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# Basic functionality of Statistics Sweden's business cycle clock

Statistics Sweden's business cycle clock contains a number of simple functions that are described here. In the business cycle clock, a number of indicators describing the economy can be monitored over time. The statistics are dynamically linked to the indicators in the tool in various ways. So when you e.g. play the time, it reflects where the indicators are in the business cycle.

A description of the business cycle clock is found below, but if you want to try it yourself, you can use this link: [Statistics Swedens business cycle clock \(arctis.com\)](https://www.scb.se/en/pressroom/2022/06/06-06-2022-1)

The actual business cycle clock is responsive, and is available in a web version and a mobile version. These are slightly different, both in terms of appearance and functionality, but are based on the same fundamental idea.

Figure 1: What the user encounters in the web tool



The user is presented with four different sections, in a two-by-two square. The four-field matrix in the centre with the playback controls coupled with the explanation of symbols and description on the right

form one part of the business cycle clock. The blue fields on the left and at the bottom control the indicators in the diagram below the business cycle clock.

Depending on the screen and resolution, the browser zoom setting may need to be reset before starting to work with the business cycle clock. Optimally, the business cycle clock in the web version should look like Figure 1.

## Basic elements of the business cycle clock

The upper part in the centre is the core of the business cycle clock.

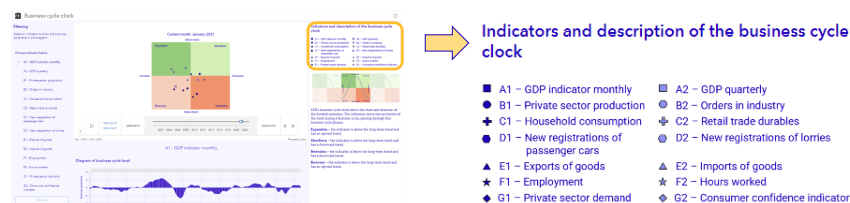
**Figure 2: The centre part of the business cycle clock**



Here, the movement of the 14 economic indicators can be played and paused at any month. The indicators move one revolution clockwise during a business cycle.

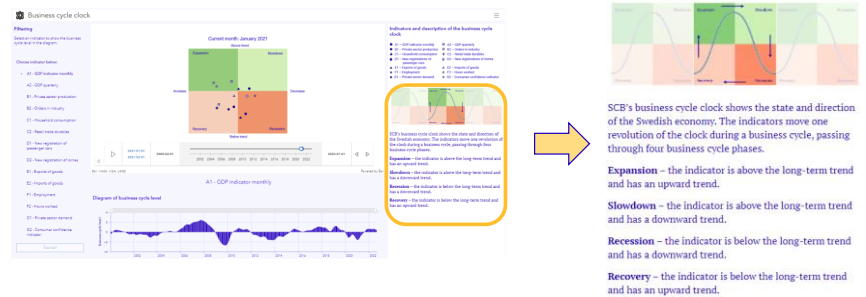
The field at the top right corner can be compared to an explanation of symbols describing where the different indicators in the clock stand. The indicators are grouped in pairs according to seven different subject areas.

**Figure 3: The symbols of the 14 indicators**



The business cycle clock describes the state of the Swedish economy. The lower field on the right describes the four phases of the business cycle – Expansion, Slowdown, Recession and Recovery.

**Figure 4: Description of the four business cycle phases**



On the left, the 14 indicators are available as selectable options for filtering. The choice of indicator is dynamically linked to the diagram in the lower blue field.

**Figure 5: Filtering the diagram by indicator**



When an indicator is selected on the left, the diagram at the bottom is adjusted to show the business cycle level of the selected indicator.

