Statistics Netherlands

Dutch Investment Radar: explanatory notes

What is the Investment Radar?

The Investment Radar is an instrument developed by Statistics Netherlands to analyse developments in private sector investment and place them in some sort of context. Using six indicators – selected on the basis of an econometric study - the radar monitors whether circumstances have developed favourably or unfavourably for Dutch private sector investment. Circumstances relevant for private sector investment are, on the one hand, the situation on the commodities markets, and on the other hand, the availability of financial means. The six indicators were chosen because they show a strong correlation with Dutch private sector investments and with the factors described above. With the aid of the various indicators in the Investment Radar, it is possible to analyse the backgrounds of developments of private fixed capital formation. The six chosen indicators are:

- The eurozone interbank interest rate (12 months EURIBOR);
- The year-on-year change of the market value of stocks of Dutch funds and enterprises on the Dutch stock market (Amsterdam Euronext)
- The year-on-year change of the volume of Dutch goods exports
- The level of Dutch consumer confidence
- The level of the capacity utilisation rate of the Dutch manufacturing industry
- Dutch manufacturers' opinions on their order positions.

Consumer confidence, the capacity utilisation rate, goods exports growth and manufacturers' opinions on their order positions reflect the situation on the commodities markets. The interest rate and the market value of stocks give an indication of the situation on the financial markets. The six indicators are chosen on the one hand because they give an indication of the situation on both the goods and the financial markets, and on the other hand because they show a strong correlation with the developments of the volume of private sector investment.

The Investment Radar does not describe a certain period, but gives a snapshot of the investment situation at a certain moment in time. Adjustment in one of the underlying indicators does not result in an adjustment of the snapshot (the photo has already been taken), but will result in a different picture at a later moment in time.

How it works and what it shows

The Investment Radar presents the above-mentioned six indicators in a hexagonal diagram, with each indicator in a corner (figure 1). For each indicator a normalised value is calculated which determines how far from the zero line the indicator is located. The zero line represents the **average** value for each indicator, for the entire period it has been available. A normalised value above zero means that this indicator has **a more**

favourable value than average. If the value is below zero, the indicator has **a less favourable value than average**.

In the radar, the zero line is marked as a dark dotted line. The figure is divided into bands coloured from dark to light orange. The darker the band in which the indicator is located, the less favourable circumstances are for private sector investment. Users can thus see at a glance which indicators show a positive picture, and which a more unfavourable picture. By moving the slide on the time bar, which runs from 1992 to today, users can select previous months. This makes it possible to see whether circumstances for Dutch private sector investment have become more or less favourable, and which factors were significant in these developments.

