

# THE GRUNDFOS INDUSTRY INDICATORS

NAVIGATING 2012:  
**THE ROAD  
AHEAD**

**UPDATE ON THE  
ECONOMIC SITUATION  
AND DEVELOPMENT IN  
SELECTED SECTORS**

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*Note: We have discontinued printing specific indicators from the Japanese Automobile Manufacturers Association (JAMA). Instead, please refer to the Grundfos Global Automotive Indicators (fig. 8). – Ed.*

## 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 new 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 two graphs ourselves, the Monthly Production Output by country and manufacturer. We build these 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 esti-

mate 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 where the market is going.

So please: read these statistics and comments as indicators alone.

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*We welcome your other comments. Use the contact information on the final page.*

## COMMENTARY

NAVIGATING 2012:

# THE ROAD AHEAD

By Søren Sørensen  
 Grundfos Group Executive Vice President, Sales & Service



**One question I have been hearing a lot lately: Don't you feel the global economic downturn?**

We had another very good year in 2011, with an estimated 8-9% growth, after our quick recovery from the financial crisis.

Looking ahead at 2012, it is difficult to tell how the course will continue. We are approaching the year with some uncertainty. There are markets that have reached a degree of recession, but there are other markets zooming ahead.

We have a challenging discipline ahead of us: pushing the speeder and braking at the same time.

If you're a good rally driver, you should be able to do that.

## SPEEDING AND BRAKING

In Grundfos overall, our Industrial business area is progressing the fastest. Much of this growth is thanks to our Machining Industry. In 2011 it had a super year, with a 35% increase over last year. That was an all-time high. The growth happened not only in the standard machine tool markets of Japan and Germany, but in other markets, too – like China, Taiwan and Korea.

Otherwise, we now see a little slowdown in machine tool order intake in Taiwan and Japan. We are also a bit worried what will happen in Germany. The statistics from the German Engineering Federation (VDMA) show a downward trend in order intake (see page 6 VDMA

FIGURE). We know we cannot expect the same growth in 2012. Our machine tool business approaches the year with conservative expectations.

In Grundfos overall, the southern European region decreased in 2011: Greece, for sure, the Iberian Peninsula (Spain and Portugal), and now Italy.

Yet some markets – like Russia, China, the Ukraine and even the U.S. – grew last year.

So, yes, we're feeling the crisis in some places, but we're gaining market share in others.

## A REVOLUTION

What's the main reason for our good performance?

One reason is our focus on new technology and resource-efficient equipment. The machine tools market is progressing through a technology change, with the result of larger investments in new production. Companies are focusing on resource-efficient and energy-saving equipment, and this generates a new demand for production equipment.

In the automotive industry, for example – accounting for more than 60% of our machine tool business – the talk is all about an “ecological revolution,” unique in its history. Consumers are demanding that automotive manufacturers reduce their environmental impact while increasing resource efficiency of both vehicle production and operation.

This demand drives a variety of developments toward the hybridisation

and electrification of the power train, along with highly efficient, lightweight designs.

Grundfos fits right in to this picture with our “intelligent” products, like smart motors and electrically regulated pumps. Our intelligent e-pump solutions use less energy. Of the total lifetime costs of a pump, 85% of those costs are from the electricity it uses. With an e-pump, that's a lot of savings over the years.

More and more, our message is coming through that people must not look only at the sticker price of a product but its lifetime cost. This is something we have been preaching for years. It seems that the time is finally right – people are beginning to take the message to heart.

## HIGH STANDARDS

Grundfos generally has high ambitions for growth. We are working with new technologies and bringing in new products – like our new MTA pump for the “dirty side” of machining processes. We are trying to make this world a slightly better place.

So on this next stretch of the road in 2012, we must be agile and ready to react.

We hope that by setting our own standards high, we can avoid using the brakes while keeping a steady speed for the way ahead.

