to taxes or transfer payments	**16**
Impact on general government net lending	**52**
Structural net lending[1]	–0.2

Note. [1] Per cent of potential GDP.

Source: NIER.

The Swedish economy is assumed to be in a recovery phase in 2021, and the NIER's base scenario assumes that, in order for fiscal policy to support household consumption, SEK 16 billion is transferred to households and firms from the government sector over and above decisions made to date. At the same time, we forecast new government consumption and investment, primarily in local government, of SEK 36 billion. Local government consumption is thus assumed to grow in line with demographically determined demand, including an increase in standards in line with the historical pattern. Total fiscal measures will come to SEK 52 billion and thus exceed the fiscal space for 2021. Structural net lending in 2021 will therefore be below a level consistent with the surplus target. Fiscal policy nevertheless has a strong contractionary bias, because structural net lending rises from -1.3 per cent of potential GDP in 2020 to -0.2 per cent in 2021. Since economic activity is expected to be comparatively deeply depressed in 2021 as well, strongly contractionary fiscal policy may be inappropriate. There is unusually great uncertainty, however, and our view of developments in 2021 may well undergo substantial revisions. The NIER will therefore return in future reports with an updated view of what constitutes appropriate fiscal policy in 2021.

Forecast revisions 2020-2021

New information since our December forecast has led to very substantial revisions (see Table 9). These are due almost exclusively to the COVID-19 pandemic and the actions taken to limit its spread.

Table 8 Current Forecast and Revisions Compared to the December 2019 Forecast

Percentage change and percentage points respectively, unless otherwise indicated

	2020			2021		
	Apr	Dec	Diff	Apr	Dec	Diff
Global Economy						
GDP, World	–0.8	3.0	–3.8	4.4	3.1	1.2
GDP, KIX-weighted	–3.7	1.8	–5.5	3.9	1.9	2.0
GDP, Euro Area	–5.5	1.1	–6.6	3.8	1.3	2.4
GDP, US	–2.9	1.8	–4.7	2.6	1.7	1.0
GDP, China	1.1	6.0	–4.9	9.7	5.9	3.8
Federal Funds Target Rate[1.2]	0.3	1.8	–1.5	0.3	1.8	–1.5
ECB Refi Rate[1.2]	0.0	0.0	0.0	0.0	0.0	0.0
Oil Price[3]	34.2	63.9	–29.7	37.1	63.9	–26.8
CPI, KIX-weighted	1.4	1.9	–0.4	1.6	2.0	–0.4
Domestic Economy						
GDP, Calendar-Adjusted	–3.4	0.7	–4.1	3.4	1.4	2.0
GDP	–3.2	1.0	–4.1	3.5	1.5	2.0
Household Consumption	–2.9	1.9	–4.8	4.0	1.7	2.3
Government Consumption	0.8	0.7	0.1	1.4	1.0	0.4
Gross Fixed Capital Formation	–4.3	–0.1	–4.2	3.2	0.7	2.5
Stockbuilding[4]	–0.5	–0.1	–0.4	0.2	0.0	0.3
Exports	–5.0	1.3	–6.3	5.1	3.0	2.2
Imports	–4.5	1.2	–5.6	4.7	2.4	2.3
Labour Market, Inflation, Interest Rates, etc.						
Hours Worked[5]	–3.6	0.1	–3.7	2.0	0.5	1.5
Employment	–1.6	0.4	–1.9	0.2	0.4	–0.3
Unemployment[6]	8.7	7.2	1.5	8.9	7.4	1.6
Labour Market Gap[7]	–4.1	–0.4	–3.7	–2.8	–0.4	–2.5
Output Gap[8]	–4.6	–0.2	–4.4	–3.0	–0.4	–2.6
Productivity[5]	0.1	0.7	–0.6	1.5	0.9	0.7
Hourly Earnings[9]	2.0	2.6	–0.6	2.2	2.7	–0.4
CPI	0.5	1.7	–1.2	1.3	1.4	–0.1
CPIF	0.5	1.6	–1.1	1.4	1.5	–0.1
Repo Rate[1.2]	0.00	0.00	0.00	0.00	0.00	0.00
10-Year Government Bond Yield[1]	0.0	0.2	–0.2	0.3	0.6	–0.3
Effective Krona Exchange Rate Index (KIX)[10]	123.3	120.4	2.9	122.4	119.1	3.3
Current Account Balance[11]	4.5	5.0	–0.5	4.9	5.2	–0.3
Government Net Lending[11]	–3.5	0.1	–3.6	–1.9	–0.1	–1.7

[1] Per cent. [2] At year-end. [3] Brent crude, USD per barrel, annual average. [4] Change in per cent of GDP the previous year. [5] Calendar-adjusted. [6] Per cent of labour force. [7] Difference between actual and potential hours worked in per cent of potential hours worked. [8] Difference between actual and potential GDP in per cent of potential GDP. [9] According to the short-term earnings statistics. [10] Index, 18 November 1992=100. [11] Per cent of GDP.

Note. The difference is between the current forecast and the December 2019 forecast. A positive value denotes an upward revision.

Source: NIER

Tables

Data for additional variables and longer time series can be found on the NIER's website at www.konj.se/english/data-sets.