**Figure 6: Business cycle level diagram**



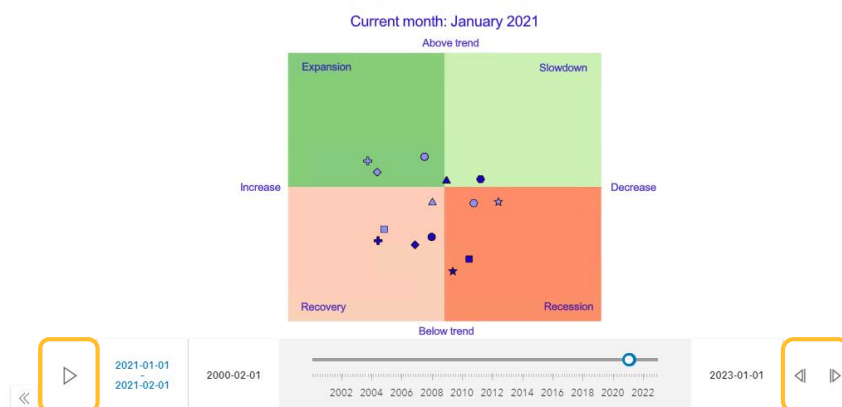
## Business cycle clock playback

In the clock itself, you can choose to play how the 14 indicators automatically move through the four phases of the business cycle. The playback function on the left can be paused at any time at a certain position, or you can click forward or back by month using the arrows on the right. See Figure 7.

The business cycle clock always shows the image from January of the previous year when the analysis tool is opened or the page is refreshed/reloaded.

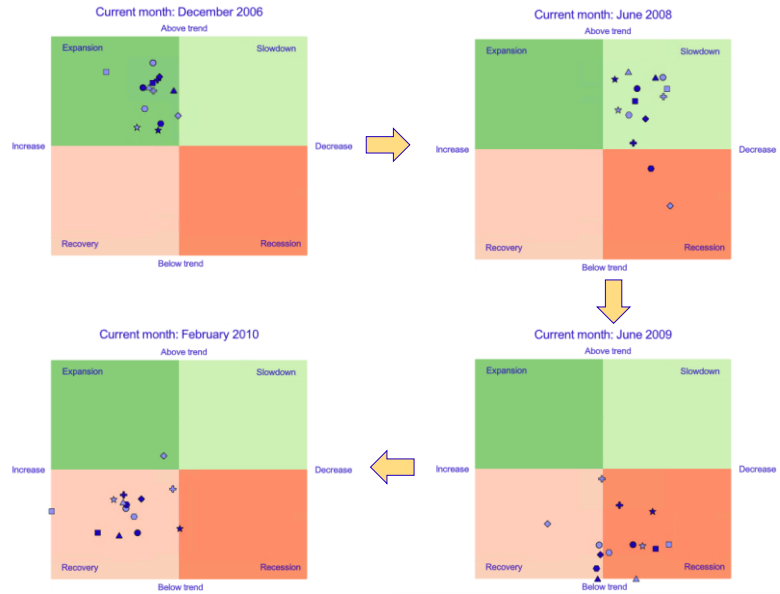
The indicators move month by month to the latest month with values. Playback then starts over at February 2000.

**Figure 7: Different playback options for the business cycle clock**



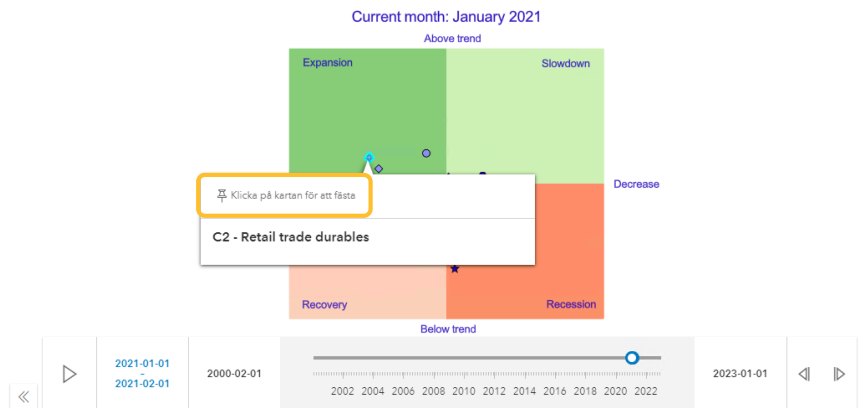
Using the arrows when the clock is paused, you can quickly click to a particular point in the business cycle to study the indicators for a given month and year. See the examples below of the indicators moving from the expansion phase in December 2006 through to the slowdown phase in June 2008 and on the way to recession. In June 2009, the indicators are in the recession phase and then finally in February 2010 have moved into the recovery phase.