## Grundfos analyst: Europe cautious, China booms ahead



At the end of 2011, the general business expectations stabilized in a positive direction instead of deteriorating further. The measures taken by the European Central Bank to help Italy and Spain may have supported this cautious optimism, which was confirmed in markets like Germany with increasing car production and new car registrations.

Meanwhile in global car production, China continuously enlarges its distance above the rest of the world.

Machine tool order intake in Germany and the U.S.A. cooled down in November, in contrast to Japan, which was even able to reverse the trend and improved its order books in the last two months of the year.

*Frank Baake*  
Senior Marketing Analyst

### 1

## Economic Expectations for Key Countries and Industry Sectors



The Centre for European Economic Research (ZEW) writes, "The ZEW Indicator of Economic Sentiment for Germany has increased by 32.2 points in January 2012. The indicator now stands at minus 21.6 points. This is the highest level of the indicator since July 2011."

"This month's increase suggests that within the next six months German economic activity is likely to stabilize instead of deteriorating further. Improved economic data from the United States as well as the recent decline in yields from Spanish and Italian government bonds may have contributed to the indicator's increase."

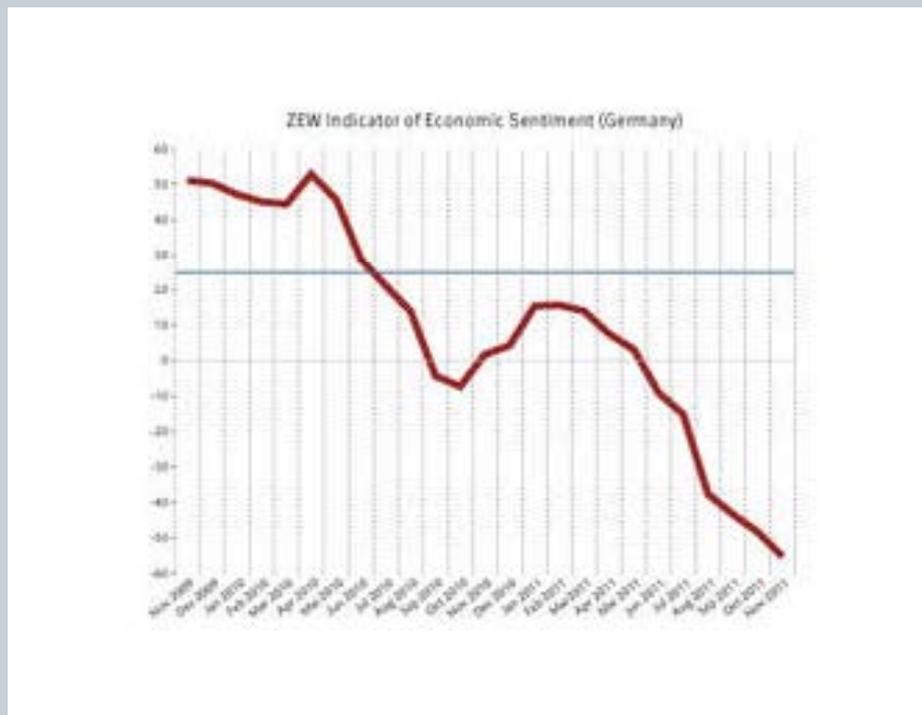
"Economic expectations for the euro zone have increased by 21.6 points in January.

The respective indicator now stands at minus 32.5 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](http://zew.de).

## ZEW Indicator of Economic Sentiment (Germany)



## ZEW - Financial Market Survey: Results January 2012

Economic expectations	improve		no change		get worse		balance	
Eurozone	15.6	(+ 8.2)	36.3	(+ 5.2)	48.1	(-13.4)	-32.5	(+21.6)
Germany (ZEW Indicator)	17.9	(+10.6)	42.6	(+11.0)	39.5	(-21.6)	-21.6	(+32.2)
USA	32.6	(+14.6)	52.9	(- 2.0)	14.5	(-12.6)	18.1	(+27.2)
Japan	24.2	(+ 3.4)	58.6	(+ 2.1)	17.2	(- 5.5)	7.0	(+ 8.9)
United Kingdom	12.9	(+ 5.3)	54.1	(+ 5.9)	33.0	(-11.2)	-20.1	(+16.5)
France	14.1	(+ 8.0)	41.7	(+ 5.6)	44.2	(-13.6)	-30.1	(+21.6)
Italy	12.6	(+ 6.0)	37.8	(+ 7.3)	49.6	(-13.3)	-37.0	(+19.3)