CONTENT

The Global Economy

Table A1 Global Output

Per cent of global GDP at purchasing power parity and percentage change, constant prices, respectively

	Weight 2018[1]	2018	2019	2020	2021
World[2]	100.0	3.6	3.4	–0.8	4.4
KIX Weighted[3]	74.8	2.6	2.0	–3.7	3.9
US	15.2	2.9	2.3	–2.9	2.6
Euro Area	13.1	1.9	1.2	–5.5	3.8
Japan	4.1	0.3	0.7	–2.0	1.9
UK	2.2	1.3	1.4	–3.6	2.9
Sweden	0.4	2.3	1.3	–3.4	3.4
Norway	0.3	1.5	1.2	–3.7	2.9
Denmark	0.2	2.4	2.2	–3.4	3.1
China	18.7	6.8	6.2	1.1	9.7
Sweden's Export Market[4]	...	3.5	3.1	–4.0	4.1

[1] The weights indicate each country or region's purchasing power-adjusted share of world GDP. [2] The table shows some of the countries that the NIER makes forecasts for. The world aggregate is calculated using time-varying purchasing power parity GDP weights from the IMF. [3] KIX weighted GDP is the weighted average of GDP growth in the 32 countries included in the KIX effective krona exchange rate index. [4] Sweden's export market refers to total import demand in the countries to which Sweden exports, each country weighted by its share of Swedish goods exports.

Sources: IMF, OECD, Eurostat, Macrobond and NIER.

Table A2 Global Inflation

Percentage change in the CPI

	2017	2018	2019	2020	2021
US	2.1	2.4	1.8	1.6	2.2
Euro Area	1.5	1.8	1.2	0.8	1.0
Japan	0.5	1.0	0.5	0.3	0.3
UK	2.6	2.3	1.7	1.0	1.5
Sweden	2.0	2.1	1.7	0.5	1.4
Norway	1.9	3.0	2.3	1.1	1.4
Denmark	1.1	0.7	0.7	0.6	1.1
China	1.6	2.1	2.9	2.7	2.5

Note. The CPI values for the EU countries and Norway refer to harmonised indices of consumer prices (HICP). The OECD aggregate includes national CPI series only. CPI for the United Kingdom refers to CPIH, including owner occupiers' housing costs. The aggregate for the euro area is weighted using consumption weights from Eurostat.

Sources: OECD, Eurostat, Macrobond and NIER.

Table A3 Selected Indicators for the Euro Area

EUR billion, current prices, and percentage change, constant prices, respectively

	Level 2018	2018	2019	2020	2021
GDP[1]	**11 576**	**1.9**	**1.2**	**–5.5**	**3.8**
HICP[2]	...	1.8	1.2	0.8	1.0
Policy Rate[3]	...	0.00	0.00	0.00	0.00
10-Year Government Bond Yield[4]	...	0.5	–0.2	–0.4	0.0
Overnight Rate[5]	...	–0.4	–0.5	–0.5	–0.5
USD/EUR[6]	...	1.2	1.1	1.1	1.1

[1] Change in per cent of GDP the previous year. [2] Percentage change [3] Refi rate level, per cent, at year-end. [4] Per cent. Refers to Germany. [5] Per cent, at year-end. [6] Level.

Sources: ECB, Eurostat, Macrobond and NIER.

Table A4 Selected Indicators for the US

USD billion, current prices, and percentage change, constant prices, respectively

	Level 2018	2018	2019	2020	2021
GDP[1]	**20 501**	**2.9**	**2.3**	**–2.9**	**2.6**
CPI[2]	...	2.4	1.8	1.6	2.2
Policy Rate[3]	...	2.50	1.75	0.25	0.25
10-year Government Bond Yield[4]	...	2.9	2.1	1.2	1.5
USD/EUR[5]	...	1.2	1.1	1.1	1.1

[1] Change in per cent of GDP the previous year. [2] Percentage change. [3] Federal Funds target rate level, per cent, at year-end. [4] Level, per cent. [5] Level.

Sources: US Bureau of Economic Analysis, US Bureau of Labor Statistics, Federal Reserve, Macrobond and NIER.

Interest and Exchange Rates

Table A5 Interest and Exchange Rates

Per cent, index 18 November 1992=100 and SEK per currency unit, respectively

	2017	2018	2019	2020	2021
At Year-End					
Repo Rate	–0.50	–0.50	–0.25	0.00	0.00
Policy Rate. KIX6-Weighted[1]	–0.04	0.10	0.01	–0.28	–0.28
Annual Average					
Repo Rate	–0.50	–0.50	–0.26	0.00	0.00
5-Year Government Bond Yield	–0.1	0.1	–0.4	–0.3	0.0
10-Year Government Bond Yield	0.7	0.7	0.1	0.0	0.3
Effective Krona Exchange Rate Index (KIX)	112.9	117.6	122.1	123.3	122.4
EUR Exchange Rate	9.6	10.3	10.6	10.8	10.8
USD Exchange Rate	8.5	8.7	9.5	9.8	9.8

[1] Refers to an average of Eonia (for the euro area) and policy rates in the US, Norway, UK, Denmark and Japan.

Sources: Sveriges Riksbank, Macrobond and NIER.

