2014: FRAGILE MARKET RECOVERY

UPDATE ON THE ECONOMIC SITUATION AND DEVELOPMENT IN SELECTED SECTORS

BUSINESS INDICATOR REPORT
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.

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Fragile market recovery expected in 2014

Global markets, including the machining and automotive industries, continued to develop in the right direction at the end of 2013. China now leads the global production of light vehicles in terms of units and growth. Business expectations are slightly optimistic overall – even in Europe, which is cautiously coming out of recession. But all markets are still fragile.

We also see positive signals in the United States, which is expected to be a major growth contributor in 2014. Conversely, emerging markets (such as India and Brazil) are slowing down. Experts expect overall modest growth.

Frank Baake
Senior Strategy & Intelligence Analyst

Economic Expectations for Key Countries and Industry Sectors

The Centre for European Economic Research (ZEW) writes,

“Economic expectations for Germany have improved by 7.4 points in December 2013. The ZEW Indicator of Economic Sentiment for Germany now stands at 62.0 points. This is the indicator’s best result since April 2006. Economic expectations for the Eurozone have gained 8.1 points in this month’s survey. Thus, the respective indicator now stands at the 68.3 points-mark.”

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 December 2013 (Germany)

ZEW Konjunkturerwartungen Deutschland

ZEW - Financial Market Survey: Results December 2013

<table>
<thead>
<tr>
<th>Economic expectations</th>
<th>improve</th>
<th>no change</th>
<th>get worse</th>
<th>balance</th>
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<tr>
<td>Eurozone</td>
<td>71.1</td>
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<td>Germany (ZEW Indicator)</td>
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<td>USA</td>
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<td>Japan</td>
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<td>United Kingdom</td>
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<td>France</td>
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<td>Italy</td>
<td>40.4</td>
<td>(- 0.7)</td>
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<table>
<thead>
<tr>
<th>Sectors</th>
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<td>Banks</td>
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<td>Insurance companies</td>
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<td>Chemicals / Pharmaceuticals</td>
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<td>Steel</td>
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<td>(+ 3.0)</td>
<td>-4.1</td>
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<td>Construction</td>
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<td>Utilities</td>
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<td>Services</td>
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<td>Information technology</td>
<td>45.3</td>
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<td>51.7</td>
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Note: 252 analysts participated in the December-survey which was conducted during the period 12/2-12/16/2013. 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

"In November, demand for new passenger cars in the EU increased for the third consecutive month (+1.2% year-on-year), totalling 938,021 registrations. From January to November, 10,945,360 new cars were registered or 2.7% less than in the first eleven months of 2012.

In November, the UK (+7.0%) and Spanish (+15.1%) markets contributed to the overall 1.2% upturn. Demand in Germany (-2.0%), France (-4.0%) and Italy (-4.5%) was lower than in the same month last year.

From January to November, most significant markets shrank. The downturn ranged from -4.9% in Germany to -7.1% in France and -7.7% in Italy. Spain (+2.1%) and the UK (+9.9%) were the only ones to perform better than in the first eleven months of last year."

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 turned positive from a (very low) October. In November it was +19.5% compared to the same month in 2012.

For Jan.-Nov. the order intake was -6.4% vs. last year period.

The VDMA (Verband Deutscher Maschinen- und Anlagenbau - German Engineering Federation) is a network of around 3,000 engineering industry companies in Europe.

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 (JMTBA) in December 2013 was +28.0% compared to December 2012. January-December 2013 is -7.9% below last year.

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

Machine Tool Order Intake in U.S.A.

“November U.S. manufacturing technology orders totalled $437.79 million according to AMT – The Association for Manufacturing Technology. This total, as reported by companies participating in the USMTO program, was up 0.6% from October and up 20.7% when compared with the total of $362.63 million reported for November 2012. With a year-to-date total of $4,399.22 million, 2013 is down 7.7% compared with 2012.”

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.
German Business Climate – Industry and Trade

“The Ifo business climate for industry and trade in Germany improved once again in December. Assessments of the current business situation were somewhat less favourable, but firms expressed greater optimism about future business developments.

The business climate in manufacturing continued to improve. Favourable assessments of the current business situation were scaled back somewhat, but manufacturers’ optimism rose to its highest level since spring 2011.”

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 3% more units from Jan.-Oct. than last year. Production level in the 4 main vehicle producing countries from Jan.-Nov. in this year is 6.3% over last year’s period, with only growth coming from China.
Grundfos Cost Analyst Tommy Godtfredsen comments on the price fluctuations of raw materials and their impact on the manufacturing industry. He writes:

**Macroeconomic Events Spur Increases in Commodity Markets**

- The commodity markets in December saw increasing or neutral raw material prices except Neodymium, which continues to fall in price.

- The United States released good economic financial figures that showed improved job creation and an unemployment rate of 7%, which has stimulated raw material prices in an upward direction.

- Oil prices fluctuated during December, but the end result was a 3.3% increase after two coherent months with decreasing oil prices.

- The copper price increased 1.8% due to indications on increasing demand from China, which has the world’s largest user of copper.

- A strengthened expectation of a potential new Indonesian export restriction in January 2014 has put upward pressure on industry metal prices in general this month.