

Unsettled economic situation leaves mark on microtechnology industry

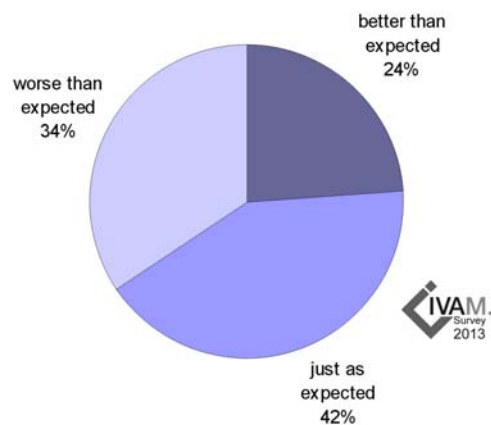
A year ago, the microtechnology, nanotechnology and advanced materials industry looked out to the year 2012 with quite positive expectations. As it turned out, the Euro debt crisis and the unstable economic situation have left their mark on these industries, too.

The ups and downs of the European economy are reflected in the volatile economic forecasts made by various institutions. According to the ZEW index published by the Centre for European Economic Research in February 2013, the business climate in Europe has improved at the beginning of the year. Other forecasts from Brussels, however, predict that the economy will fall into recession in the Euro zone in 2013, with the exception of individual countries, like, for instance, Germany. In fact, Europe as a market is too heterogeneous for a consistent forecast. It is even more difficult to predict how an equally heterogeneous sector like the microtechnology, nanotechnology and advanced materials industry will fare.

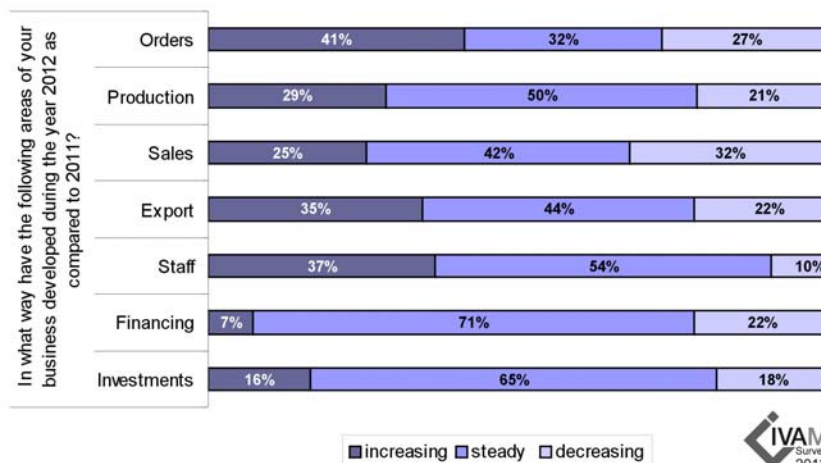
At present, the mood of the microtechnology, nanotechnology and advanced materials industry is quite subdued, as the economic data survey of the IVAM Microtechnology Network confirms. In 2012, the business situation of the companies has gone slightly downhill compared to the year before, but also compared to the expectations in the beginning of the year.

While orders and staff numbers have slightly risen and production has remained stable for a large proportion of companies, sales figures have dropped.

How has your business developed during 2012 as compared to your expectations in the beginning of the year?



In what way have the following areas of your business developed during the year 2012 as compared to 2011?



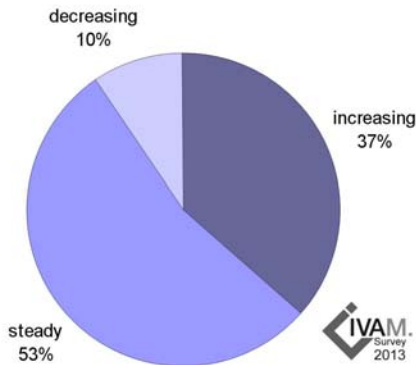
The lack of funding for the strategic business development, expansion or investment in innovation is still an essential problem. Only 7 % of companies had more funds available for corporate financing in 2012 than in the year before, only 16 % have been able to invest more than in 2011.

IVAM Research, the economic research division of the IVAM Microtechnology Network, collects economic data in the fields of microtechnology, nanotechnology and advanced materials once a year. The survey in February 2013 has been addressed to 2,734 companies and research institutions throughout Europe, 117 (4.28 %) of which took part in the survey. Regional distribution of participants: 55 % of respondents are based in Germany, 11.8 % in Switzerland, 6.4 % in the United Kingdom, 5.5 % in the Netherlands, 3.6 % in France and Italy respectively, 2.7 % in Austria, and 10.9 % in several other countries mostly in Central, Western and Northern Europe.