The Swedish Economy

Table A6 GDP by Expenditure

SEK billion, current prices, and percentage change, constant prices, respectively

	Level 2018	2018	2019	2020	2021
Household Consumption Expenditure[1]	2 159	1.7	1.2	–2.9	4.0
Goods	998	1.9	1.8	1.7	2.3
Services Excl. Housing	676	1.8	1.4	–11.0	11.6
Housing	413	3.6	2.1	1.8	2.0
General Government Consumption Expenditure	1 258	0.4	0.4	0.8	1.4
Central Government	324	–0.1	–1.2	–0.2	1.0
Local Government	934	0.5	1.0	1.2	1.5
Gross Fixed Capital Formation[2]	1 250	4.2	–1.2	–4.3	3.2
Business Sector Excl. Housing	760	6.4	–0.2	–7.4	4.0
Industry	183	6.1	–1.7	–8.8	1.7
Other Goods Producers	126	2.7	–1.1	–5.6	0.1
Service Producers Excl. Housing	452	7.6	0.6	–7.4	6.0
Housing	262	–3.8	–5.8	–0.9	–1.4
General Government	221	7.1	0.8	2.5	5.6
Domestic Demand Excl. Stockbuilding	*4 666*	*2.0*	*0.4*	*–2.3*	*3.1*
Stockbuilding[3]	47	0.4	–0.3	–0.5	0.2
Total Domestic Demand	*4 713*	*2.4*	*0.1*	*–2.8*	*3.3*
Exports	2 213	3.2	4.2	–5.0	5.1
Exports of Goods	1 560	4.5	2.3	–4.4	3.4
Processed Goods	1 218	5.6	3.0	–4.7	3.0
Raw Materials	342	0.6	–0.2	–3.3	4.6
Exports of Services	653	0.1	8.8	–6.4	9.2
Total Demand	*6 926*	*2.6*	*1.4*	*–3.6*	*3.9*
Imports	2 092	3.6	1.8	–4.5	4.7
Imports of Goods	1 442	4.9	–1.0	–3.4	3.2
Processed Goods	1 042	5.0	0.4	–5.0	3.7
Raw Materials	399	4.8	–4.6	0.7	1.9
Imports of Services	651	0.7	8.0	–6.6	7.9
Net Exports[3]	*121*	*–0.1*	*1.1*	*–0.4*	*0.4*
GDP	**4 834**	**2.2**	**1.2**	**–3.2**	**3.5**
GDP per Capita[4]	475	1.0	0.2	–4.0	2.7

[1] Including non-profit institutions serving households and the net of household consumption abroad and foreign consumption in Sweden. [2] Including non-profit institutions serving households. [3] Change in per cent of GDP the previous year. [4] SEK thousand, current prices, and percentage change, constant prices, respectively.

Sources: Statistics Sweden and NIER.

Table A7 Household Income, Consumption Expenditure and Saving

SEK billion, current prices, and percentage change, respectively

	Level 2018	2018	2019	2020	2021
Total Earnings, Adjusted for External Transactions	1 929	4.9	3.9	–1.0	4.3
Hourly Earnings (according to national accounts)[1.2]	243	2.8	3.9	2.3	2.2
Hours Worked[1.3]	7 914	2.0	–0.2	–3.2	2.0
Transfers From Government Sector, Net	645	3.0	2.0	7.4	–2.6
Property Income, Net	308	5.4	3.9	–28.6	26.9
Other Income, Net[4]	304	5.2	6.2	0.6	7.8
Income Before Taxes[5]	**3 186**	**4.6**	**3.7**	**–1.8**	**4.7**
Direct Taxes[6]	855	0.5	0.9	0.3	0.0
Disposable Income	**2 331**	**5.1**	**4.6**	**–1.5**	**4.8**
Consumer Prices[7]	...	2.2	1.9	0.3	1.3
Real Disposable Income	**2 331**	**2.8**	**2.6**	**–1.8**	**3.5**
Per Capita[8]	229	1.6	1.6	–2.7	2.6
Consumption Expenditure[9]	2 159	1.7	1.2	–2.9	4.0
Saving[10]	393	15.4	16.6	16.5	16.2
Own Saving[10]	172	7.4	8.7	9.7	9.3
Net Lending[10]	284	11.1	12.9	12.8	12.7

[1] Calendar-adjusted values. [2] SEK per hour. [3] Employees only. [4] This also includes computational calculations of transfers to households through altered taxes and/or transfers, see table A20. [5] Growth in income before taxes is calculated as a weighted sum of the growth rates for total earnings, transfers, capital income and other income. [6] Direct taxes' contribution to the change in disposable income, expressed in percentage. [7] Implicit price index for household consumption expenditure. [8] SEK thousand. [9] Constant prices [10] SEK billion, current prices, and per cent of disposable income, respectively. Own saving excludes occupational and premium pensions.

Sources: Statistics Sweden and NIER.

Table A8 Current Account and Net Lending

SEK billion, current prices, and per cent, respectively

	2017	2018	2019	2020	2021
Net Exports	148	121	193	186	198
Of Which: Goods	126	119	193	189	196
Services	22	2	0	–3	2
Earnings, Net	7	7	10	11	11
Investment Income, Net	70	74	114	120	156
Transfers etc., Net	–65	–74	–92	–96	–108
Current Account Balance	**159**	**128**	**225**	**221**	**256**
Per cent of GDP	*3.4*	*2.6*	*4.5*	*4.5*	*4.9*
Capital Transfers	–1	2	1	1	1
Net Lending	**158**	**130**	**226**	**222**	**257**
Per cent of GDP	*3.4*	*2.7*	*4.5*	*4.5*	*5.0*

Sources: Statistics Sweden and NIER.

