

ARTICLE – Small effects on production and inflation of the summer's drought and forest fires

The drought of the summer of 2018 has hit agriculture and forestry hard with poor harvests and forest fires. Individual farmers and forest owners have lost considerable value, but the macroeconomic effects are deemed to be small. All in all, the drought is expected to mean that GDP growth in the third quarter will be slightly lower than it would if the weather had been more normal. The lack of rain has also led to abnormally low levels of water in reservoirs, which has contributed to rising electricity prices and higher CPIF inflation over the summer. The summer's weather is not expected to have any effect on GDP growth or inflation in the short term.

Major forest fires, but limited impact on GDP

There have been major forest fires in Gävleborg, Jämtland and Dalarna Counties during the summer. Approximately 25,000 hectares of forest, corresponding to 2.6 million cubic metres of forest, valued at about SEK 900 million, has been damaged by fire.¹⁰ Significant economic value has thus been lost, even if the affected areas only make up about one-thousandth of Sweden's forests.

GDP is used to measure the value of the goods and services produced in a country over a certain period. Forestry production takes place continually as forests grow and is recorded in the National Accounts (NA) as stocks of growing forest. When forest is destroyed in some way, such as by fire or storm, the stocks of growing forest are reduced, which, all other factors being equal, has a negative effect on growth.¹¹ However, the forests were not totally destroyed in the fires, but some trees will be usable as saw logs and fuel. This means that stocks of timber, another item in the National Accounts, will increase, so the net effect on companies' stocks will therefore be smaller. In addition, GDP will increase as a consequence of the work carried out due to the fires: firefighting, clearing and repairs. All in all, the effects on GDP growth of the summer's forest fires are expected to be weakly negative.

As a comparison, the effect on stocks of forest and GDP of the major storm that hit Sweden in 2005 and which came to be known as Gudrun can be examined. Gudrun impacted considerably larger areas and almost 30 times as much cubic metres of forest were affected compared to the summer's fires. In the first quarter of 2005, stocks of growing forest decreased, which contributed significantly negatively to GDP growth. However, this was almost completely counteracted

by the increase in stocks of timber. The negative net effect on GDP growth was thereby very small.

Reduced harvests contribute towards increased food prices

The summer's drought has hit both agriculture and livestock farming. The Swedish Board of Agriculture has estimated that the cereal harvest will be almost 30 per cent smaller than last year.¹² The agricultural sector has, however, decreased over time in significance for Sweden's GDP and currently stands for about 0.3 per cent of output. The effect on GDP of lower agricultural output this year is thus expected to be small.

The small harvests have contributed to rising price of wheat and other cereals. This is expected to lead to slightly faster price increases of cereal-based foodstuffs in the autumn. At the same time, feed shortages have made it necessary to conduct the emergency slaughter of livestock, which means that the supply of Swedish meat will increase and prices may be subdued. All in all, rising food prices due to the poor harvest are expected to contribute towards an inflation rate of about 0.1 percentage points higher than it would otherwise have been towards the end of the year.

Temporarily high energy prices

The drought has also led to water levels in Nordic reservoirs becoming very low. As a result, electricity prices have risen.

The rising electricity prices are contributing towards exacerbating the differences between inflation measured as the CPIF and as the CPIF excluding energy. Over the next year, CPIF inflation is expected to exceed CPIF inflation excluding energy. However, this increase will be temporary and, as of the end of next year, the CPIF and the CPIF excluding energy will increase at about the same rate.

¹⁰ See "Skog för över 900 miljoner kronor har brunnit" (Forest worth more than SEK 900 million has burned), press release 23 July 2018, Swedish Forest Agency.

¹¹ It remains unclear whether Statistics Sweden will define the forest fires as a natural disaster. According to the manual of the European System of National and Regional Accounts, in this case, the damaged forests would be recorded in the National

Accounts and the reduced stocks of forest would thus not affect GDP growth negatively.

¹² See "Crop production forecast for cereals and oilseed crops", Statistical Report, JO 29 SM 1801, Swedish Board of Agriculture, 2018.