

Updated Economic Outlook April 2020

The National Institute of Economic Research (NIER) is a Swedish government agency accountable to the Ministry of Finance. We produce forecasts to support decisions on economic policy in Sweden, analyse economic developments and conduct economic research.

Published four times a year, our report *Konjunkturläget* contains a forecast for the Swedish and global economies as well as more in-depth special analyses of relevant economic topics. *The Swedish Economy* is an English translation of the summary and selected special analyses from *Konjunkturläget*. In August, a brief update of the economic outlook is made, which includes a handful of pages with tables and graphs. Such an update is also being made in April 2020 due to the covid-19 pandemic.

All of our reports can be downloaded from our website at <a href="www.konj.se/english">www.konj.se/english</a>. The forecast reports are available at <a href="www.konj.se/swedisheconomy">www.konj.se/english/data-sets</a>.

# Preface

Ylva-Hedén Westerdahl, director of the forecasting, has led the work to produce this forecast update. The forecast is based on available statistics published up to and including the 27th of April 2020.

Stockholm, April 2020

Urban Hansson Brusewitz Director-General

# Contents

Updated economic outlook	5
Macroeconomic base scenario	
Government finances	
	,
Alternative scenario	.14

# Updated economic outlook

Developments in April suggest that the COVID-19 pandemic will hit the Swedish economy much harder than anticipated in The Swedish Economy, April 2020. The global economy is faring worse than expected, which is affecting Swedish exporters also battling with disruption in international supply chains. The NIER's business and consumer confidence indicators fell in April to new lows and point to a rapid and severe downturn, not least in large parts of the service sector. This picture is supported by the Agency for Economic and Regional Growth having received applications under the short-time work programme for more than 350,000 employees in recent weeks. Together with the government's other support measures, this will slow the rise in unemployment. In the NIERs updated base scenario, GDP drops 7 per cent this year, and the support measures cause general government net lending to fall to -6 per cent of GDP. Sweden's relatively low Maastricht debt means that there is nevertheless considerable scope to step up the support measures in order to limit the economic downturn and promote the subsequent recovery, should this be deemed necessary.

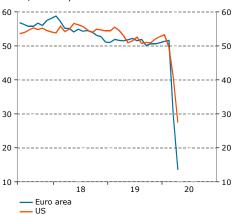
## Macroeconomic base scenario

It is now clear that the COVID-19 pandemic will have very considerable negative consequences for the global economy. To limit the spread of infection, the authorities in most countries have, to varying degrees, shut down non-essential activities and imposed limits on social contact. These restrictions have complicated international trade and disrupted international supply chains. The abrupt economic downturn is clearly reflected in various surveys conducted in April. For example, the purchasing managers' indices (PMIs) in both the US and the euro area have slumped to extremely low levels (see Diagram 1). The bleak outlook is also evident in the stock markets, which have plummeted since the beginning of the year, albeit with a slight rally in recent weeks (see Diagram 2).

The International Monetary Fund (IMF) is currently forecasting that GDP will fall by 7.5 per cent this year in the euro area and almost 6 per cent in the US.1 The IMF also predicts that world trade will shrink by 11 per cent this year, which is supported by a very sharp fall in the Container Throughput Index in February.<sup>2</sup> The global outlook is thus much weaker than the NIER anticipated only a month ago in *The Swedish Economy*, April

Diagram 1 Purchasing manager index in the Euro area and the US (composite)

Index, monthly values



Note. A value of 50 indicates unchanged activity.

Sources: IHS Markit and Macrobond.

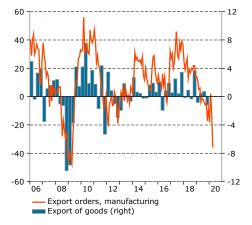
**Diagram 2 Stock markets** Index 2006-12-29=100, daily values, 5-day moving average



Sources: Standard & Poor's, Nasdaq OMX, STOXX

Diagram 3 Export orders in the manufacturing industry and export of goods

Balances, seasonally adjusted monthly values and percentage change, seasonally adjusted quarterly values



<sup>&</sup>lt;sup>1</sup> See World Economic Outlook, April 2020, <a href="www.imf.org/en/Publications/WEO/Is-">www.imf.org/en/Publications/WEO/Is-</a> sues/2020/04/14/weo-april-2020.

