UPDATE ON THE ECONOMIC SITUATION AND DEVELOPMENT IN SELECTED SECTORS

BUSINESS INDICATOR REPORT
CONTENTS

1. Economic Expectations for Key Countries and Industry Sectors
   (Source: ZEW indicator, ZEW, 20 January 2015)

2. New Passenger Car Registrations in Europe
   (Source: ACEA, 16 January 2015)

3. Machine Tool Order Intake in Germany
   (Source: VDMA, February 2015)

4. Fig. 4, Machine Tool Order Intake in Japan
   (Source: JMTBA, February 2015)

5. Fig. 5, Machine Tool Order Intake in U.S.A.
   (Source: AMT, 12 January 2015)

6. Fig 6, German Business Climate – Industry and Trade
   (Source: Business Climate Indicator, Ifo Institute, 26 January 2015)

7. Fig 7, The Grundfos Global Automotive Indicators
   (Source: Automotive Information Platform, MarkLines.com, February 2015)

8. Fig 8, The Grundfos Raw Material Price Index
   (Source: London Metal Exchange, Steel Business Briefing, CME Group, February 2015)

ABOUT GRUNDFOS INDUSTRY INDICATORS

This quarterly newsletter can give you a general idea of which way the wind is blowing in the machine tools industry. It is a special supplement to our subscribers of Knowledge Link, our website for the machining industry.

Almost all the charts and graphs here are publicly available. They come from the three major machine tool associations – in Germany, Japan and the United States – as well as global surveys from market analysts.

We make the final graphs ourselves, the Grundfos Raw Materials Index and the automotive Monthly Production Output by country and manufacturer. We build the latter up from available automotive production figures. Grundfos Machining Industry segment uses automotive production statistics, because that market is such a big part of the machine tools industry.

Based on that, we try to estimate how the coming one- to three months will look.

Why do we want to share these statistics? Because we have a common interest in seeing how the market is doing. So please: read these statistics and comments as indicators alone.

We publish a full version of the Grundfos Industry Indicators quarterly in three languages, as well a monthly version in English only.

The Grundfos Industry Indicators Copyright 2015 Grundfos A/S. Permission to reprint graphs, tables and data has been granted to Grundfos from the various organisations represented in the publication. If you have comments or questions on the data from those organisations, please contact them directly with the links provided. We welcome your other comments.
Grundfos analyst:
‘Cautious optimism’ for growth

Global economic activity in early 2015 expanded slightly. Business expectations for the Eurozone are cautiously optimistic. The United States economy lost momentum at the end of last year, but it is still a growth driver with its projected GDP growth of about 3% for this year.

Japan’s manufacturing industry also continued to grow. Meanwhile, the global automobile industry witnessed a growth of around 5% in 2014. Overall the signs are predominantly positive.

Frank Baake
Senior Strategy & Intelligence Analyst

Economic Expectations for Key Countries and Industry Sectors

The Centre for European Economic Research (ZEW) writes,

“Gaining 13.5 points in January 2015, the ZEW Indicator of Economic Sentiment for Germany now stands at 48.4 points. The index increased for the third consecutive time reaching the highest reading since February 2014.

The financial market experts’ sentiment concerning the economic development of the Eurozone is also improving. ZEW’s Indicator of Economic Sentiment for the Eurozone increased by 13.4 points to a reading of 45.2 points.”

The ZEW Indicator of Economic Sentiment is ascertained monthly. Up to 350 financial experts take part in the survey. The indicator reflects the difference between the share of analysts that are optimistic and the share of analysts that are pessimistic for the expected economic development in Germany in six months. The survey also asks for the expectations for the Euro-zone, Japan, Great Britain and the U.S.A.