**Figure 8: Examples of paused states in the different phases of a business cycle**



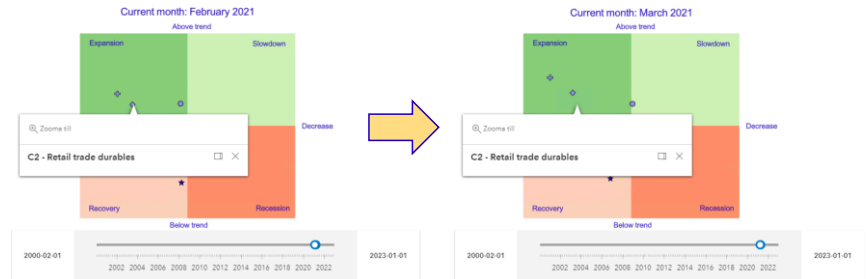
When the mouse pointer is held (hovers) over the symbols of the indicators in the clock, an explanation box about the indicator in question opens. See Figure 9.

**Figure 9: Explanation box for the indicators in the clock**



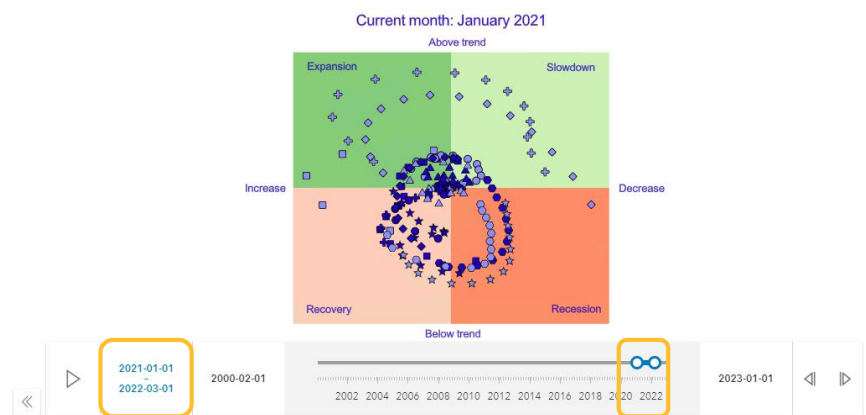
The explanation box can be pinned if necessary, and then you can click forward month by month and follow an indicator’s movement from the month in which you pinned it. See Figure 10.

**Figure 10: The cursor of an indicator pinned at a specific month**



It is also possible to drag the sliders to display any period. If you drag only one slider, multiple months will be displayed simultaneously as shown in the figure below. The date range at the bottom left indicates the period selected with the sliders at the bottom right.

**Figure 11: Sliders' link to indicators over a period**

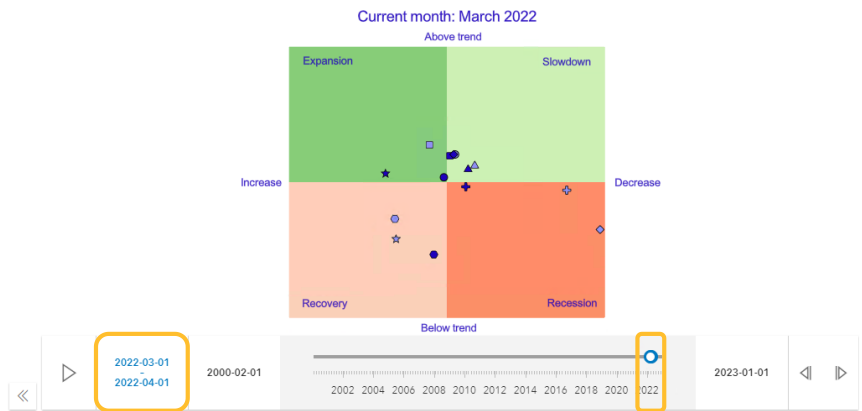


The forward and back arrows can then be used to follow the movement of the whole period to see the different outputs of the indicators.