<sup>&</sup>lt;sup>2</sup> The Container Throughput Index measures the volume of containerised cargo passing through most of the world's major ports. The index is published monthly by RWI Essen and can be accessed via www.isl.org/en/containerindex.

2020 (published on 1 April). The base scenario in this update assumes that global GDP decreases by 3 per cent this year, which is in line with the IMF's latest forecast (see Table 1).

#### SWEDISH EXPORTS WILL PLUMMET IN SECOND QUARTER

The sharp downturn in the rest of the world has led to a decline in export orders for the vast majority of Swedish manufacturers (see Diagram 3). The share of firms reporting a lack of demand as the main constraint on production nevertheless decreased slightly in the April confidence survey. Instead, the share of firms citing "other factors" soared to a record high (see Diagram 4). In all probability, this is a result of firms having problems sourcing intermediates due to disruption in international supply chains. At the same time, the net balance for manufacturers' production plans tumbled to by far the lowest level recorded since the monthly measurements began in 1996 (see Diagram 5). The overall manufacturing confidence indicator also nose-dived in April to around the same low levels as when the financial crisis erupted in 2008 (see Diagram 6).

The NIER now expects Swedish exports to fall by 18 per cent in the second quarter this year (see Diagram 7). This is a much steeper decrease than anticipated in the base scenario in The Swedish Economy, April 2020.

## RESTRICTIONS AND CHANGES IN BEHAVIOUR WILL REDUCE CONSUMER SPENDING

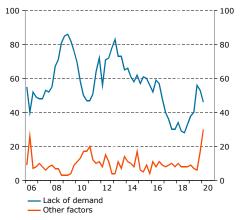
Hotels and restaurants, the travel industry and sporting and cultural events are being hit hard by both official restrictions and changes in the population's behaviour. Other parts of the service sector are also greatly affected. The confidence indicator for the service sector as a whole slumped in April to by far the lowest level since measurements began in 1996 (see Diagram 6). All of the sub-indices included in the indicator fell to their lowest recorded levels. An abrupt decline in expected demand contributed most to the decrease in the confidence indicator (see Diagram 5).

Sentiment has also deteriorated greatly in the retail trade. The confidence indicators for specialist retailers, wholesalers and the motor trade fell markedly in the April survey. On the other hand, the indicator for food retailers climbed to its highest since measurements began in 2000, with the segment benefiting from the restrictions and recommendations on social distancing. Despite the brighter situation for food retailers, the confidence indicator for the retail trade as a whole has plunged to levels similar to those when the financial crisis broke out in 2008.

The economic downturn will hit many households hard as firms go under, unemployment rises, and asset prices fall. The bleak economic outlook for households is reflected in the consumer confidence indicator, which fell in April to the same low levels as when the financial crisis hit in 2008 (see Diagram 8).

Diagram 4 Main production limitation, manufacturing industry

Share of respondents in per cent, seasonally adjusted quarterly values



Source: NIER

**Diagram 5 Production plans** Balances, seasonally adjusted monthly values



Note. For private service sectors this refers to expected demand

Source: NIER.

**Diagram 6 Confidence indicators** Index mean=100, seasonally adjusted monthly values



Source: NIER.

Households did not, however, rein in their spending to any great extent at the start of the financial crisis. This time, the situation for households is radically different. Restrictions to limit social contact and changes in behaviour are expected to send household consumption tumbling by more than 10 per cent in the second quarter. This is a far greater decrease than anticipated a month ago (see Diagram 8).

## SWEDISH GDP WILL FALL 11 PER CENT IN THE SECOND **QUARTER**

In the NIER's updated base scenario, Swedish GDP decreases by 11 per cent in the second quarter this year (see Diagram 9). This is a downward revision of more than 4 percentage points relative to the base scenario in *The Swedish Economy*, April 2020. A drop in output of 11 per cent in a single quarter is very large by historical standards. This assumption is, however, associated with unusually great uncertainty, partly because it is hard to gauge what the exceptional changes in indicators such as business and consumer confidence mean for actual production and demand.