Table A9 GNI

SEK billion, current prices, thousands, ratio and annual percentage change, respectively

	Level 2018	2018	2019	2020	2021
GNI	4 918	4.6	4.8	–2.0	6.0
Deflator. Domestic Use	...	2.9	2.5	0.8	2.0
Real GNI	**...**	**1.7**	**2.3**	**–2.7**	**3.9**
Population	10 175	1.2	1.0	0.9	0.8
Real GNI per Capita[1]	**483**	**0.5**	**1.3**	**–3.6**	**3.0**

[1] SEK thousand.

Sources: Statistics Sweden and NIER.

Table A10 Production

SEK billion, current prices, and percentage change, constant prices, respectively, calendar-adjusted values

	Level 2018	2018	2019	2020	2021
Goods Producers	1 158	2.1	1.5	–3.5	3.4
Of Which: Industry	671	3.1	0.4	–5.6	4.5
Construction	290	3.4	1.5	–1.0	2.3
Service Producers	2 200	3.2	1.9	–4.8	4.8
Business Sector	3 359	2.8	1.7	–4.4	4.3
General Government	874	0.4	0.1	–0.7	1.2
GDP at Basic Prices[1]	**4 289**	**2.3**	**1.4**	**–3.6**	**3.6**
Taxes/Subsidies on Products	550	2.6	0.0	–1.9	2.1
GDP at Market Prices	4 839	2.3	1.3	–3.4	3.4

[1] Including production in non-profit institutions serving households.

Note. Production refers here to value added.

Sources: Statistics Sweden and NIER.

Table A11 Hours Worked

Million hours and percentage change, respectively, calendar-adjusted values

	Level 2018	2018	2019	2020	2021
Goods Producers	1 976	1.7	–1.1	–3.8	1.3
Of Which: Industry	1 013	1.1	–1.7	–6.1	1.1
Construction	651	4.4	0.5	–0.9	1.6
Services Producers	3 888	1.9	0.4	–4.9	3.0
Business Sector	5 865	1.8	–0.1	–4.6	2.4
General Government	2 246	1.8	–0.7	–1.2	1.2
Total Economy[1]	**8 280**	**1.8**	**–0.3**	**–3.6**	**2.0**

[1] Including non-profit institutions serving households.

Sources: Statistics Sweden and NIER.

Table A12 Productivity

SEK per hour, basic prices, and percentage change, constant prices, respectively, calendar-adjusted values

	Level 2018	2018	2019	2020	2021
Goods Producers	586	0.4	2.6	0.4	2.1
Of Which: Industry	663	2.0	2.1	0.6	3.4
Construction	445	–1.0	1.1	–0.1	0.6
Service Producers	566	1.3	1.5	0.1	1.8
Business Sector	573	1.0	1.9	0.2	1.9
General Government	389	–1.4	0.8	0.5	0.0
Total Economy[1]	**518**	**0.5**	**1.7**	**0.1**	**1.5**

[1] Including production in non-profit institutions serving households.

Sources: Statistics Sweden and NIER.

Table A13 The Labour Market

Thousands of people and percentage change, respectively, unless otherwise indicated

	Level 2018	2018	2019	2020	2021
Hours Worked[1]	8 280	1.8	–0.3	–3.6	2.0
Average Hours Worked for Employed[2]	31.2	0.3	–0.9	–2.1	1.8
Number of Employed	5 097	1.5	0.7	–1.6	0.2
Employment Rate[3]	...	68.3	68.3	66.9	66.8
Labour Force	5 442	1.1	1.1	0.5	0.4
Labour Force Participation Rate[4]	...	72.9	73.3	73.3	73.3
Unemployment[5]	344	6.3	6.8	8.7	8.9
Population Aged 15–74	7 461	0.8	0.7	0.5	0.4

[1] Million hours, calendar-adjusted values. [2] Hours per week, calendar-adjusted values. [3] Number of employed in per cent of the population aged 15–74. [4] Number of people in the labour force in per cent of the population aged 15–74. [5] Per cent of labour force.

Sources: Statistics Sweden and NIER.

Table A14 Resource Utilisation

Per cent and percentage change, calendar-adjusted values, unless otherwise indicated

	2017	2018	2019	2020	2021
Labour Market					
Equilibrium Unemployment[1]	6.8	6.8	6.8	6.8	6.8
Actual Unemployment[2]	6.7	6.3	6.8	8.7	8.9
Potential Hours Worked	1.4	1.2	0.7	0.5	0.7
Of Which: Potential Employment	1.3	1.3	1.1	0.9	0.7
Actual Hours Worked	2.3	1.8	–0.3	–3.6	2.0
Labour Market Gap[3]	0.4	0.9	–0.1	–4.1	–2.8
Productivity					
Potential Productivity	0.7	0.8	1.3	1.3	1.0
Of Which: Potential Productivity. Business Sector	1.1	1.4	1.4	1.4	1.4
Actual Productivity	0.4	0.5	1.5	0.3	1.4
Productivity Gap[4]	0.6	0.3	0.5	–0.5	–0.2
GDP					
Potential GDP	2.2	2.0	2.0	1.8	1.7
Actual GDP	2.7	2.3	1.3	–3.4	3.4
Output Gap[5]	1.0	1.3	0.5	–4.6	–3.0

[1] Level, per cent of potential labour force. [2] Level, per cent of labour force. [3] Difference between actual and potential hours worked in per cent of potential hours worked. [4] Difference between actual and potential productivity in per cent of potential productivity. [5] Difference between actual and potential GDP in per cent of potential GDP.