To display one month only, set the sliders so that the time span covers only one month, like in Figure 12.

You can refresh/reload the page at any time to start over from the original state. The clock will then show the starting period of January of the previous year.

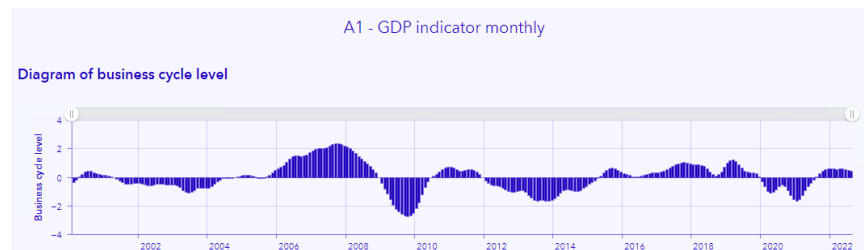
**Figure 12: Slider setting to display the indicators for one month**



## Business cycle clock diagram of business cycle level

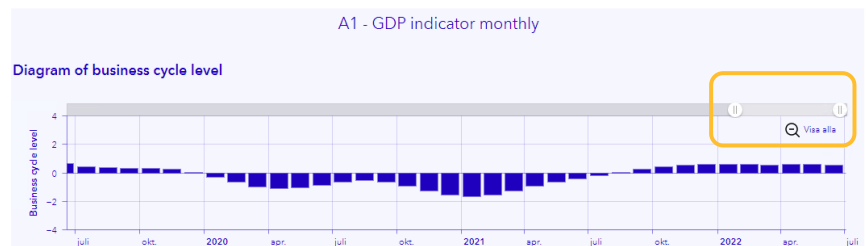
In the left menu, the 14 indicators are available as selectable options to filter the diagram. The selected indicator is shown above the time series diagram; see the figure below. GDP indicator monthly is always shown at start.

**Figure 13: Business cycle level diagram for selected indicator**



It is possible to zoom in to see only part of the time series by dragging the time slider as shown in the figure below. The more you zoom in, the more the months appear. To return to the starting mode, use the magnifying glass with the text “Show all”.

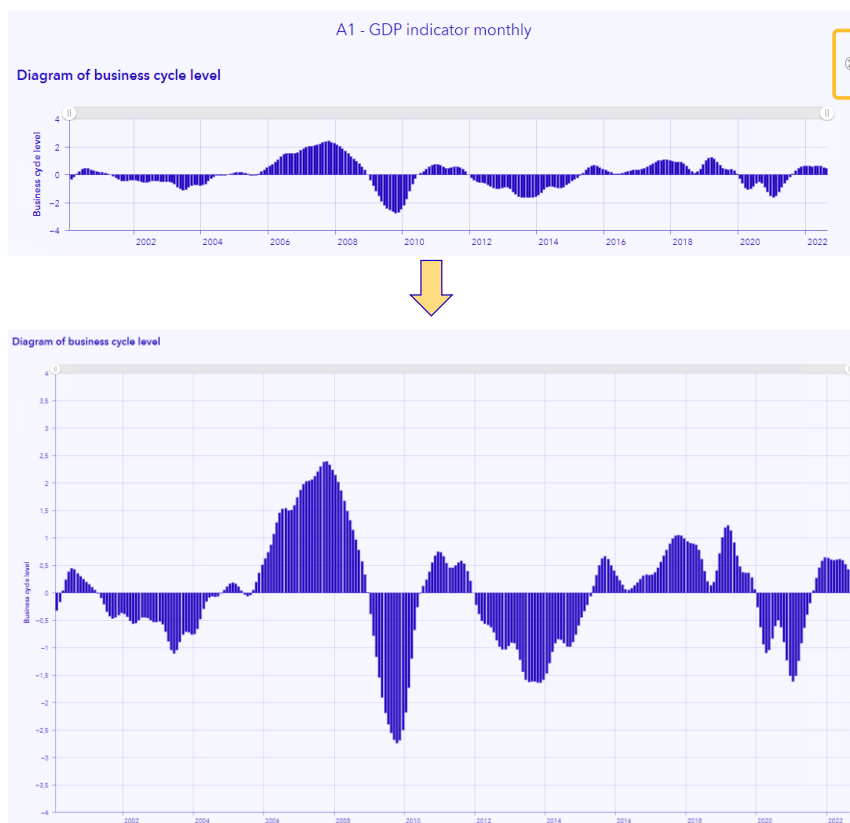
**Figure 14: Zoomed-in mode for the business cycle level diagram**