Just as in the base scenario in *The Swedish Economy*, April 2020, the economy is expected to begin to grow again in the third quarter this year. Over 2020 as a whole, GDP is assumed to decrease by 7 per cent (see Table 1). The downturn will therefore be particularly deep, and the economy is expected to take a long time to recover. At the end of next year, the economy is expected to have recovered to the extent that GDP is back around the same level as in the fourth quarter of 2019 (see Diagram 7).

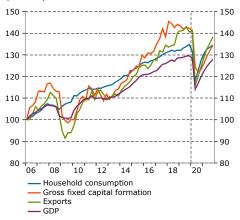
#### SUPPORT MEASURES WILL LIMIT RISE IN UNEMPLOYMENT

The sudden downturn in the Swedish economy is also clear from firms' responses to the Business Tendency Survey's questions on employment. The indicator for current employee numbers fell sharply in April, with 26 percentage points more firms reporting a decrease in their workforce than an increase (see Diagram 10). The indicator for firms' employment plans fell even further and is now at its lowest since measurements began in 2001. The statistics for redundancies also show that the labour market is continuing to worsen rapidly. More than 40,000 people were given notice of redundancy in March, and more than another 20,000 in the first 26 days of April, which are record levels (see Diagram 11). Both employment and the labour force contracted sharply in March according to Statistics Sweden's Labour Force Survey (LFS), which suggests that many temporary and hourly-paid workers lost their jobs as early as last month. Taken together, this paints a much bleaker picture of the labour market than presented in *The Swedish Economy*, April 2020.

The decline in employment is, however, being slowed by a large proportion of workers in the business sector moving onto shorter hours under the temporary legislation on short-time

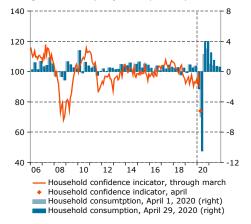
Diagram 7 Household consumption. gross fixed capital formation, exports and GDP

Index 2006 quarter 1=100, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER

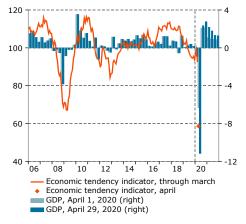
**Diagram 8 Household confidence** indicator and household consumption Index mean=100, monthly values and percentage change, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER

Diagram 9 Economic tendency indicator and GDP

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

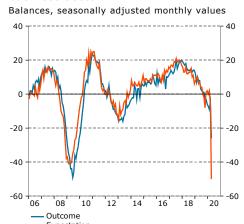


working. In The Swedish Economy, April 2020, the NIER assumed that an average of 100,000 people would work short-time during the second, third and fourth quarters this year. The number of applications under the short-time work programme has been much higher than expected, however, and already now cover more than 350,000 employees. The maximum reduction in working hours has also been temporarily raised from 60 to 80 per cent for the period from May to July, with the level of government subsidy then amounting to 75 per cent. The NIER now expects the number of people working short-time to average 360,000 in the second quarter this year, before falling slowly during the second half of 2020 as the economy picks up.

This extensive short-time working means that employment will fall much less in the second quarter than hours worked (see Diagram 12). There will nevertheless be a considerable increase in unemployment. The assumption now is that the jobless rate will rise to 11.5 per cent in the second quarter, which is around 2.5 percentage points higher than in the base scenario in *The Swe*dish Economy, April 2020. Without the short-time work programme, unemployment could have topped 15 per cent. Unemployment will ease somewhat during the autumn as the economy recovers, but only modestly, because the recovery will result primarily in increased working hours for those working short-time. At the beginning of next year, the temporary legislation on short-time working will expire, but the NIER assumes that the government will have activated the option of short-time working with the government paying a third of the cost. Since the level of subsidy is then much lower, the number of people covered by this support is expected to fall sharply, causing unemployment to rise again in early 2021.