Information: www.ivam.de/research

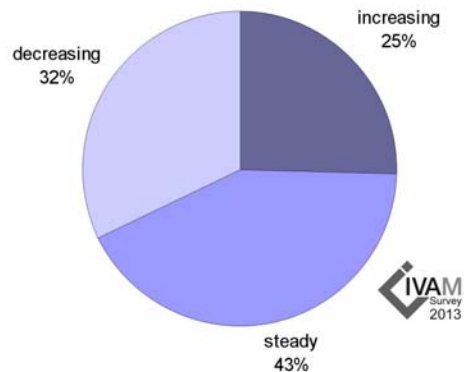
Low growth in employment, decline in sales

How has the number of your employees developed during the year 2012 as compared to 2011?



For a majority of companies, the number of employees has remained stable in 2012. 37 % have hired more staff.

How have your sales numbers developed in 2012 as compared to 2011?



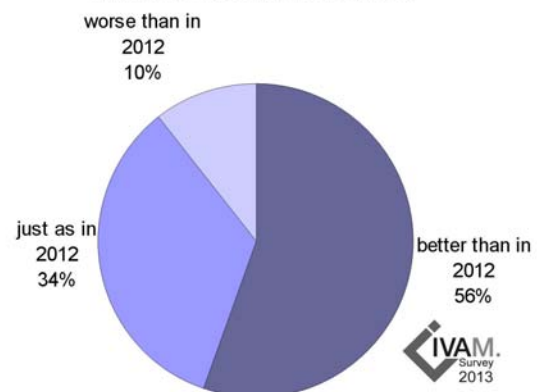
Only one in four companies have been able to increase their annual sales in 2012; for a higher proportion (32 %), sales figures have declined.

Slight upwards trend expected for 2013

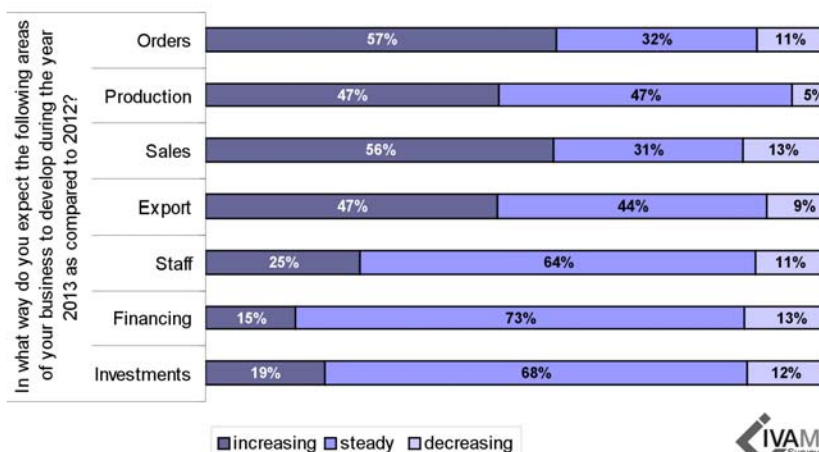
For 2013, the industry expects a slight upwards trend. Slightly more than half (56 %) of European companies expect to perform better in 2013 than in 2012.

Orders and sales are supposed to improve in 57 % and 56 % of companies respectively, 47 % expect to increase production and export shares. Employment numbers are going to remain stable in a large proportion of companies: only one in four companies plan to hire more staff in 2013. In contrast, there are 11 % that expect to reduce staff in the course of the year.

How do you expect your business to develop during 2013 as compared to 2012?