Sources: Statistics Sweden and NIER.

Table A15 Hourly Earnings According to the Short-Term Earnings Statistics

Per cent and percentage change, respectively

	Weight 2019	2018	2019	2020	2021
Business Sector	68	2.5	2.5	1.8	2.1
Goods Producers	22	3.0	2.5	1.8	2.2
Of Which: Industry	15	2.9	2.6	1.9	2.3
Construction	7	3.3	2.1	1.7	2.1
Service Producers	46	2.2	2.5	1.8	2.1
Local Government	26	2.7	2.8	2.3	2.5
Central Government	6	2.8	2.6	2.7	2.2
Total	**100**	**2.5**	**2.6**	**2.0**	**2.2**
Real Hourly Earnings (CPI)[1]	...	0.6	0.8	1.5	0.9
Real Hourly Earnings (CPIF)[2]	...	0.4	0.8	1.5	0.9

[1] Deflated by the CPI. [2] Deflated by the CPI with constant mortgage rates (CPIF).

Sources: National Mediation Office, Statistics Sweden and NIER.

Table A16 Hourly Earnings and Labour Costs in the Business Sector According to the National Accounts

SEK per hour, per cent and percentage change, respectively

	Level 2018	2018	2019	2020	2021
Not Calendar-Adjusted Values					
Hourly Earnings	251	3.3	4.0	1.6	1.8
Employers' Social Contributions[1] (per cent of earnings)		43.2	42.8	41.6	43.1
Hourly Labour Costs[2]	359	4.0	3.7	0.8	2.9
Productivity	555	1.2	2.0	–0.3	1.8
Adjusted Unit Labour Costs[3]		2.8	1.7	1.1	1.1
Calendar-Adjusted Values					
Hourly Earnings		3.0	3.9	2.3	2.2
Hourly Labour Costs[2]		3.7	3.7	1.5	3.3
Productivity		1.0	1.9	0.1	2.0
Adjusted Unit Labour Costs[3]		2.7	1.7	1.3	1.2

[1] Employers' social contributions and payroll taxes. [2] Earnings and employers' social contributions. [3] Refers to total business sector excluding one- and two-family houses and secondary homes, and adjusted for the number of hours worked by the self-employed.

Sources: Statistics Sweden and NIER.

Table A17 Supply and Use Price Deflators

Per cent and percentage change, respectively

	Weight 2018	2018	2019	2020	2021
GDP	69.8	2.3	2.7	1.0	1.8
General Government[1.2]	13.4	4.6	3.8	0.0	3.8
Business Sector[2]	48.4	1.7	2.5	1.1	1.2
Product Taxes, Net	7.9	2.2	2.0	2.2	1.8
Imports	30.2	6.0	2.9	–2.5	1.0
Processed Goods	15.0	3.9	2.6	–0.1	–0.2
Raw Materials	5.8	14.8	1.6	–15.8	2.8
Services	9.4	4.6	4.0	1.5	1.5
Supply/Use[3]	**100.0**	**3.4**	**2.8**	**0.0**	**1.5**
General Government Consumption Expenditure	18.2	4.1	3.5	0.6	3.4
Household Consumption Expenditure	31.2	2.2	1.9	0.3	1.3
Gross Fixed Capital Formation	18.0	3.1	2.3	1.8	1.8
Exports	32.0	4.5	3.4	–1.7	0.6
Processed Goods	17.6	3.4	4.7	0.4	–0.1
Raw Materials	4.9	14.2	–0.3	–14.9	3.2
Services	9.4	2.0	2.9	0.9	0.9

[1] Including non-profit institutions serving households. [2] Value added price deflator calculated at basic prices. [3] Including stock-building.

Sources: Statistics Sweden and NIER.

Table A18 Business Sector Prices, Costs and Profits

SEK billion, percentage change and per cent, respectively

	Weight 2018	2018	2019	2020	2021
Value Added, Constant Prices[1]	...	2.7	1.7	–4.1	4.4
Value-Added Deflator	...	1.7	2.5	1.1	1.2
Value Added, Current Prices[2]	3 353	4.6	4.3	–1.7	4.5
Hours Worked, Employees	...	1.8	0.0	–3.4	2.7
Hourly Labour Costs[3]	359	4.0	3.7	0.8	2.9
Total Labour Costs[4]	1 968	5.9	3.7	–2.7	5.7
Gross Profit	1 386	2.9	5.1	–0.4	2.9
Profit Share	**...**	**41.3**	**41.7**	**42.2**	**41.5**
Adjusted Profit Share[5]	...	35.6	36.1	37.1	36.4

[1] Calculated at basic prices. [2] Calculated at factor prices. [3] SEK. [4] Including wage-related other taxes on production for employees. [5] Excluding one- and two-family houses and secondary homes, and adjusted for the number of hours worked by the self-employed.

Sources: Statistics Sweden and NIER.