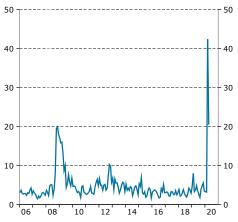
The extensive use of short-time working in 2020 and the relatively high level of government subsidy will help rein in unemployment and business failures. The short-time work programme and reduction in employer contributions are key components of the policy to ease the economic downturn. At the same time, these measures entail considerable costs for central government (see the section "Government finances" below). General government net lending is expected to be deeply negative this year (see Table 1), and fiscal policy will be expansionary. Should support for the business sector need to be stepped up further to soften the economic downturn, the NIER believes that there is still considerable scope to do so because the Maastricht debt is still relatively low, although it will grow this year (see Diagram 14). Risks of a more negative macroeconomic outcome than assumed in the base scenario dominate, however, as illustrated in the special analysis "Alternative scenario". In this alternative scenario, Maastricht debt climbs to more than 50 per cent of GDP in 2021 even in the absence of additional active fiscal policy. It is therefore important to leave space for a fiscal response in case the situation turns out worse than in the base scenario.

Diagram 10 Recruitment plans in business sector



Source: NIFR.

Diagram 11 Redundancy notices Thousands, monthly values



Note. For April, redundancy notices received up to and including April 26.

Sources: The Swedish Public Employment Office

Diagram 12 Employed and hours worked

Index 2006 quarter 1=100, seasonally adjusted quarterly values



#### THE RIKSBANK WILL NOT LOWER THE REPO RATE

In The Swedish Economy, April 2020, we predicted that CPIF inflation – the increase in the consumer price index with a fixed interest rate - would slow to 0.5 per cent this year and climb back up to 1.4 per cent next year. This picture is largely unchanged despite the even bleaker economic outlook. The Riksbank has been clear in its communication that it does not envisage reducing the repo rate to below 0 per cent despite the weak inflationary outlook and the particularly deep economic downturn now looming. The NIER believes that it would be appropriate to lower the repo rate, although in the current circumstances this is not the Riksbank's most important tool for supporting the financial system and countering the economic downturn.

Table 1 Updated base scenario and revisions relative to the base scenario in The Swedish Economy, April 2020 (published April 1, 2020)

Percentage change and percentage points, unless otherwise indicated

	2019	2020	Diff	2021	Diff
Global GDP	2.9	-3.0	-2.2	5.8	1.4
GDP Sweden, Market Prices	1.2	-7.0	-3.9	4.8	1.3
Employment	0.7	-3.7	-2.1	-0.3	-0.4
Unemployment Rate <sup>1</sup>	6.8	10.2	1.5	11.0	2.1
Hourly Earnings <sup>2</sup>	3.9	5.1	2.8	-0.4	-2.6
CPI	1.8	0.6	0.1	1.5	0.2
CPIF	1.7	0.5	0.1	1.5	0.2
Repo Rate <sup>3,4</sup>	-0.3	0.0	0.0	0.0	0.0
Government Net Lending <sup>5</sup>	0.4	-6.3	-2.7	-3.2	-1.3
Maastricht Debt <sup>5</sup>	35.1	44.7	3.8	44.2	4.5

 $<sup>^{\</sup>mathrm{1}}$  Per cent of labour force.  $^{\mathrm{2}}$  According to the national accounts, for the business sector. 3 Per cent. 4 At year-end. 5 Per cent of GDP.

Note. Hourly earnings according to the national accounts is greatly affected by the short-time work scheme in 2020 and 2021, see The Swedish Economy, April 2020.

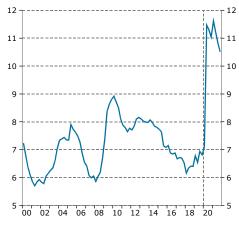
Note. The difference refers to the difference between the current base scenario and the base scenario in The Swedish Economy, April 2020. A positive value means an

Sources: Statistics Sweden and NIER.

# Government finances

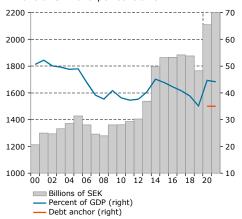
The government has taken numerous steps in recent months to support firms, households and local government through the slump in economic activity. The NIER expects even more measures to be introduced during the course of this year. In the NIER's base scenario, general government net lending deteriorates to -6.3 per cent of GDP in 2020, with Maastricht debt rising by around 10 percentage points to almost 45 per cent of GDP. This is much more negative than anticipated in *The Swe*dish Economy, April 2020 and is due to both more negative

**Diagram 13 Unemployment** Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 14 Maastricht debt Billions of SEK and per cent of GDP



macroeconomic developments and more extensive fiscal support measures.