Sectors	improve		no change		get worse		balance	
Banks	12.1	(+ 6.5)	26.5	(+ 8.8)	61.4	(-15.3)	-49.3	(+21.8)
Insurance companies	7.3	(+ 3.2)	36.1	(+ 8.1)	56.6	(-11.3)	-49.3	(+14.5)
Automobile	16.2	(+10.1)	55.5	(+ 1.7)	28.3	(-11.8)	-12.1	(+21.9)
Chemicals / Pharmaceuticals	20.7	(+ 6.0)	60.7	(+ 0.7)	18.6	(- 6.7)	2.1	(+12.7)
Steel	15.7	(+ 8.4)	40.3	(- 2.4)	44.0	(- 6.0)	-28.3	(+14.4)
Electronics	12.5	(+ 3.5)	64.0	(+ 2.1)	23.5	(- 5.6)	-11.0	(+ 9.1)
Mechanical engineering	19.3	(+ 8.8)	47.0	(- 1.4)	33.7	(- 7.4)	-14.4	(+16.2)
Retail / Consumer goods	18.4	(+ 1.7)	66.3	(+ 7.0)	15.3	(- 8.7)	3.1	(+10.4)
Construction	19.0	(+ 6.5)	55.2	(- 2.3)	25.8	(- 4.2)	-6.8	(+10.7)
Utilities	10.6	(+ 2.5)	51.2	(+ 2.0)	38.2	(- 4.5)	-27.6	(+ 7.0)
Services	19.5	(+ 5.2)	68.4	(- 1.4)	12.1	(- 3.8)	7.4	(+ 9.0)
Telecommunications	11.8	(+ 3.6)	72.8	(+ 1.3)	15.4	(- 4.9)	-3.6	(+ 8.5)
Information technology	24.5	(+ 6.5)	63.1	(- 2.2)	12.4	(- 4.3)	12.1	(+10.8)

Note: 293 analysts participated in the January-survey which was conducted during the period 1/2-1/16/2012. 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.

## 2 New Passenger Car Registrations in Europe



**ACEA**  
EUROPEAN AUTOMOBILE MANUFACTURERS' ASSOCIATION

The European Automobile Manufacturers Association writes: "In December, new passenger car registrations in the EU dropped by 6.4% to 953,108 units. Over the year 2011, demand for new cars was decreased by 1.7%.

In December, Germany was the largest market in units with 244,501 new registrations and the only major one to post growth (+6.1%). Spain (-3.6%) and the UK (-3.7%) recorded single-digit drops, while Italy (-15.3%) and France (-17.7%) faced a double-digit downturn.

