

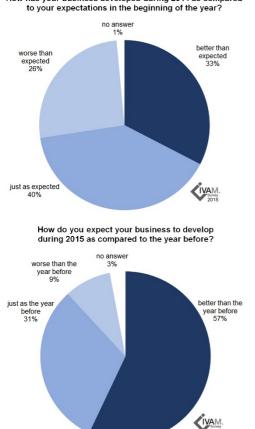
Microtechnology industry more eager to invest

High-tech companies reserved about TTIP in its present design

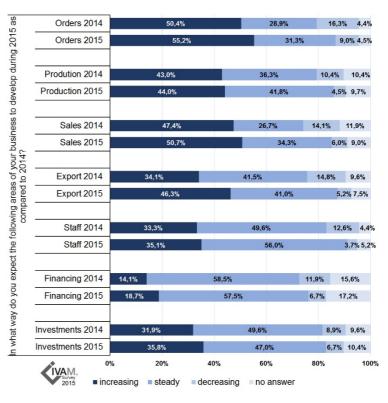
The European microtechnology industry has recently been more eager to invest than in previous years. In the economic data survey of the IVAM Microtechnology Network, almost a third of the participating companies stated that they have invested more in 2014 than in the year before. This is a higher percentage than in the past years and also, it seems, above the European average.

In the latest issue of the *European Economic Forecast* (Winter 2015) the European Commission reports that investments remained stable in 2014 due to a continuing poor investment climate. The European Commission predicts a noticeable rise in investment not before 2016, stimulated, among other things, by its own investment plan and the European Central Bank's quantitative easing programme, which aims at reducing real interest rates. The microtechnology companies are actually inclined to spend more money on technology development and corporate growth in 2015 already: 35.8% of companies plan to invest more than in the past year.

All in all, the year 2014 held no big surprises for the European microtechnology industry. Business went just as expected for the highest percentage (40%) of companies, better than expected for a third, worse than expected for about a quarter of companies. In 2015, 57% of companies expect their business to improve. Just over half the companies have received a larger amount of orders in 2014 than in the year before, production increased for 43.0% of the companies, sales for 47.4%. The companies expect a stronger increase in orders and sales in 2015, whereas production shows a tendency to improve just as moderately as it has in 2014.



How has your business developed during 2014 as compared



In what way do you expect the following areas of your business to develop in 2015 year as compared to 2014?

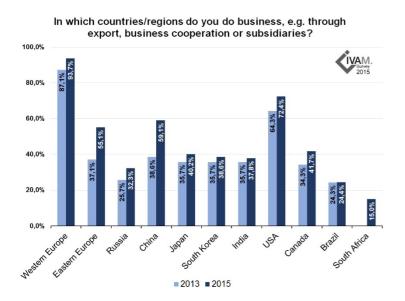
Business development in the European microtechnology industry – review on 2014 and outlook on 2015.



A little more than a third (34.1%) of European microtechnology companies have increased export in 2014. Economic experts and the European Commission expect the recently weak export to recover during 2015, not least thanks to the weak euro. This outlook corresponds with the expectations of the microtechnology industry: 46.3% of companies want to export more in 2015 than in the previous year.

Employment has only moderately increased, just as in previous years: A third of all surveyed companies has hired additional employees, one eighth (12.6%) had to reduce staff in 2014. The industry expects a similar development with a little less downsizing in 2015. This is more or less in line with the expectations for the overall economy in Europe: employment figures are supposed to remain largely unaffected by the moderate economic growth in the European Union and the euro zone, which the European Commission predicts for 2015 and 2016.

Business booms in Eastern Europe and China - Brazil high on the list



Which foreign markets do you plan to enter in future? 100,0% 80.0% 60.0% 40,0% 20,0% 0.0% EasternEurope South Kores SouthAfrica Western Europe Bratil Japan RUSSIA China mdia canada JSA today already in five years ■ in three years time still later or not at all in ten vears

In which countries/regions do you do business?

The European microtechnology companies are still trading mainly within Western Europe. Outside the European home market, the US market continues to be the strongest, but markets in China and Eastern Europe have become considerably more important for the industry since 2013. Business with Russia has not abated despite the economic sanctions; a higher proportion of companies is doing business in Russia today than two years ago.

The most important foreign markets of the European microtechnology industry in 2013 and 2015.

Emerging markets such as India and Brazil have not developed as fast as expected. The proportion of companies with market activities in Brazil has remained stable since 2013. However, an additional 22% of microtechnology companies want to become active there within the next five years. This would make Brazil the fastest growing overseas market for the European microtechnology industry in the medium term - followed by South Korea, Russia, and India, where a little less than 20% of companies wish to establish themselves over the next five years.