Table A19 Consumer Prices

Per cent and percentage change, respectively

	Weight 2020	2018	2019	2020	2021
CPI	**100**	**2.0**	**1.8**	**0.5**	**1.3**
Mortgage Interest Costs. Mortgage Interest Rate	...	–4.9	1.8	1.1	–0.5
CPIF	**100**	**2.1**	**1.7**	**0.5**	**1.4**
Goods	44	0.6	1.0	0.9	1.4
Services	30	1.9	2.1	1.8	1.0
Housing Excl. Mortgage Interest Costs and Energy	16	1.8	1.9	1.5	1.1
Energy	7	10.5	3.1	–11.3	2.1
Mortgage Interest Costs. Capital Stock	3	7.1	5.8	5.3	4.6
CPIF Excl. Energy	**93**	**1.4**	**1.6**	**1.4**	**1.3**
HICP	...	2.0	1.7	0.7	1.3
Crude Oil (Brent)[1]	...	71.5	64.1	34.2	37.1

[1] Dollars per barrel, annual average.

Note. The CPI's mortgage interest cost component is the product of the mortgage interest rate and the capital stock.

Sources: Intercontinental Exchange, Statistics Sweden, Macrobond and NIER.

Public Finances

Table A20 General Government Finances

SEK billion, current prices, and percentage of GDP, respectively

	2017	2018	2019	2020	2021
Revenue	**2 295**	**2 390**	**2 444**	**2 397**	**2 517**
Per cent of GDP	*49.7*	*49.4*	*48.6*	*48.7*	*48.6*
Taxes and Duties	2 033	2 106	2 148	2 095	2 210
Per cent of GDP	*44.0*	*43.6*	*42.7*	*42.6*	*42.6*
Tax-to-GDP Ratio[1]	*44.1*	*43.7*	*42.9*	*42.7*	*42.8*
Property Income	66	76	78	76	74
Other Revenue	196	207	218	226	233
Expenditure	**2 229**	**2 354**	**2 426**	**2 571**	**2 599**
Per cent of GDP	*48.2*	*48.7*	*48.3*	*52.3*	*50.1*
Consumption Expenditure	1 205	1 258	1 307	1 326	1 391
Transfers	787	828	844	960	902
Households	638	658	672	721	703
Corporations	83	91	90	153	102
Abroad	66	79	82	87	97
Capital Formation[2]	208	235	247	256	274
Property Expenditure	30	33	28	29	32
Technical Transfer to Households[3]	**0**	**0**	**0**	**0**	**11**
Technical Transfer to Corporations[4]	**0**	**0**	**0**	**0**	**5**
Net Lending[5]	**66**	**36**	**18**	**–174**	**–97**
Per cent of GDP	*1.4*	*0.7*	*0.4*	*–3.5*	*–1.9*
Primary Net Lending[6]	**30**	**–8**	**–31**	**–221**	**–139**
Per cent of GDP	*0.6*	*–0.2*	*–0.6*	*–4.5*	*–2.7*
Structural Net Lending	**31**	**6**	**17**	**–69**	**–9**
Per cent of potential GDP	*0.7*	*0.1*	*0.3*	*–1.3*	*–0.2*
Maastricht Debt	**1 882**	**1 874**	**1 803**	**2 010**	**2 058**
Per cent of GDP	*40.7*	*38.8*	*35.9*	*40.9*	*39.7*
GDP, Current Prices	4 621	4 834	5 026	4 918	5 183
Potential GDP, Current Prices	4 575	4 772	5 000	5 156	5 344
Net Financial Wealth	1 115	1 170	1 405	1 131	1 134
Per cent of GDP	*24.1*	*24.2*	*27.9*	*23.0*	*21.9*

[1] The tax-to-GDP ratio is calculated by dividing total taxes, including EU taxes, by GDP. [2] Fixed gross investments, inventory investments and acquisition/disposal of land, etc. [3] Technical transfer to households in the form of changes to taxes and/or transfer payments. A negative number means a transfer from households to the government. [4] Technical transfer to corporations in the form of changes to transfer payments or subsidies. [5] Net lending is calculated as income minus the sum of expenses and transfers to households. [6] Primary net lending is calculated as net lending minus net capital income. Net capital income is capital income minus capital expenditures.

Sources: Statistics Sweden and NIER.

Table A21 Central government finances

SEK billion and percentage of GDP, respectively, current prices

	2017	2018	2019	2020	2021
Revenue	**1 218**	**1 263**	**1 279**	**1 226**	**1 308**
Taxes and Duties	1 071	1 105	1 114	1 057	1 137
Property Income	22	29	29	29	26
Other Revenue	126	129	136	140	144
Expenditure	**1 143**	**1 201**	**1 219**	**1 368**	**1 324**
Transfers	710	747	752	887	813
Old-Age Pension System[1]	25	24	23	26	23
Local Government Sector	272	279	282	310	303
Households	301	310	314	350	327
Corporations	50	59	56	119	67
Abroad	62	75	77	82	93
Consumption Expenditure	310	320	330	336	349
Capital Formation[2]	100	107	116	124	138
Property Expenditure	24	27	21	21	23
Of which interest expenditure	*19*	*21*	*15*	*16*	*17*
Technical Transfer to Households[3]	**0**	**0**	**0**	**0**	**25**
Technical Transfer to Corporations[4]	**0**	**0**	**0**	**0**	**5**
Net Lending	**75**	**62**	**60**	**–142**	**–46**
Per cent of GDP	*1.6*	*1.3*	*1.2*	*–2.9*	*–0.9*
Central Government Debt	1 265	1 197	1 054	1 230	1 224
Per cent of GDP	*27.4*	*24.8*	*21.0*	*25.0*	*23.6*
Net Financial Wealth	–249	–130	–49	–245	–222
Per cent of GDP	*–5.4*	*–2.7*	*–1.0*	*–5.0*	*–4.3*

[1] Central government's old-age pension contributions. [2] Fixed gross investments, inventory investments and acquisition/disposal of land, etc. [3] Technical transfer to households in the form of changes to taxes and/or transfer payments. In this table, central government grants to the local government sector are estimated on the basis of unchanged rules. If these grants turn out to be higher than with unchanged rules, the technical transfer from the central government sector to households will decrease correspondingly, at the same time as the technical transfer from local government to the households will increase correspondingly via smaller increases in local government taxes (or larger transfer payments). The total technical transfer from the general government sector to households, reported in Table A20, is not affected. [4] Technical transfer to corporations in the form of changes to transfer payments or subsidies.

