

# Focus on Economics

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## Learning to succeed: how SMEs benefit from the international exchange of ideas

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To remain competitive in today's world, small and medium-sized enterprises (SMEs) need to hold their own in a globalised market place. This applies now more than ever. To this end, being actively open to new ideas – especially new ideas from abroad – is of major importance. This is the key finding of a KfW study in partnership with Verband der Vereine Creditreform.<sup>1</sup>

Seeking new ideas from other countries and then making use of them – in an active and systematic fashion – can double SME<sup>1</sup> productivity. Learning about international best practice is especially important for those SMEs with a relatively low level of productivity.

However, there is no reason to fear that making use of ideas from abroad will cause a company's own research and development to atrophy. On the contrary: in one in three companies, this search for ideas actually encourages additional R&D activity.

### Looking abroad for ideas: standard practice for SMEs

31 % of SMEs have already incorporated new ideas from other countries into their own businesses. In a third of these SMEs, this success has come as the result of a systematic search; in contrast, just under two thirds of these companies came across an idea abroad simply by chance and have then made use of it themselves. Overall, larger SMEs are 2.5 times more likely than smaller SMEs

to adopt such ideas.<sup>2</sup>

20 % of SMEs have yet to make use of an idea from abroad, but look out for them regularly.

Europe is the most popular region: 86 % of SMEs scan for new ideas in other European countries. The driving factors here may well be geographical proximity as well as similarities in language, customer preferences, and business processes.

### Ideas from abroad lead to distinct productivity gains

When SMEs adopt an idea from abroad, this leads to significant productivity gains in 87 % of cases (Figure 1): on average, productivity within these companies increases by a remarkable 83 %. Smaller SMEs with relatively low productivity benefit the most here: prior to implementing the new idea, productivity in this group is significantly below the arithmetic mean (an index value of 56), but almost doubles as a result of using

an idea from abroad (to an index value of 102).<sup>3</sup>

For 13 % of SMEs, adopting ideas from abroad has no effect on their own productivity.<sup>4</sup> A possible reason for this is that these companies are already highly productive. Prior to employing these new ideas they have an index value of 135, markedly above the average for all companies (and roughly 1.4 times the average for the group of SMEs which derive a benefit from new ideas coming from abroad).

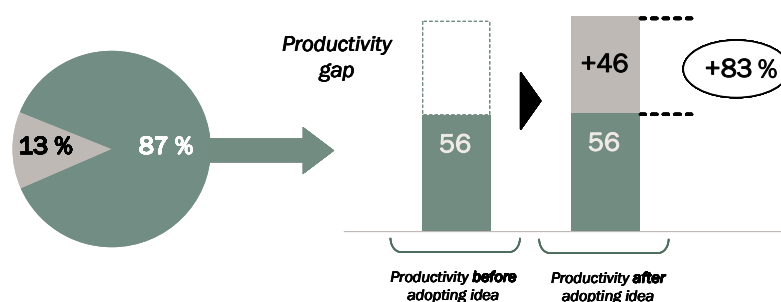
### The search for new ideas precedes the search for new markets

These results suggest that searching for ideas can be, and often is, an effective strategy when preparing to venture abroad, albeit a strategy which has received little consideration to date. In the run-up to exporting, companies often make a conscious effort to raise their productivity (by investing in production technology, for example).<sup>5</sup> This has also been confirmed by recent KfW studies: increases in productivity often precede SME ventures into export markets.<sup>6</sup>

Given the enormous impact on productivity which results from adopting new ideas (including ideas from abroad), it is certainly possible that, when SMEs trade internationally – and especially when they venture into exporting for the first time – the search for new ideas precedes the search for markets.

**Figure 1: The relationship between adopting ideas from abroad and labour productivity**

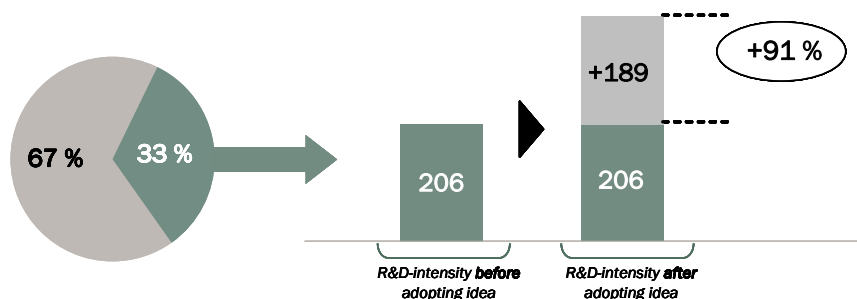
Standardised values: 100 represents average labour productivity across all companies



Source: KfW /Creditreform survey 2012.