The prospective medium-term and longterm development of the foreign markets of the European microtechnology industry.

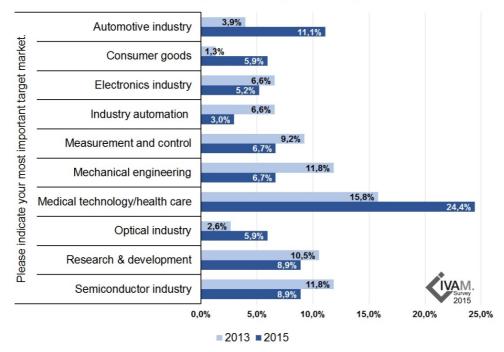
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Microtechnology and health care market benefit from each other

Automotive industry back among top markets

The medical and healthcare sector is of growing importance for the microtechnology industry. More than half of the European companies are supplying this market. For nearly a quarter (24.4%), it is the most important target market – two years ago it was just about 16%. Microtechnology is essential for the medical industry, because it provides technical solutions that make it possible to enhance the quality and scope of health services and at the same time reduce the expenses for treatment, which is essential in view of the increasing life expectancy and the increase in chronic diseases. This trend will continue, and the technical possibilities are far from being exhausted.



Please indicate your most important target market.

The most important target markets of the European microtechnology industry in 2013 and 2015.

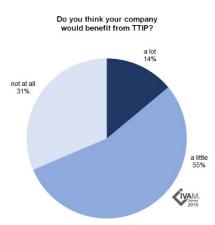
The automotive industry has recently experienced a growth spurt around the world. For the microtechnology industry, too, this market has become more important again during the past two years. Automotive technology is the major target market for 11.1% of companies – in 2013 this applied to just under 4%. Likely reasons for the comeback of the automotive industry in the list of major target markets are a growing need for intelligent systems, such as driver assistance systems, and the connectivity of cars with entertainment and information services, as well as the ongoing development of alternative drive concepts, such as electric or hydrogen engines.

Technologies for renewable energy and higher energy efficiency are still largely in the development stage, even in Germany where the government-promoted energy transition is driving the development of new energy technology. Research institutions list energy and efficiency more frequently as possible application fields for their technologies than industrial companies. It is the most important market just for 1% of companies.



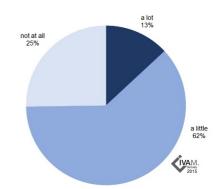
Does TTIP bear "more risks than opportunities"?

The proposed Transatlantic Trade and Investment Partnership (TTIP) between the European Union and the US is causing mixed feelings in the European microtechnology industry. The companies appreciate the potential benefits of the free trade agreement, but they rather disapprove of it in its considered design. TTIP bears "more risks than opportunities" is how one participant summarised the concern.

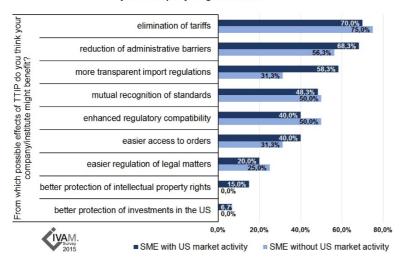


More than two thirds (69%) of respondents believe that their company would benefit from TTIP at least a little. A larger proportion (75%) think that TTIP would have a positive impact on the economy of their country. Especially companies with high export quotas hope to gain economic profit from the free trade agreement.

Do you think that TTIP would have a positive impact on the economy in your country?



From which possible effects of TTIP do you think your company might benefit?



The possible benefits most often mentioned by the responding companies are an elimination of tariffs and a reduction of administrative barriers. SME that have already entered the US market are more often looking forward to more transparent import regulations, easier access to orders as well as a better protection of Intellectual Property rights and investments in the US than those without US market activities.

Possible benefits of TTIP for European microtechnology companies.

IP and investment protection, however, are also issues that make the industry doubt the all-over benefit of TTIP for European high-tech SME. The companies are especially bothered by differences in the patent laws of the US and Europe that would put European companies at a disadvantage, and the uncertainties concerning investment protection – a topic which is still waiting to be negotiated. The general feeling is that national legal regulations, but also consumer and environmental protection issues, should not be submitted to economic interests unconditionally. So TTIP might gain a better reputation with the European microtechnology companies, if the goals were communicated more actively, negotiations became more transparent and controversial issues were resolved with priority.

IVAM Research, the economic research division of the IVAM Microtechnology Network, collects economic data in the fields of microtechnology, nanotechnology, advanced materials, and optical technologies once a year. The survey in January and February 2015 has been addressed to 2541 companies and research institutes in Europe. 6.5 % of addressees took part in the survey.

Information: www.ivam.de/research