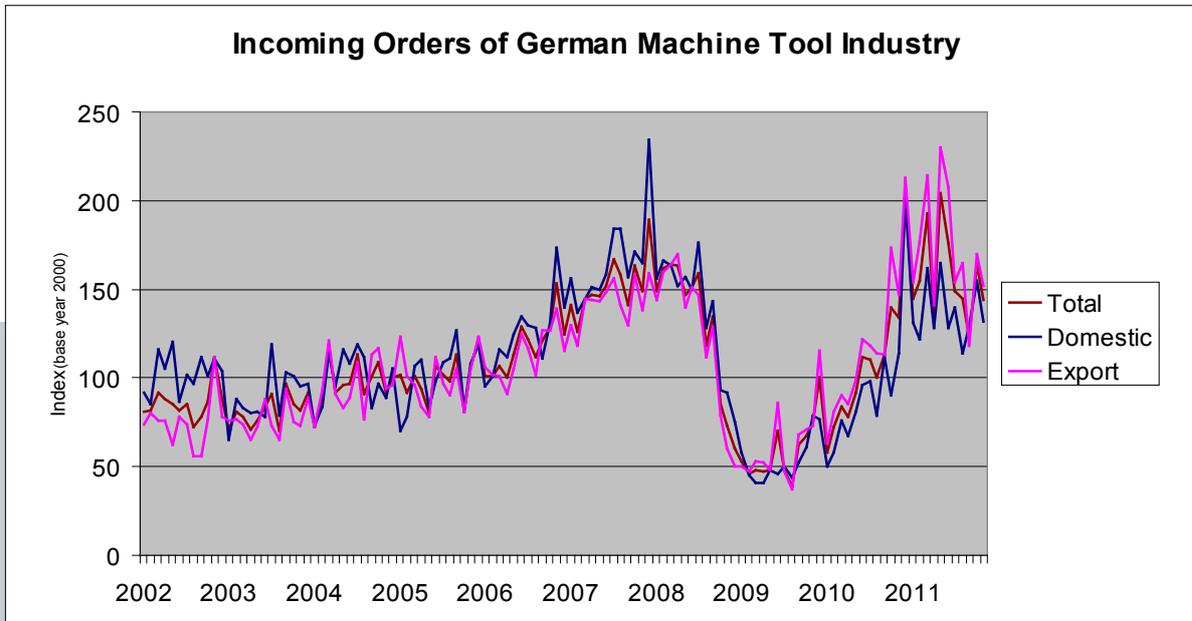
In 2011, most of the significant markets



declined, from -2.1% in France to -4.4% in the UK, -10.9% in Italy and -17.7% in Spain. Germany was the exception as demand for new cars grew by 8.8% over twelve months. "

For more information, see ACEA's website at [acea.be](http://acea.be).

## 3 Machine Tool Order Intake in Germany



The German Engineering Federation (VDMA) writes: "For the German machine tool industry, the order intake in November was +7.5% compared to the same month in 2010. The first eleven months of the year was + 58.6%. But the order intake decreased in November by 12% compared to previous month October 2011".

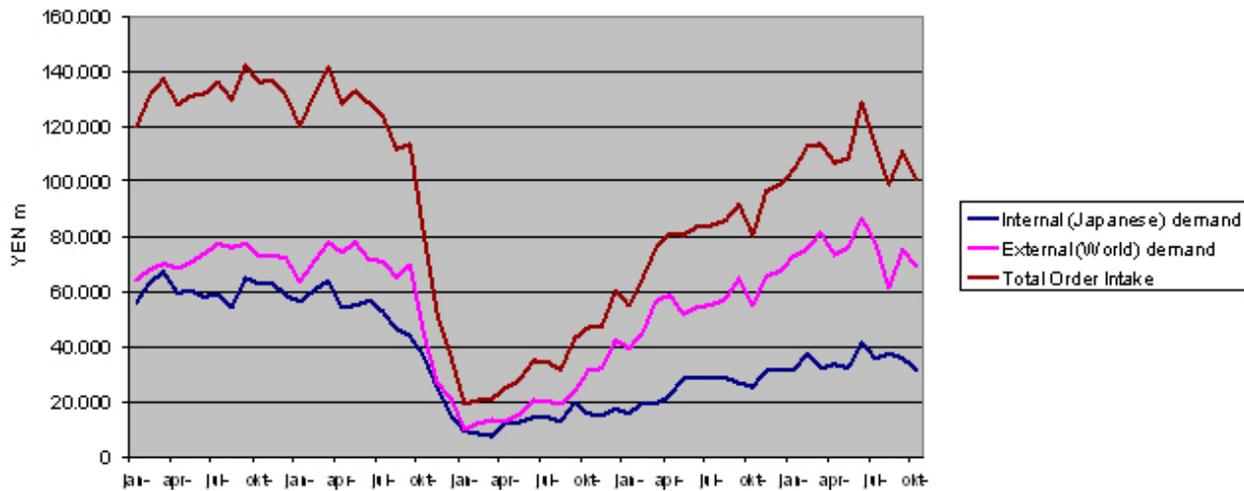
The VDMA (Verband Deutscher Maschinen- und Anlagenbau - German Engineering Federation) is a network of around 3,000 engineering industry companies in Europe.