Figure 1: the Dutch Investment Radar for February 2009

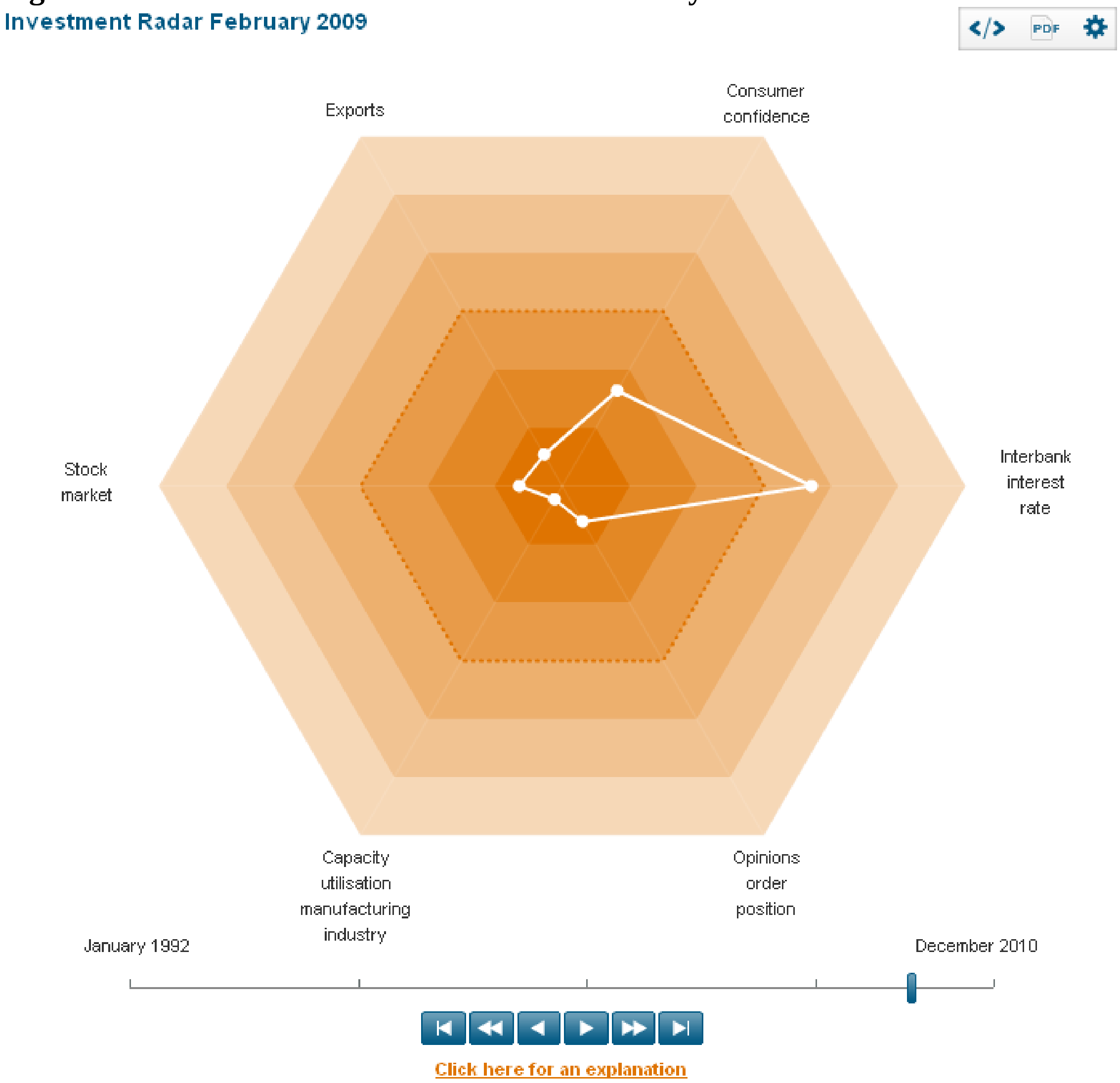
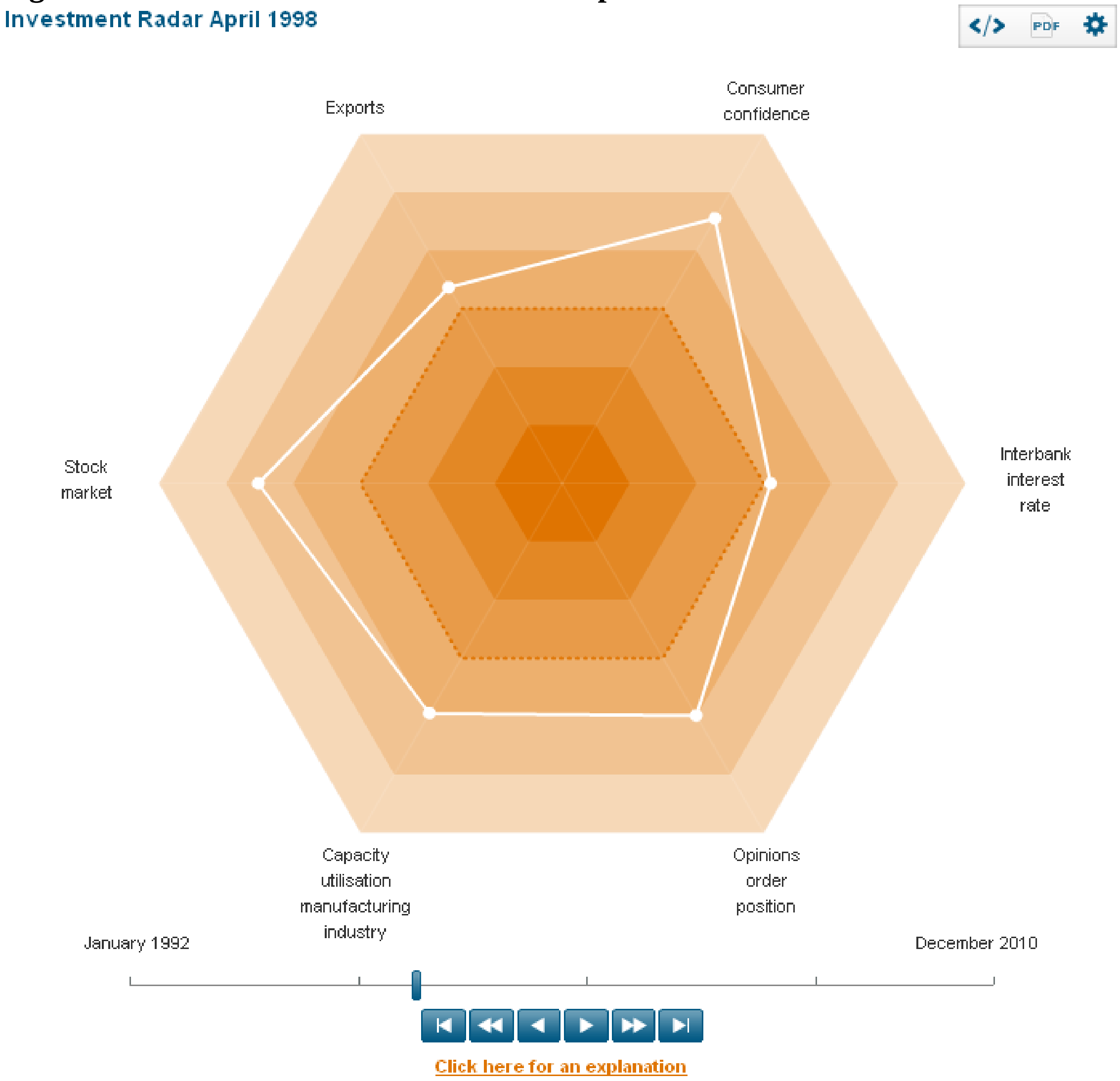