**Figure 2: The relationship between adopting new ideas from abroad and R&D intensity**

Standardised values: 100 represents average level of R&D intensity across all companies



Source: KfW /Creditreform survey 2012.

strategies exists alongside these. However, the frequency with which they are used says very little about their actual benefits. Closer analysis shows that, out of this plethora of search strategies, only four demonstrate a statistically significant positive impact on the probability that an idea is actually adopted (Figure 3).

The strategy which has by far the greatest influence here is the recruitment of applicants with experience abroad. All other things being equal, the probability of an idea being implemented increases by 26 percentage points among these SMEs. Visiting specialised international trade fairs (+20 percentage points) has a similar effect to undertaking independent market research (+19 percentage points). Participating in cross-sectoral events also has a beneficial impact (+12 percentage points).

The strong positive effect seen when SMEs purposeful search potential employees with experience abroad underlines the importance – in a knowledge economy – of transferring knowledge and experience on an inter-personal level. The fact that visiting specialised international exhibitions and cross-sectoral events also generates positive effects points in the same direction, because the transfer of personal knowledge plays a significant role here too. Studies have unequivocally shown that the informal interactions which often take place during such events are an important forum for exchanging ideas.<sup>8</sup>

**The main barriers: financing, management capacity and lack of specialist staff**

Various obstacles constrain the use of ideas from abroad and often prevent the productivity increases and / or R&D leveraging described earlier from being re-

**R&D in Germany not displaced**

Fears that adopting new ideas from abroad could lead to a reduction in companies' own research and development (R&D) are not confirmed: ideas from abroad are not displacing the R&D activities undertaken by German SMEs. On the contrary: in a third of SMEs, adopting new ideas has a beneficial causal effect on their own R&D efforts (Figure 2): by adopting new ideas, the respective SMEs raise their R&D index value from 206 to 395 (+91 %).

Detailed analyses show that, in this area too, smaller SMEs in particular benefit from making use of ideas from abroad. However, unlike the small companies in the productivity analysis, these small companies are already highly productive. Why? Because before implementing new ideas their levels of R&D-intensity were already above average, and, as a result, so were their absorptive capacities (their abilities to recognise and understand the value of external ideas and to put them into practice).<sup>7</sup>

A lack of absorptive capacity may also explain why implementing new ideas has no discernible positive effect on R&D-intensity in the remaining 67 % of SMEs. It is most likely that these companies are short of internal capacity and know-how: prior to implementing new ideas, the mean level of R&D activity in this group is 51 % of the average value.

**Making use of new ideas for both products and processes brings success**

For large parts of the SME sector, making use of new ideas from abroad has a

positive effect on their productivity and / or their R&D activity. This prompts the question: what kind of ideas are most promising?

With regard to productivity effects, this question is easily answered: there are no indications that any particular type of idea is especially promising. New ideas for both products and processes serve to raise productivity in equal measure.

The situation is different with regard to the effect on R&D. 71 % of those companies whose R&D activity ultimately benefit from new ideas from abroad specifically search for product ideas. This figure is only 51 % among all the SMEs which are actively seeking ideas.

**Not every search strategy brings benefits – but employees with experience abroad are a strong advantage**

SMEs use a multitude of strategies to search new ideas abroad. The internet is the most frequently used source of information (47 % of companies). 18 % of SMEs find leads in professional journals, whilst 13 % visit specialised international trade fairs and 7 % conduct their own market research. A raft of other search

**Figure 3: The impact of different search strategies on the probability of adopting a new idea from abroad**

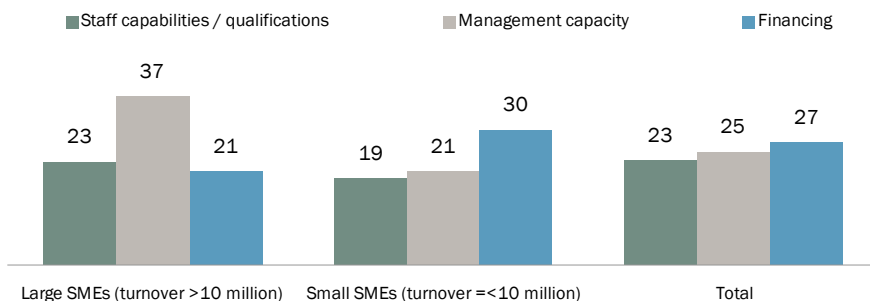
Values expressed in percentage points



Source: KfW /Creditreform survey 2012.