It is also possible to maximise the window by clicking on the symbol on the right just above the diagram field. See the Figure 15. In maximised mode, it is possible to directly change indicator without having to go back to the previous view.

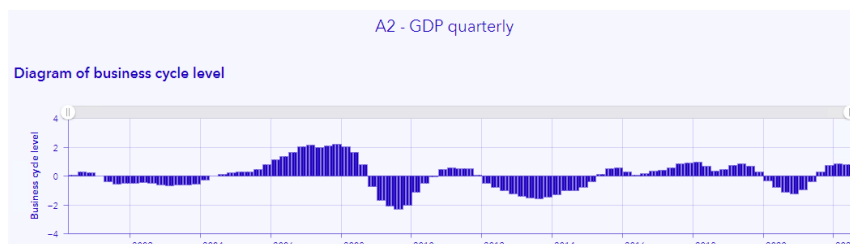
Clicking on the corresponding function in maximised mode returns you to the original diagram size.

**Figure 15: Enlarged mode for the business cycle level diagram**



One of the indicators has a slightly different pattern than the other monthly indicators. This is GDP quarterly, where the value is repeated three months before it is renewed. This creates a more step-like pattern in the figure below for the GDP quarterly indicator.

**Figure 16: Diagram for GDP quarterly**





## Mobile interface of the business cycle clock

In the mobile version, the business cycle clock is divided into three tabs. See Figure 17. The functionality is also somewhat different in order to be practical in this format.

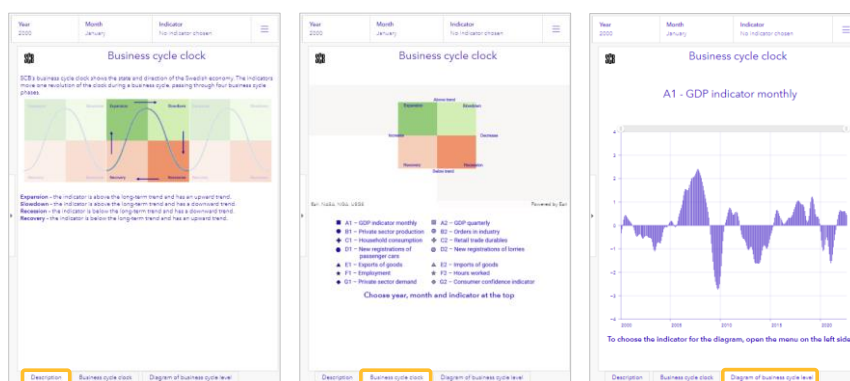
If you have the mobile version but turn your phone/tablet from portrait to landscape, it may switch to showing the web version instead.

What the user first encounters is the description with the different phases of the business cycle under the “Description” tab.

The business cycle clock itself with explanation of the indicator symbols is found in the centre tab, “Business cycle clock”.

The third tab shows the time series diagram for the business cycle level.

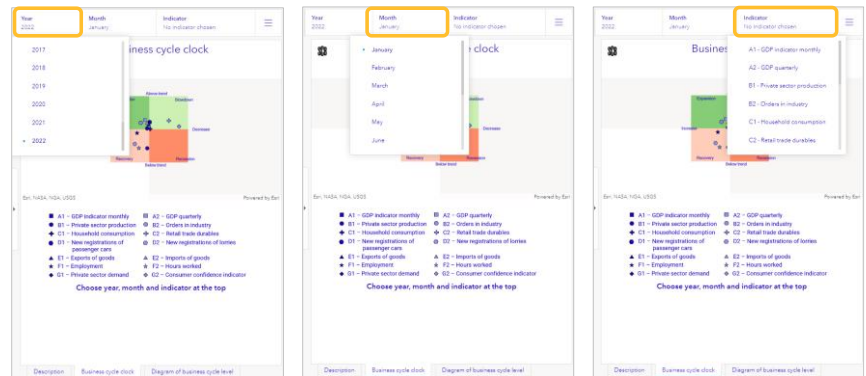
**Figure 17: Mobile interface of the business cycle clock**