Figure 1 shows the Investment Radar for February 2009. The normalised values of all indicators except for the interbank interest rate were below zero. This means that the circumstances for Dutch private sector investment were very unfavourable in February 2009. If they had been favourable, most of the normalised values would have been above zero. With the aid of the time bar we can see whether the circumstances are more or less favourable than in the previous month.

Figure 2 shows the Investment Radar for April 1998. At that time, circumstances were clearly more favourable than in February 2009. All normalised values were above zero.

Figure 2: the Dutch Investment Radar for April 1998



It should be mentioned that the values of the indicators in the radar do not necessarily refer to the same month. The Investment Radar is published once a month. When it is updated, the most recently available figures are used. In figure 1, for example, consumer confidence is the figure for February 2009, but Dutch goods exports refers to the December 2008 figure. For all indicators, except for the capacity utilisation rate, which is published quarterly, new information will become available every month. The period under review is indicated in a tool tip, which also shows whether the indicator concerned has improved or deteriorated compared with the previous month.
Another tool tip shows the source of each figure. Statistics Netherlands is not the source for every indicator: the interbank interest rate is published by the Dutch central bank (*De Nederlandsche Bank*).

Calculating the normalised values

To calculate the normalised values in the Investment Radar, first the long-term average is subtracted from the original value. Subsequently the difference is divided by the standard deviation. As a formula this reads:

Normalised value = (original value – long-term average) / (standard deviation).

The long-term average is the average value since 1992, as is the standard deviation. Former normalised values are retained. In the Investment Radar for January 2011, the original values are thus compared with the average in the period January 1992–January 2011, and in the Investment Radar for February 2011 with the average in the period January 1992–February 2011.

Methodology

The Investment Radar is based on methodological research by Van Ruth (2010) (http://www.cbs.nl/nl-NL/menu/methoden/onderzoek-methoden/discussionpapers/archief/2010/2010-19-x10-pub.htm),
which has been described in a discussion paper. Since this paper was published, one alteration has been made: the long-term loans have been replaced by the interbank interest rate, because of the emergence of breaks in the series for the long term loans.