For more information, please visit the VDMA's website at [vdma.org](http://vdma.org).

## Machine Tool Order Intake in Japan



Order Intake of Japanese Machine Tool Manufacturers



According to the Japan Machine Tool Builders' Association (JMTBA), the order intake for the Japanese Machine Tool Industry in December 2011 was 3.6%, compared to November. Compared to December last year, the order intake is +17.4%.

For more information, please visit the JMTBA's website at [jmtba.or.jp](http://jmtba.or.jp)

## Machine Tool Order Intake in U.S.A.



The Association for Manufacturing Technology (AMT) writes, "November U.S. manufacturing technology orders totaled \$430.17 million according to AMT and AMTDA, the American Machine Tool Distributors' Association. This total, as reported by companies participating in the USMTO program, was down 6.9% from October but up 26.6% when compared with the total of \$339.68 million reported for November 2010.

The 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.

With a year-to-date total of \$4,956.51 million, 2011 is up 73.9% compared with 2010."

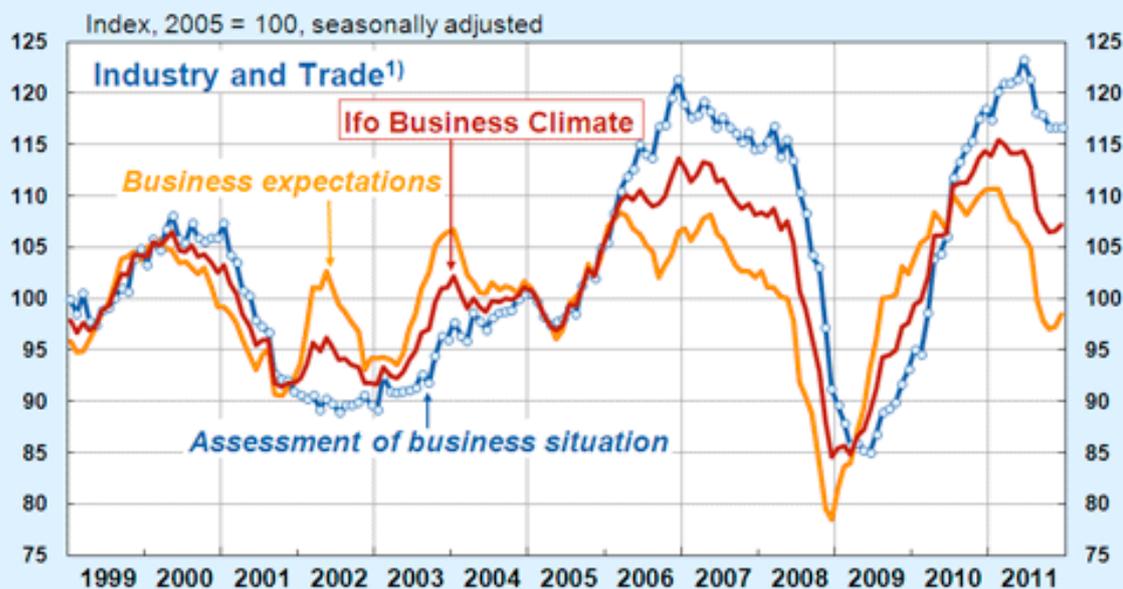
For more information, visit the website at [amtonline.org](http://amtonline.org).