## Mobile functionality of the business cycle clock

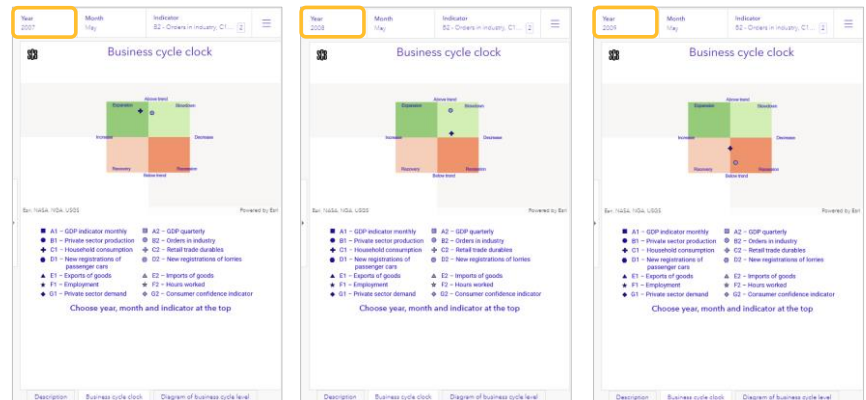
Instead of the playback function, users select the year and month from the menus at the top of the mobile version. See Figure 18. In the third menu at the top, the user can choose whether to follow all indicators or only a selection.

Figure 18: Selecting year, month and indicator for the mobile business cycle clock



In the mobile business cycle clock, the user can e.g. select two indicators and see the change in these two by locking the month and indicator but changing the year. See the image series in the figure below when “Household consumption” and “Orders in industry” are followed for May in the years 2007, 2008 and 2009.

Figure 19: Example of how the mobile business cycle clock can be used

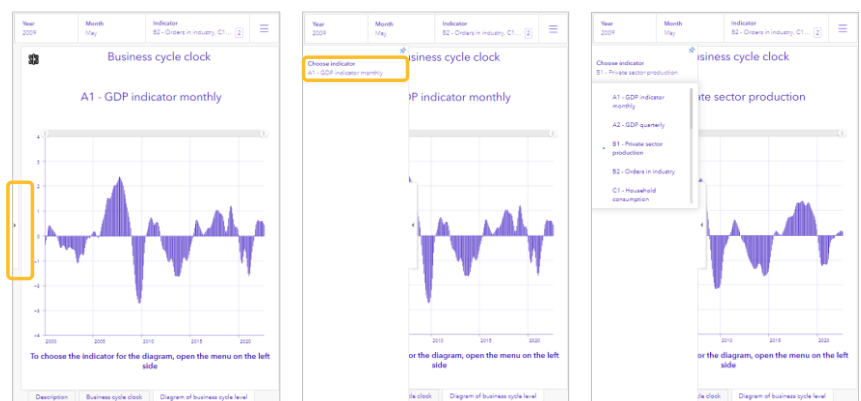


## Mobile functionality for diagram mode

The time series diagram for the 14 indicators can be found under the third tab. GDP indicator monthly is always shown at start. The other indicators are inset on the left at start. See Figure 20 on the left.

When the indicator selection menu is expanded by clicking on the arrow to the left, you can select the indicator to be displayed in the diagram. To see the whole diagram again, the expanded menu can be hidden by clicking on the arrow again.

**Figure 20: Business cycle level diagram in mobile business cycle clock**



## Further reading about the business cycle clock

Under the so-called hamburger menu at the top right corner of both the web and mobile business cycle clock, there are links for further reading about the business cycle clock. There are also links to where the data can be downloaded. See Figure 21.

**Figure 21: Links to further reading and data for the business cycle clock**