Sources: Statistics Sweden, National Debt Office and NIER.

Table A22 Old-Age Pension System Finances

SEK billion and percentage of GDP, respectively, current prices

	2017	2018	2019	2020	2021
Revenue	**303**	**318**	**328**	**330**	**338**
Social Insurance Contributions	245	257	267	266	276
Central Government's Old-Age Pension Contributions	25	24	23	26	23
Property Income	31	35	37	36	35
Other Revenue	2	2	2	2	3
Expenditure	**302**	**311**	**322**	**333**	**336**
Income Pensions	296	304	315	325	329
Property Expenditure	0	1	0	0	0
Other Expenses	6	6	7	7	7
Net Lending	**0**	**7**	**6**	**–3**	**1**
Per cent of GDP	*0.0*	*0.1*	*0.1*	*–0.1*	*0.0*
Net Financial Wealth	1 429	1 401	1 596	1 558	1 583
Per cent of GDP	*30.9*	*29.0*	*31.7*	*31.7*	*30.5*

Sources: Statistics Sweden and NIER.

Table A23 Local government finances

SEK billion and percentage of GDP, respectively, current prices

	2017	2018	2019	2020	2021
Revenue	**1 080**	**1 120**	**1 152**	**1 188**	**1 209**
Taxes	700	726	749	753	776
Municipal Property Tax	17	18	19	19	20
Central Government Grants incl. VAT Compensation	267	274	280	308	301
Property Income	13	12	12	11	13
Other Revenue	83	89	92	96	99
Average municipal tax rate[1]	*32.12*	*32.12*	*32.19*	*32.28*	*32.28*
Expenditure	**1 089**	**1 153**	**1 200**	**1 216**	**1 276**
Transfers	85	85	88	91	94
Households	43	45	46	48	49
Other	42	40	43	43	45
Consumption Expenditure	891	934	974	986	1 037
Capital Formation	108	128	131	132	136
Property Expenditure	5	6	7	7	9
Technical Transfer to Households[2]	**0**	**0**	**0**	**0**	**–14**
Net Lending	**–10**	**–33**	**–48**	**–28**	**–52**
Per cent of GDP	*–0.2*	*–0.7*	*–1.0*	*–0.6*	*–1.0*
Net Financial Wealth	–66	–100	–142	–182	–227
Per cent of GDP	*–1.4*	*–2.1*	*–2.8*	*–3.7*	*–4.4*

[1] Per cent. [2] Technical transfer to households in the form of changes to taxes and/or transfer payments. In this table, central government grants to the local government sector are estimated on the basis of unchanged rules. If these grants turn out to be higher than with unchanged rules, the technical transfer from the local government sector to households will increase accordingly via smaller increases in local government taxes (or larger transfer payments). Since the technical transfer from the central government sector to households will decrease correspondingly, the total technical transfer from the general government sector to households, reported in Table A20, is not affected.

Sources: Statistics Sweden and NIER.

Table A24 General Government Revenue with Unchanged Tax Rules

Per cent of GDP

	2017	2018	2019	2020	2021
Direct Household Taxes	16.0	15.5	15.0	15.1	15.0
Direct Business Taxes	3.0	3.0	3.0	3.1	2.9
Employers' Social Contributions[1]	12.1	12.1	12.0	11.5	12.0
VAT	9.2	9.2	9.2	9.3	9.3
Excise	2.2	2.2	2.1	2.2	2.1
Other Taxes	1.7	1.7	1.6	1.6	1.5
Tax-to-GDP Ratio[2]	**44.1**	**43.7**	**42.9**	**42.7**	**42.8**
EU Taxes[3]	−0.1	−0.1	−0.1	−0.1	−0.1
Other Revenue[4]	4.2	4.3	4.3	4.6	4.5
Primary Revenue	**48.2**	**47.9**	**47.1**	**47.2**	**47.1**
Property Income	1.4	1.6	1.5	1.5	1.4
Total Revenue	**49.7**	**49.4**	**48.6**	**48.7**	**48.6**

[1] Employers' social contributions, contributions from the self-employed and special payroll tax. [2] The tax-to-GDP ratio is defined as total taxes, including EU taxes, divided by GDP. [3] Taxes paid to the EU are included in the tax-to-GDP ratio but not in general government revenue. [4] Including transfers from abroad and from unemployment insurance funds.

Note. Refers to general government revenue with unchanged tax rules, that is, based on the current regulations.

Sources: Statistics Sweden and NIER.