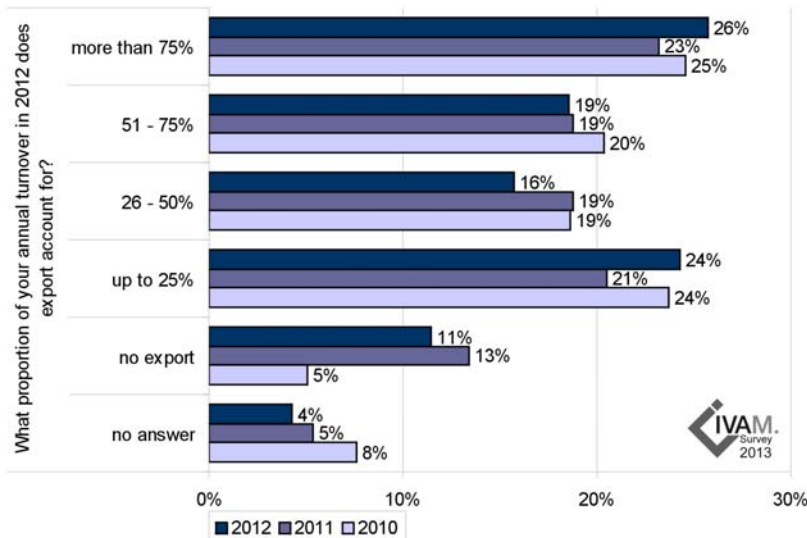
In what way do you expect the following areas of your business to develop during 2013 as compared to 2012?



Not much will change in regard to the funding shortfall in 2013: only 15 % of companies expect an increase in the area of financing; only 19 % intend to invest more than in the year before.

Global competition curtails export

What proportion of your annual turnover does export account for?

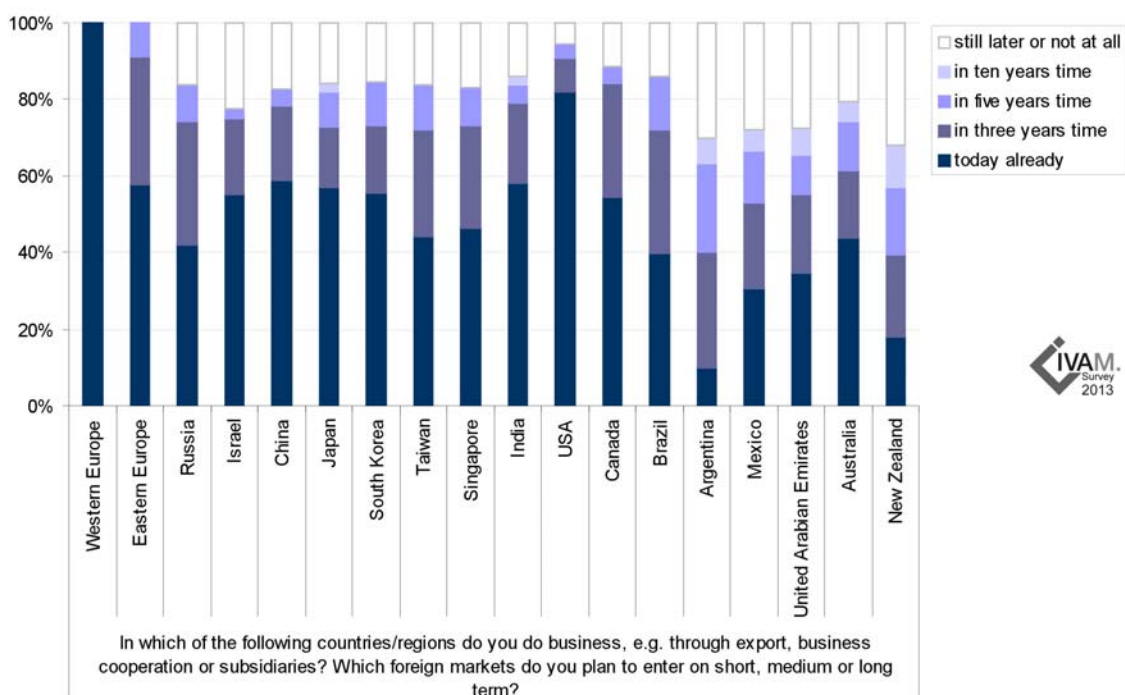


Foreign trade has developed modestly in the last business year, thus continuing the trend of previous years. Throughout Europe, the export rates of the microtechnology, nanotechnology and advanced materials industry have remained rather stable in 2012. For the German companies, export quotas have slightly declined again another year in a row since 2004.