For more information, visit ZEW’s website at zew.de.
ZEW Indicator of Economic Sentiment November 2014 (Germany)

ZEW Indicator of Economic Sentiment (Germany)

ZEW - Financial Market Survey: Results January 2015

<table>
<thead>
<tr>
<th>Economic expectations</th>
<th>improve</th>
<th>no change</th>
<th>get worse</th>
<th>balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurozone</td>
<td>50.0</td>
<td>45.2</td>
<td>4.8</td>
<td>45.2</td>
</tr>
<tr>
<td>Germany (ZEW Indicator)</td>
<td>55.0</td>
<td>38.4</td>
<td>6.6</td>
<td>48.4</td>
</tr>
<tr>
<td>USA</td>
<td>38.8</td>
<td>56.8</td>
<td>4.4</td>
<td>34.4</td>
</tr>
<tr>
<td>Japan</td>
<td>21.7</td>
<td>72.8</td>
<td>5.5</td>
<td>16.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>25.0</td>
<td>69.0</td>
<td>6.0</td>
<td>19.0</td>
</tr>
<tr>
<td>France</td>
<td>30.6</td>
<td>57.7</td>
<td>11.7</td>
<td>18.9</td>
</tr>
<tr>
<td>Italy</td>
<td>26.3</td>
<td>64.7</td>
<td>9.0</td>
<td>17.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sectors</th>
<th>improve</th>
<th>no change</th>
<th>get worse</th>
<th>balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>10.5</td>
<td>41.1</td>
<td>48.4</td>
<td>-37.9</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>9.0</td>
<td>44.2</td>
<td>46.8</td>
<td>-37.8</td>
</tr>
<tr>
<td>Automobile</td>
<td>34.2</td>
<td>53.7</td>
<td>12.1</td>
<td>22.1</td>
</tr>
<tr>
<td>Chemicals / Pharmaceuticals</td>
<td>45.7</td>
<td>48.4</td>
<td>5.9</td>
<td>39.8</td>
</tr>
<tr>
<td>Steel</td>
<td>30.7</td>
<td>55.9</td>
<td>13.4</td>
<td>17.3</td>
</tr>
<tr>
<td>Electronics</td>
<td>31.2</td>
<td>62.9</td>
<td>5.9</td>
<td>25.3</td>
</tr>
<tr>
<td>Mechanical engineering</td>
<td>46.8</td>
<td>44.0</td>
<td>9.2</td>
<td>37.6</td>
</tr>
<tr>
<td>Retail / Consumer goods</td>
<td>45.2</td>
<td>51.1</td>
<td>3.7</td>
<td>41.5</td>
</tr>
<tr>
<td>Construction</td>
<td>35.6</td>
<td>58.0</td>
<td>6.4</td>
<td>29.2</td>
</tr>
<tr>
<td>Utilities</td>
<td>9.1</td>
<td>51.1</td>
<td>30.8</td>
<td>-30.7</td>
</tr>
<tr>
<td>Services</td>
<td>30.4</td>
<td>66.3</td>
<td>3.3</td>
<td>27.1</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>21.1</td>
<td>73.5</td>
<td>5.4</td>
<td>15.7</td>
</tr>
<tr>
<td>Information technology</td>
<td>45.7</td>
<td>51.6</td>
<td>2.7</td>
<td>43.0</td>
</tr>
</tbody>
</table>

Note: 233 analysts participated in the January-survey which was conducted during the period 1/5-1/19/2015. Analysts were asked about their expectations for the next 6 months. Numbers displayed are percentages (month-over-month percentage point changes in parentheses). Balances refer to the difference between positive and negative assessments.
New Passenger Car Registrations in Europe

The European Automobile Manufacturers Association writes: "In December, EU passenger car registrations recorded growth for the sixteenth consecutive month (+4.7%), reaching 951,329 units sold. Looking at the largest markets, the demand increase was mainly led by the significant growth recorded in Spain (+21.4%), followed by the UK (+8.7%), Germany (+6.7%), and Italy (+2.4%), while France (-6.7%) performed less well than in the same month last year.

Substantial growth was also posted by the new EU member states (+9.6%) and by the EFTA countries (+9.8%) contribute to explain last month’s positive outcome.

From January to December, 12,550,771 new passenger cars were registered in the EU. With 5.7% growth posted in 2014, new car registrations increased for the first time since 2007 after having been on the decline for six consecutive years. Looking at the largest markets, Spain recorded the largest increase over the year (+18.1%) followed by the UK (+9.3%), Italy (+4.2%) and Germany (+2.9%), while France remained stable (+0.3%)."