#### FISCAL MEASURES IN 2020 AND 2021

In March and April, the Swedish government presented a number of additional amending budgets with support for firms, households and local government. The spring amending budget contained further support announced in March and April but not specified in an additional amending budget. Altogether, the measures in these amending budgets that affect net lending amount to SEK 105 billion in 2020 (see columns 3 and 4 in Table 2).

Applications to the Agency for Economic and Regional Growth under the short-time work programme have risen rapidly. In The Swedish Economy, April 2020, the NIER assumed that an average of 100,000 people would work short-time during the last three quarters of the year, while the government assumed 120,000 in the spring fiscal policy bill on 15 April. In its updated base scenario, the NIER now assumes an average of 316,000 people. Given an average decrease in working hours of 65 per cent, this will cost SEK 57 billion (accounting for around half of total transfer payments to firms - see Table 2).

The NIER also assumes that some of the measures presented by the government will be needed for longer than the government has so far indicated (see the box "Spring 2020 measures"). These include the assumption of responsibility for sick pay and the replacement of the qualifying-day deduction from sick pay for the first day of sickness absence with sickness benefit, which the NIER assumes will be extended to the end of September.

The NIER believes that further support for local government and firms beyond that already decided or announced for 2020 is appropriate. The NIER also assumes that the government will transfer an additional SEK 20 billion to municipalities and regions in the form of central government grants, mainly to counter a decline in tax revenue, and add another SEK 50 billion in support for firms. This increased support for firms could take the form of the measures costed in the box "Direct government cost of alternative rules and volumes" below, namely an increase in the duration or size of the reduction in employer contributions, and increased central government support through the short-time work programme. Other measures could also be introduced to cut firms' costs.

When it comes to 2021, the NIER assumes that parts of the support for local government and firms assumed for 2020 will continue, but they may not take the same form as this year. In addition, the NIER assumes that the higher and broader unemployment benefit entitlements will continue next year. There is unusually great uncertainty, however, and our view of developments in 2021 may well undergo substantial revisions. The

#### Spring 2020 measures

Government measures in response to COVID-19

- Support for various authorities
- Central government grants to local government
- The short-time work programme
- Sickness benefit instead of a qualifyingday 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

- Government continues to be responsible for sick pay from June to September
- Sickness benefit instead of the qualifyingday deduction from sick pay for the first day of sickness absence continues from June to September
- Further support for firms
- Further compensation for local government in the form of central government grants

NIER will therefore present an updated view of appropriate fiscal policy in 2021 in The Swedish Economy, June 2020.

Table 2 Fiscal measures for 2020

SEK billion

	ВВ	FC AAB	AABs	SAB	NIER FP	Total
Expenditure (a)	16.5	1.7	26.2	46.1	125.5	215.9
Central government consumption	5.0	-0.1	0.2	5.5	0.0	10.5
Central government grants to local government	7.4	2.0	2.0	22.8	20.0	54.2
Transfers to firms	-1.1	0.0	13.3	17.5	96.9 <sup>1</sup>	126.6
Transfers to local government	0.0	0.0	1.7	0.0	3.3	5.0
Transfers to households	-0.1	-0.2	9.0	0.3	5.3	14.3
Transfers to abroad	1.3	0.0	0.0	0.0	0.0	1.3
Government investment	4.0	0.0	0.0	0.0	0.0	4.0
Revenue (b)	-14.4	1.7	-32.7	0.0	0.0	-45.4
Household direct taxes	-12.2	0.0	0.0	0.0	0.0	-12.2
Production taxes	-2.6	1.7	-32.7	0.0	0.0	-33.6
Product taxes	0.5	0.0	0.0	0.0	0.0	0.5
Impact on central govern- ment net lending (b-a)	-30.9	0.0	-58.9	-46.1	-125.5	-261.3

<sup>&</sup>lt;sup>1</sup> This figure includes the NIER's assumption of further support for firms of SEK 50 billion. This could cover a range of support measures (see, for example, the box "Direct government cost of alternative rules and volumes" below). In addition to this SEK 50 billion, the figure includes the effects of larger volumes and longer durations – for example, the extension of the period in which central government assumes responsibility for sick pay until September (see the box "Spring 2020 measures"), and a higher number of people being covered by the short-term work programme, with the NIER assuming that an average of 316,000 people work short-time during the last three quarters of this year rather than the 120,000 assumed by the government. This volume effect could also be seen as being part of the automatic stabilisers rather than as a part of active fiscal policy.