Table A25 General Government Expenditure

Per cent of GDP

	2017	2018	2019	2020	2021
Consumption Expenditure	26.1	26.0	26.0	27.0	26.8
Transfers	17.0	17.1	16.8	19.5	17.4
Households	13.8	13.6	13.4	14.7	13.6
Corporations	1.8	1.9	1.8	3.1	2.0
Abroad	1.4	1.6	1.6	1.8	1.9
Gross Fixed Capital Formation	4.5	4.9	4.9	5.2	5.3
Primary Expenditure	47.6	48.0	47.7	51.7	49.5
Property Expenditure	0.6	0.7	0.6	0.6	0.6
Total Expenditure	**48.2**	**48.7**	**48.3**	**52.3**	**50.1**

Note. Refers to general government expenditure with maintained personnel density in the provision of publicly funded welfare services and an increase in standards in line with the historic trend.

Sources: Statistics Sweden and NIER.

Table A26 Transfers from General Government to Households

Per cent of GDP

	2017	2018	2019	2020	2021
Pensions[1]	7.7	7.5	7.5	7.9	7.6
Of Which Income Pension	6.4	6.3	6.2	6.6	6.3
Labour Market[2]	0.7	0.6	0.6	0.7	0.7
Illness and Disability[3]	1.7	1.6	1.5	1.6	1.4
Family and Children[4]	1.7	1.7	1.7	2.0	1.7
Education[5]	0.3	0.3	0.3	0.4	0.4
Social Assistance[6]	0.3	0.3	0.3	0.3	0.3
Other[7]	1.5	1.5	1.5	1.7	1.4
Total Transfer to Households	**13.8**	**13.6**	**13.4**	**14.7**	**13.6**

[1] Income pension, supplementary pension, guaranteed pension, survivor's pension, general government occupational pensions and housing supplement for pensioners. [2] Unemployment benefits, labour market training benefits, introduction benefit and salary guarantee. [3] Sickness and rehabilitation benefit, activity and sickness compensation, work injury compensation and disability allowance. [4] Parental benefit, child allowance, care allowance and housing allowance. [5] Student grants and other study allowance. [6] Welfare benefits. [7] Assistance compensation, financial support for asylum seekers, income support for the elderly and other transfers to households.

Note. Refers to transfers from general government to households with unchanged regulations for transfers.

Sources: Statistics Sweden and NIER.

Table A27 Income Index, Balance Index, Income Pensions and Balance Ratio

Percentage change, unless otherwise indicated

	2017	2018	2019	2020	2021
Income Index	3.7	1.5	3.1	3.8	0.2
Balance Index	4.4	2.6	3.1	3.8	0.2
Balance Ratio[1 2]	1.007	1.013	1.012	1.017	1.027
Nominal Income Pension[3]	**2.8**	**1.0**	**1.4**	**2.1**	**–1.4**

[1] Level. [2] Starting with 2017 entries refer to the dampened balance ratio according to the Swedish Pensions Agency, expressing the pension system's assets in relation to its liabilities two years before the current year. [3] Adjustment indexation, i.e. percentage change of balance index minus 1.6 percentage points.

Sources: Swedish Pensions Agency and NIER.

Table A28 Central Government Budget Balance and Debt

SEK billion and percentage of GDP, respectively

	2017	2018	2019	2020	2021
Budget Balance	**61.8**	**80.0**	**111.9**	**–205.1**	**–0.9**
Adjustments to Net Lending	6.1	13.4	–53.1	21.1	5.4
Sales of Shares etc.	0.0	–1.7	0.0	0.0	0.0
Extra Dividends	–0.1	–0.2	–1.0	0.0	–3.4
On-Lending	13.0	19.0	–52.9	17.8	16.3
Other Adjustments	–6.8	–3.8	0.8	3.4	–7.5
Accruals	–2.2	2.7	0.0	38.6	–50.5
Of Which: Tax Accruals	11.3	–26.3	9.6	34.0	–38.2
Interest Accruals	13.6	–20.4	5.0	9.0	–0.5
Other	9.6	–34.1	1.4	3.0	0.0
Central Government Net Lending	**75.3**	**62.0**	**60.3**	**–142.4**	**–46.0**
Central Government Borrowing Requirement[1]	–61.8	–80.0	–111.9	205.1	0.9
Stock-Flow Adjustments. Central Government Debt	35.0	11.9	–31.1	–29.1	–7.4
Central Government Debt, Change	–26.8	–68.2	–143.0	176.0	–6.5
Central Government Debt	**1 265**	**1 197**	**1 054**	**1 230**	**1 224**
Per cent of GDP	*27.4*	*24.8*	*21.0*	*25.0*	*23.6*

[1] The central government borrowing requirement is equal to the budget balance with the sign reversed.

Sources: Statistics Sweden, Swedish National Debt Office, Swedish National Financial Management Authority and NIER.

Table A29 Central Government Expenditure Ceiling

SEK billion unless otherwise indicated

	2017	2018	2019	2020	2021
Central Government Expenditure Ceiling	**1 274**	**1 337**	**1 351**	**1 392**	**1 443**
Per cent of Potential GDP	*27.8*	*28.0*	*27.0*	*27.0*	*27.0*
Capped Expenditure	1 229	1 282	1 308	1 448	1 412
Per cent of Potential GDP	*26.9*	*26.9*	*26.2*	*28.1*	*26.4*
Budgeting Margin	**45**	**55**	**43**	**–56**	**31**
Per cent of Capped Expenditure	*3.6*	*4.3*	*3.3*	*–3.9*	*2.2*

Sources: Swedish National Financial Management Authority, Ministry of Finance and NIER.