For more information, see ACEA’s website at acea.be.

Machine Tool Order Intake in Germany

For the German Machine Tool Industry, the order intake in December was +36.5% compared to the same month in 2013. For January through December the order intake was +4.3% versus the last year period.

For more information, please visit the VDMA’s website at vdma.org.
Machine Tool Order Intake in Japan

The order intake for the Japanese Machine Tool Industry in December 2014 was +33.8% compared to December 2013 (3.7% up from November 2014). In 2014 the growth was +35.1%.

For more information, please visit the JMTBA’s website at jmtba.or.jp

Machine Tool Order Intake in U.S.A.

The Association for Manufacturing Technology (AMT) writes, “November United States manufacturing technology orders totalled $378.06 million. This total, as reported by companies participating in the USMTO program, was down 15.5% from October and down 14.5% when compared with the total of $442.01 million reported for November 2013. Despite the monthly dip, with a year-to-date total of $4,556.60 million, 2014 is up 2.6% compared with 2013.”

The United States Manufacturing Technology Consumption (USMTC) report, jointly compiled by the two trade associations representing the production and distribution of manufacturing technology, provides regional and national U.S. consumption data of domestic and imported machine tools and related equipment.

Analysis of manufacturing technology consumption provides a reliable leading economic indicator as manufacturing industries invest in capital metalworking equipment to increase capacity and improve productivity.

For more information, visit the website at amtonline.org.
The Ifo Business Climate Index for industry and trade in Germany rose to 106.7 points in January from 105.5 points last month, marking its third successive increase. Companies were far more satisfied with their current business situation and the majority were also optimistic about the business outlook. The German economy makes a good start to the year.

In manufacturing the business climate indicator rose for the third month in succession. Assessments of the current business situation were better and manufacturers also expressed greater confidence in short-term business developments. Stronger impulses are expected from exports thanks to the falling euro exchange rate. Capacity utilisation rates rose by 0.4 percentage points to 84.6 per cent.

The Ifo Business Climate Index is based on ca. 7,000 monthly survey responses of firms in manufacturing, construction, wholesaling and retailing. The firms are asked to give their assessments of the current business situation and their expectations for the next six months. They can characterise their situation as “good,” “satisfactorily” or “poor” and their business expectations for the next six months as “more favourable”, “unchanged” or “more unfavourable.” The balance value of the current business situation is the difference of the percentages of the responses “good” and “poor”; the balance value of the expectations is the difference of the percentages of the responses “more favourable” and “more unfavourable.” The business climate is a transformed mean of the balances of the business situation and the expectations. For calculating the index values, the transformed balances are all normalised to the average of the year 2000.

The CESifo Group, consisting of the Centre for Economic Studies (CES), the Ifo Institute for Economic Research and the CESifo GmbH (Munich Society for the Promotion of Economic Research) is a research group unique in Europe in the area of economic research. It combines the theoretically oriented economic research of the university with the empirical work of a leading Economic research institute and places this combination in an international environment.

For more information, visit the website at cesifo-group.de.
The Grundfos Global Automotive Indicators

The six main manufacturers produced -1.2% in November (vs. last year), and +3.4% for the period January to November.

Production in the 4 main vehicle-producing countries increased by +7.6% in December compared to same month last year. It shows growth of +5.5% for the whole year of 2014.
Grundfos Cost Analyst Menno Buikema comments on the price fluctuations of raw materials and their impact on the manufacturing industry. He writes:

In January, there was a continued overall trend of decreasing prices on commodity markets. The largest change compared to last month is the decrease of the crude oil price. This decrease and the change in the EUR/USD exchange rate greatly influenced commodity prices and overall macroeconomic developments.

Risks to the outlook remain tilted downward due to four factors:
- A persistently weak global trade.
- The possibility of financial market volatility as interest rates in major economies rise on varying timelines.
- The extent to which low oil prices strain balance sheets in oil-producing countries.
- The risk of a prolonged period of stagnation or deflation in the Euro Area or Japan.

Some optimism comes from the World Bank’s recently released “Global Economic Prospects” report. The report projects the global economy to expand by 3% after a disappointing growth of 2.6% in 2014.