Note. "BB" stands for the Budget Bill for 2020. "FC AAB" refers to the additional amending budget from the Finance Committee that was approved by the Riksdag on 19 February. "AABs" refers to the other additional amending budgets (bills 2019/20:132, 136, 142, 146 and 151). "SAB" denotes the spring amending budget of 15 April. The government's expenditure tables in the spring amending budget also included SEK 11 billion as a result of larger volumes in the unemployment insurance and parental benefit insurance schemes. This is ignored in the table above. The column labelled "NIER FP" contains the fiscal policy that the NIER is assuming over and above that presented in budgets to date.

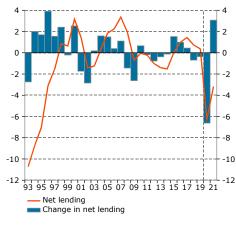
Source: NIER.

#### **NET LENDING IN 2020 LOWEST SINCE 1990S CRISIS**

Net lending drops to -6.3 per cent of GDP in 2020 in the updated base scenario, which is the lowest level since the 1990s crisis (see Diagram 15). In the NIER's alternative scenario, where macroeconomic developments are even worse, net lending falls to -8.5 per cent of GDP.3

The fiscal measures that have been introduced, and that the NIER assumes will be strengthened to support firms, households and local government, mean that general government net lending will decline (see Table 2). Tax revenue will decrease as a result of the deep downturn in the economy. Next year, net

Diagram 15 Government net lending Per cent of GDP



<sup>&</sup>lt;sup>2</sup> Compensation for sick pay.

<sup>&</sup>lt;sup>3</sup> See the special analysis "Alternative scenario".

lending is expected to improve to -3.2 per cent of GDP, partly because the economy will begin to recover and partly because some of this year's fiscal measures are only temporary and will not continue in 2021.

In the updated base scenario, Maastricht debt will be around 45 per cent of GDP this year, up almost 10 percentage points on 2019 (see Diagram 14). Next year, Maastricht debt will decrease marginally as a share of GDP. In the NIER's alternative scenario below, Maastricht debt is around 48 per cent of GDP in 2020 and climbs further to 53 per cent in 2021.

The increase in Maastricht debt this year is due partly to negative net lending and partly to the government's steps to bolster firms' cash position, such as grace periods for tax payments.4 These cashflow measures will not impact on central government net lending but will affect central government debt and so Maastricht debt. The increase in Maastricht debt as a share of GDPis also due to the large drop in GDP..

### Direct government cost of alternative rules and volumes

This box presents estimates of the direct cost of alternative assumptions for rules and volumes. Other effects, on the likes of production and employment, are not considered.

## Employer contributions

The government has introduced a temporary reduction in employer contributions from March to June 2020, such that employers pay only the old-age pension component for the first 30 employees, with a capon earnings up to SEK 25,000 per month. This is estimated to cost SEK 30 billion. This measure could be expanded in a number of ways. An increase in its duration would cost SEK 8 billion per month. Including the old-age pension contribution in the reduction would cost a further SEK 4 billion per month. Raising the limit on the number of employees covered by the reduction from 30 to 100 would cost SEK 2 billion per month. Were the limit on earnings instead to be raised from SEK 25,000 to SEK 35,000 per month, more would benefit from the reduction as fewer would exceed the ceiling. With average monthly earnings of SEK 30,000, this would cost central government SEK 1.5 billion per month.

<sup>&</sup>lt;sup>4</sup> The limit for loans from the Swedish Export Credit Corporation has been raised from SEK 125 billion to SEK 200 billion. In March, the corporation decided to use SEK 10 billion of its total limit, increasing central government debt by the same amount. The government has also issued extensive guarantees through its "företagsakuten" emergency package for firms. Any credit losses in excess of the fees for these schemes will adversely affect central government net lending and central government debt.