		U.S. Manufacturing Technology Orders				Nov2011		
		A joint statistical program of AMT and AMTDA						
	Nov11 (P)	Previous Month	% Change	Year Ago Month	% Change	YTD 11 (P)	YTD 10 (R)	% Change YTD
<b>National</b>								
Metal Cutting	372.35	428.64	-13.1%	298.50	24.7%	4,441.09	2,625.89	69.1%
Metal Forming & Fabricating	57.82	33.61	72.0%	41.18	40.4%	515.41	223.51	130.6%
<b>Total</b>	<b>430.17</b>	<b>462.25</b>	<b>-6.9%</b>	<b>339.68</b>	<b>26.6%</b>	<b>4,956.51</b>	<b>2,849.40</b>	<b>73.9%</b>

## German Business Climate – Industry and Trade

### Ifo Business Climate in Germany

Ifo Business Survey December 2011



20/12/2011 © ifo

#### Ifo Business Climate Germany:

“The Ifo Business Climate for trade and industry in Germany continued to improve in December after stabilising in the previous month. Business expectations improved for the second time in succession.”

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.

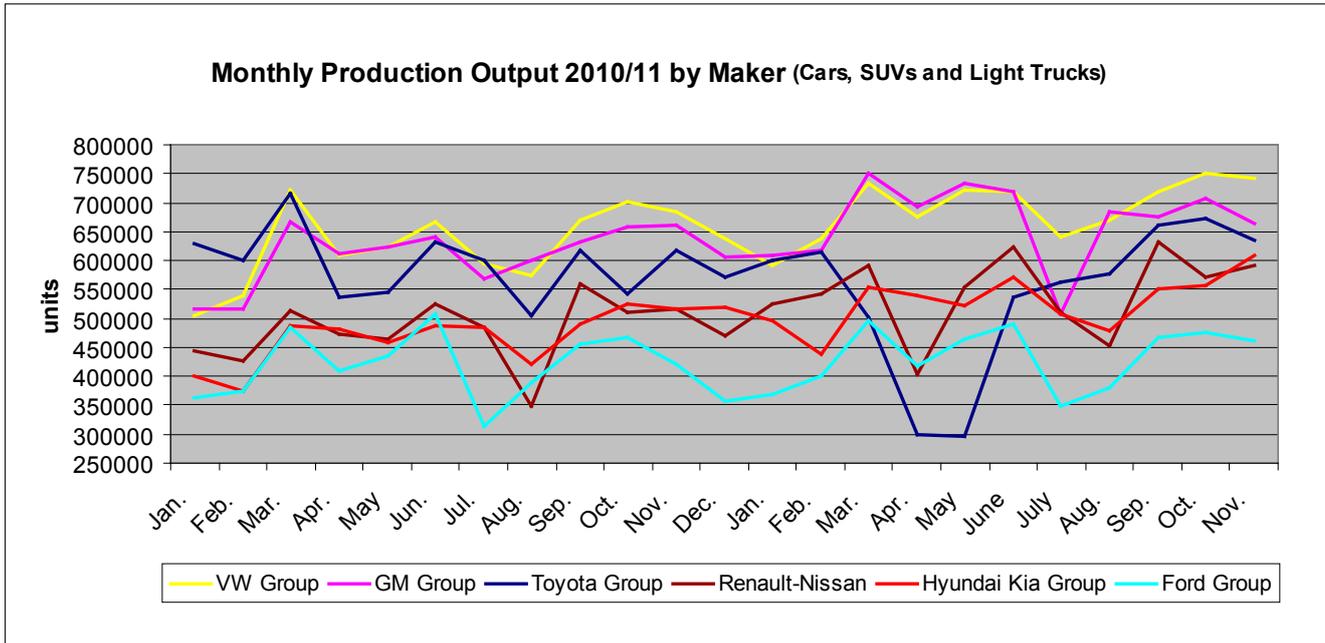
The CESifo Group, consisting of the Centre for Economic Studies (CES), the Ifo Institute for Economic Research and the CESifo GmbH (Munich Society for the Promotion of Economic Research) is a research group unique in Europe in the area of economic research. It combines the theoretically oriented economic 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](http://cesifo-group.de).