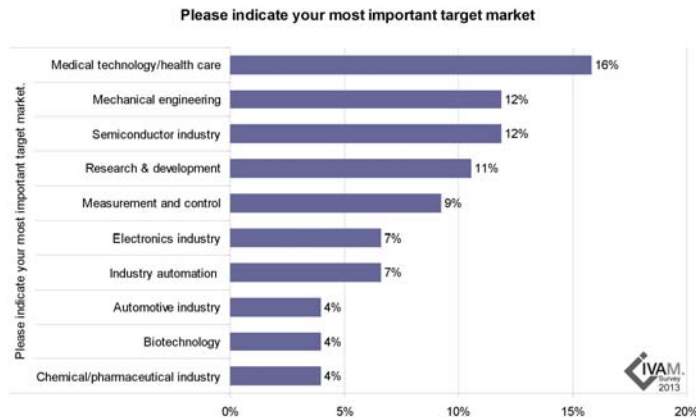
It is, among other things, the growing competition from countries in Asia, which is reflected in the export figures. In countries like China, high-tech suppliers have become competitive, which is why the demand for components "made in Germany" or Europe has subsided in these countries.

In order to counteract this trend, the companies in Germany and Europe will attempt to break into the markets in China and other BRIC countries as well as in countries that have recently been reclassified from emerging markets to industrial nations. Brazil, Russia, India and China as well as Israel, Taiwan and South Korea are countries which the companies want to enter in the short and medium term, e.g. by cooperative ventures or setting up branches.

Which foreign markets do you plan to enter on short, medium or long term?



Industry supplies health care and mechanical engineering sectors



The medical technology and health care sector is the key target market for the largest share of the microtechnology, nanotechnology and advanced materials companies in Europe. In Germany, the medical market is sharing the major position with mechanical engineering (most important market for 16 % of companies). In Europe, mechanical engineering is sharing the second place with the semiconductor industry, which is the main customer group for 12 % of companies.

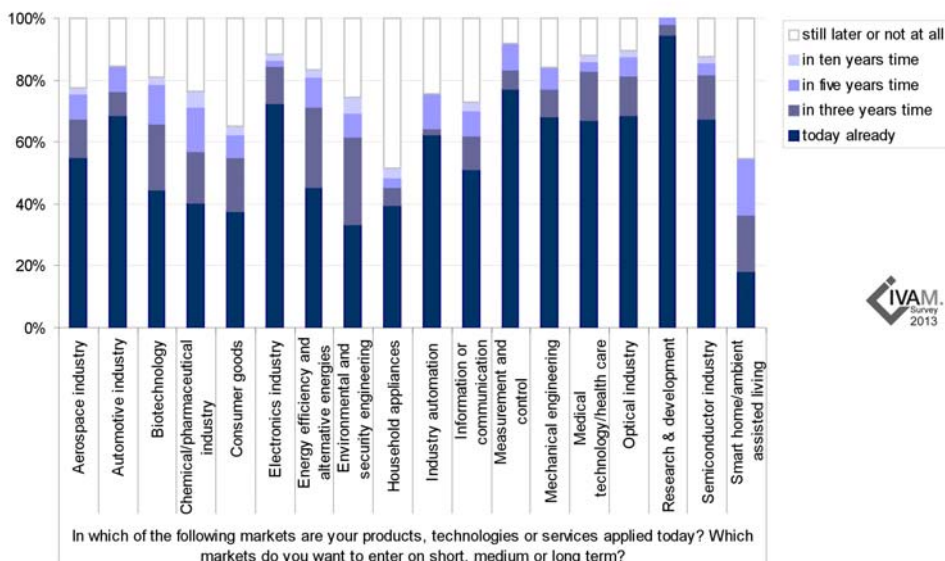
Altogether, far more companies are supplying these markets or are planning to do so in the short or medium term. The medical and healthcare market is being supplied by a total of 67 % of European companies today already; another 16 % are planning to enter the market within the next three years. Only 12 % of companies say that they do not intend to supply the healthcare market in the long run.

Today, 68 % of companies already have customers in the mechanical engineering industry; another 16 % are planning to follow within the next five years. The remaining 16 % of companies do not intend to enter this market in the long term.

Energy efficiency and alternative energies as well as environmental and security engineering today are among the less important markets for the companies of microtechnology, nanotechnology and advanced materials in Europe, but they will experience the biggest increase on short term: 26 % or 28 % of companies respectively want to open up these markets within the next three years. 81 % of companies are planning to supply technologies or components for energy efficiency and alternative energy within the next five years, 69 % of companies want to enter the market of environmental technologies within the same period of time.

The market for intelligent homes and ambient assisted living still has little significance today. Only 18 % of companies are active in this area. But another 18 % want to supply this market within the next three years, and even another 18 % within the next five years. This makes it the strongest growing market in the medium term.

In which of the following markets are your products, technologies or services applied today? Which markets do you want to enter on short, medium or long term?



Nearly saturated with micro-technology products is the market for intelligent household appliances, which only a few more companies want to enter in the future.