#### The short-time work programme

The NIER assumes that an average of 316,000 people will be covered by the short-time work programme during the last three quarters of the year, but this estimate is very uncertain. Were the number of people covered by the programme to be 100,000 higher on average during the period, this would cost SEK 18 billion more over the year as a whole.

Were these 316,000 people to have their hours cut by 65 per cent during the second quarter when there is also a reduction in employer contributions, and then be furloughed completely in the third and fourth quarters, the cost of the programme would rise to around SEK 80 billion in 2020. This corresponds to an average reduction in working hours of almost 90 per cent in the last three quarters of the year. This can be compared with a cost of SEK 57 billion under the NIER's assumption in the base scenario of an average reduction in working hours of around 65 per cent during the same period.

In 2021, the NIER estimates that an average of 44,000 people will work short-time. Were the level of subsidy to be raised from 33 per cent to the same level as for this year's short-time work programme, namely 75 per cent, this would cost an additional SEK 5 billion in 2021. Were the volume also to be higher than assumed by the NIER, with the programme covering 100,000 people rather than 44,000, this would cost SEK 12 billion more in 2021.

# **Special Analysis**

# Alternative scenario

The short-term outlook for both the global economy and the Swedish economy is still very uncertain. The NIER believes that the risks to the base scenario are mainly to the downside. The dominant risk to the economic outlook is the spread of the COVID-19 pandemic and how the measures taken to slow the rate of infection affect the behaviour of households and firms. An even more severe level of contagion would not only affect human health but also put further pressure on the economy. Global GDP growth could be even lower than in the base scenario if more drastic steps are taken to reduce infection, or if current measures remain in place for longer. Disruption of production in various countries may become more pronounced, with more businesses failing or experiencing greater losses of productivity. There is also a risk that the economic support packages for households and firms being introduced by governments will not be enough. These factors, individually or collectively, could lead to lower GDP growth abroad than in the base scenario both this year and next.

There is also a risk of domestic demand in Sweden being weaker than in the base scenario. Should more drastic action be taken to reduce the spread of infection, or the current restrictions remain in place for longer, this could lead to even weaker household consumption than in the base scenario. It could also result in more pronounced disruption of production. A further decline in share prices could undermine household consumption through reduced wealth and increased precautionary saving. A similar effect would occur if consumers' expectations for the economy become more negative. Some or all of these underlying causes of a worse outcome could coincide.

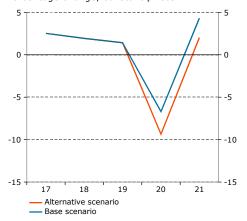
The NIER's general equilibrium model SELMA<sup>5</sup> can be used to analyse a more negative path for both the global economy and the Swedish economy. This is represented in SELMA by lower demand for goods and services than in the base scenario both abroad6 and in Sweden.7

#### What is an alternative scenario?

This chapter presents a possible path for the economy other than that described in the base scenario. It sets out different economic assumptions compared to the base scenario, and the effects these alternative assumptions might have on the Swedish economy.

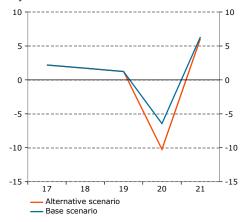
The alternative scenario is made using the NIER's general equilibrium model SELMA. The analysis presented is based on the results from the model. It is therefore entirely dependent on the assumptions made in the model.

Diagram 16 Global GDP Percentage change, constant prices



Note, Global refers to KIX6. Sources: OECD, Eurostat, Macrobond and NIER.

Diagram 17 Household consumption Percentage change, constant prices, calendaradjusted values



<sup>&</sup>lt;sup>5</sup> For a presentation of SELMA, see "SELMA – Technical documentation" at www.konj.se.

 $<sup>^{6}</sup>$  The foreign economy is represented in the diagrams by the KIX6 countries, i.e. all of the countries in the euro area plus the US, Norway, the UK, Denmark and Japan.