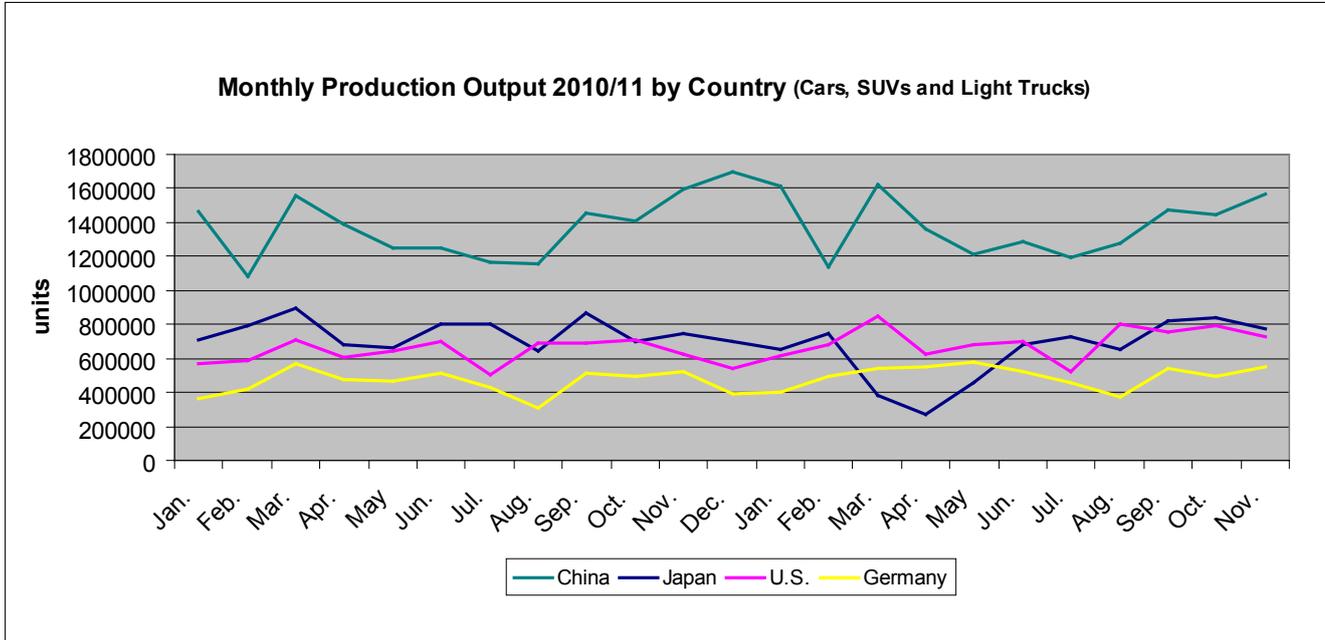


# The Grundfos Global Automotive Indicators

Data source: MarkLines Co. Ltd



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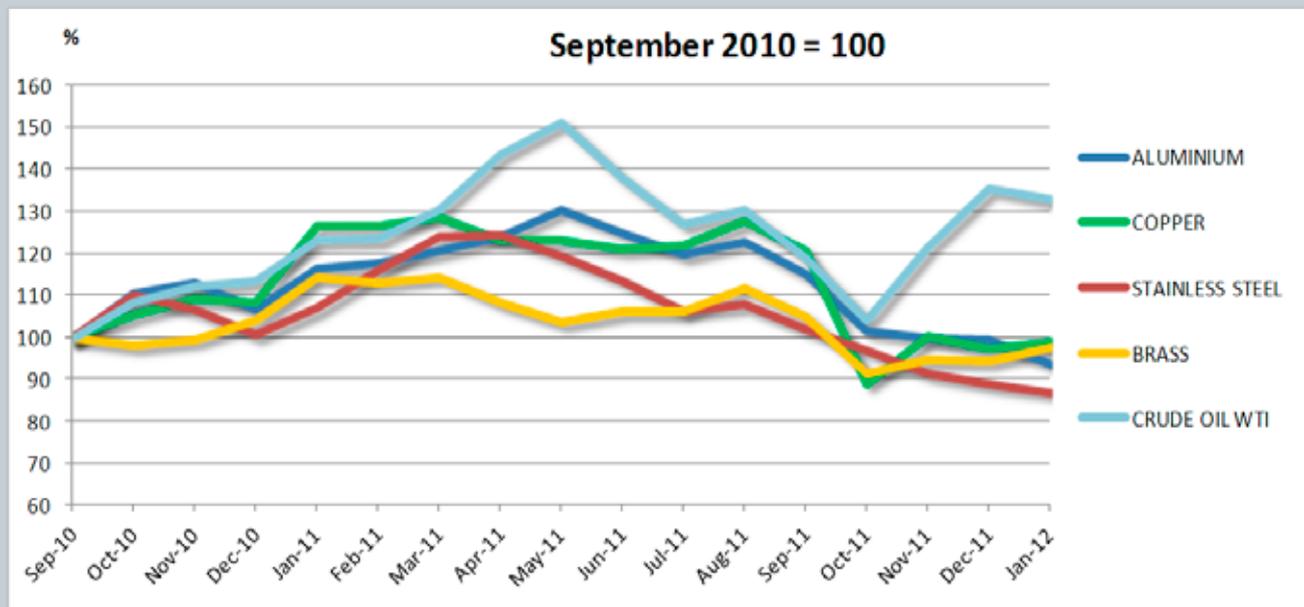


The TOP 6 manufacturers produced almost the same quantity each month from September to November. 4 of them had a slight drop in November, compensated by increase for Renault-Nissan and Hyundai Kia.

Production numbers in China and Germany developed better in November than in Japan and the U.S.

## The Grundfos Selected Commodities Price Index

### Raw Materials Update



London Metal Exchange, Steel Business Briefing, CME Group.

For our newest index, Grundfos Cost Analyst Jesper Bjerregård Juul comments on the price fluctuations of four base metals (aluminium, copper, stainless steel and brass) and crude oil, and their impact on the manufacturing industry. He writes:

Looking back over time, commodity prices have been trending upward, due to demand from emerging markets, supply issues and the weak dollar – along with low interest rates and a greater interest in commodities as investment. The general increase has led industry to constantly improve productivity to offset the material price rises.

As the European debt crisis has escalated in the second half of 2011, most of the commodities have declined (see the figure). The Eurozone crisis – along with a failure of the U.S and China to support global growth – provides the greatest risk to base metal's prices in the coming months.

Base metals in general are sensitive to the global economy or certain regions.

When China – the largest copper consumer – tightened its policy to control inflation, it impacted demand (Sept.-Oct.). That is when you see a steep decline in its price, followed by a slight rise when China showed some better-than-expected key figures and activity began to increase again. Lately, Chinese copper consumers have been in a destocking mode, but this is expected to reverse soon.

Aluminium production has tended to exceed consumption, plunging its price below the cost of production for many suppliers.

#### Volatility

Current commodity prices are about volatility, according to Andy Palmer, executive vice president of Japanese auto maker Nissan. One minute they are skyrocketing and the next they are not, he told Reuters. In response, Nissan is trying to reduce its dependence on scarce metals through engineering.

Oil prices are not affected in the same way as base metals because OPEC of-

ten controls supply and thereby price. Gaddafi's removal from power in Libya in October greatly increased supply. Global growth continues to support demand. Other oil-producing countries like Saudi Arabia and Kuwait might lower production to stimulate prices.

A price recovery is expected in the second half of 2012 for most commodities. The Eurozone crisis is not currently expected to derail growth in the U.S. and Chinese. If the markets see the U.S. economy going well, that will help the commodities – their demand and the global outlook. If the European crisis gets worse, we might see further price decreases in the coming months.



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