**Figure 4: Most frequently encountered barriers to adopting ideas from abroad**

Classified by turnover, frequency cited (as a percentage)



Source: KfW /Creditreform survey 2012.

alised. The three barriers most frequently encountered are shown in Figure 4. Financing search strategies (such as travel costs, or the costs of producing market studies) is the barrier nominated most often (cited by 27 %), especially among smaller SMEs (30 %). This also shows that, with regard to this particular aspect of SME internationalisation, the smaller the company, the more significant a barrier financing becomes.

25 % of SMEs state that a lack of management expertise in the implementation area is a constraining factor. Larger SMEs are particularly in evidence here (37 %). They face more complex situations, and they confront them more often (being active in several markets in parallel, being regionally diversified), which can make it difficult to manage ideas systematically. Challenges in terms of staff capacity and employee qualifications are cited as barriers by 23 % of

SMEs. This category may include factors such as inadequate intercultural skills and language barriers.

### Implications

The SME sector benefits extensively from the international trade in goods and services, but it also benefits to a substantial degree from international networking – through the exchange of ideas. This article confirms precisely that. Our analysis points to three key implications.

*First:* By making use of ideas from abroad, SMEs are often able to raise their productivity and / or the level of their R&D-intensity. There is still substantial potential lying dormant here, as 50 % of SMEs have still not sought out or adopted such ideas. Yet half of these SMEs would benefit enormously from their implementation. Their productivity lies well below the average. For the most

part, these are service providers and small companies with a turnover below EUR 10 million (83 %). By working in a targeted manner and collaborating with trade associations, companies can do a lot in this area on their own account. Policymakers are invited to provide the appropriate support and to communicate existing offerings in a more transparent fashion.

*Second:* Communication and interaction are essential prerequisites for the successful transfer of ideas and knowledge. This is the only way in which personal knowledge can be conveyed and put to use effectively. It is therefore important – above and beyond existing initiatives – to further reduce existing barriers to the exchange of personal knowledge.

*Third:* Implementing ideas from abroad stimulates companies' own R&D efforts. This is particularly relevant in the context of current concerns over the SME sector's increasing withdrawal from independent R&D activities.<sup>9</sup> History teaches us that, for the most part, the companies which stay competitive are active in R&D and innovation. Leveraging R&D it is therefore key – and may well pay for itself in the long term.

### Further publications on this topic:

**“Internationalisation in Germany's SME sector. Step by step to global presence”**

**“From exports to foreign investments: SMEs tap into foreign markets” ■**

<sup>1</sup> Data was collected in a postal survey of 28,165 companies carried out jointly with Verband der Vereine Creditreform e. V. Questionnaires were sent to all Creditreform member companies with 30 or more employees. The survey was undertaken between 26 March 2012 and 20 April 2012. A total of 3,594 companies responded (12.7 % response rate). These companies form the study data base.

<sup>2</sup> We define larger SMEs as companies with an annual turnover in excess of EUR 50 million and smaller SMEs as companies with an annual turnover of up to EUR 5 million.

<sup>3</sup> Direction of causality was monitored using a two-stage least-squares (2SLS) procedure. Here we used the causal relationship between distances from the nearest national border as an instrumental variable for the use made of ideas from abroad. This relationship is particularly pronounced for those companies whose management was not university educated. The results from the 2SLS estimation process demonstrated a substantial degree of heterogeneity. This was addressed through finite mixture modelling.

<sup>4</sup> We differentiated between the two groups by using a finite mixture model.

<sup>5</sup> See Alvarez, R. and R. Lopez (2005), Exporting and firm performance: Evidence from Chilean plants, *Canadian Journal of Economics* 38, 1384–1400. – Eliasson, K., Hansson, P. and M. Lindvert (2012), Do firms learn by exporting or learn to export? Evidence from small and medium-sized enterprises, *Small Business Economics* 39, 453–472.

<sup>6</sup> See Brutscher, P., Raschen, M., Schwartz, M. and V. Zimmermann (2012): Internationalisation in Germany's SME sector. Step by step to global presence. KfW Research, KfW Bankengruppe, Frankfurt am Main.

<sup>7</sup> See Cohen, W. M. and D. A. Levinthal (1989) 'Innovation and learning: the two faces of R&D', *The Economic Journal*, Vol. 99, pp.569–596. – Cohen, W. M. and D. A. Levinthal (1990) 'Absorptive capacity: a new perspective on learning and innovation', *Administrative Science Quarterly*, Vol. 35, pp.128–152.

<sup>8</sup> Von Hippel, E. and S. Schrader (1996): "Managed" informal information trading: the oil scout system in oil exploration firms, *International Journal of Technology Management* 11, 207–218. – Pyka, A. (1997): Informal networking, *Technovation* 17, 200–207.

<sup>9</sup> Zimmermann, V. (2013): The innovation motor is sputtering, Focus on economics no. 13, KfW Research, KfW Bankengruppe, Frankfurt am Main.