<sup>&</sup>lt;sup>7</sup> SELMA does not model explicitly how a pandemic would impact on the economy. Supply disruptions such as higher sickness absence, school closures and non-deliveries cannot be modelled explicitly in SELMA.

#### LOWER GDP GROWTH ABROAD

The alternative scenario is illustrated by the red line in the diagrams. In this scenario, GDP growth abroad is assumed to be almost 3 percentage points lower than in the base scenario in 2020 (see Diagram 16).8 The decline is assumed to be temporary, but growth is still lower in 2021.9

#### **DEEPER DOWNTURN IN SWEDEN**

The lower demand abroad than in the base scenario means that demand for Swedish exports is even weaker. Reduced domestic demand in Sweden is captured in SELMA by Swedish households being assumed to want to consume less and so save more in 2020 (see Diagram 17). In the alternative scenario, consumption growth in 2020 is almost 4 percentage points lower than in the base scenario. These effects are assumed to be temporary.

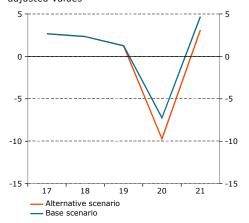
The lower levels of household consumption, investment and exports all contribute to lower GDP growth (see Diagram 18) and so a wider output gap than in the base scenario in both 2020 and 2021. CPIF inflation is also down, thanks to lower import prices and lower domestic inflation.<sup>10</sup> The alternative scenario assumes that the Riksbank does not lower the repo rate but keeps it at 0 per cent throughout 2020 and 2021, just as in the base scenario.11

## Unemployment

Unemployment rises and is estimated to be 3 percentage points higher than in the base scenario in 2021 (see Diagram 19). SELMA models the number of hours worked in the economy but not unemployment. To estimate how unemployment might move in the alternative scenario, certain assumptions must be made. For further information, see the alternative scenario in The Swedish Economy, April 2020.

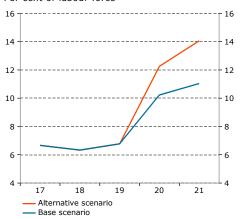
The alternative scenario assumes that fiscal policy acts through the automatic stabilisers, but that no discretionary fiscal policy is

Diagram 18 Swedish GDP Percentage change, constant prices, calendaradjusted values



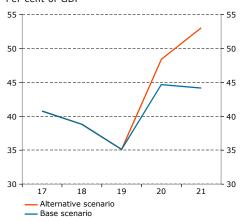
Sources: Statistics Sweden and NIER.

Diagram 19 Unemployment (estimated) Per cent of labour force



Sources: Statistics Sweden and NIER.

Diagram 20 Maastricht debt Per cent of GDP



 $<sup>^{8}</sup>$  The size of the decrease should not be taken as the NIER's prediction of the effects of the spread of COVID-19, but as an example.

 $<sup>^{9}\ \</sup>mathrm{For}\ \mathrm{a}\ \mathrm{more}\ \mathrm{detailed}\ \mathrm{description}$  of how the foreign economy is affected, see the alternative scenario in The Swedish Economy, April 2020.

 $<sup>^{10}</sup>$  For a more detailed description of how the Swedish economy is affected, see the alternative scenario in The Swedish Economy, April 2020.

<sup>&</sup>lt;sup>11</sup> This should be viewed as an example and not as the NIER's view of optimal monetary policy.

pursued beyond that included in the base scenario.12 The combination of lower tax revenue and higher transfer payments to households than in the base scenario means that government net lending declines. The lower net lending and lower GDP lead to higher Maastricht debt than in the base scenario (see Diagram

Once the restrictions to slow the spread of infection can be lifted, the economy will find itself in a deep downturn, at a time when monetary policy has limited room to manoeuvre. In this situation, discretionary fiscal measures of a temporary nature could be used to accelerate the recovery.<sup>13</sup>

 $<sup>^{12}</sup>$  Measures already decided and announced by the government to alleviate the effects of COVID-19 on the Swedish economy are included in the base scenario's fiscal policy.

 $<sup>^{13}</sup>$  The effect of fiscal policy in an economic downturn when monetary policy is constrained by a lower bound was analysed in *The Swedish Economy*, October 2019.