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Recruitment of skilled workers in SMEs: Optimism must not distract from qualification problems

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When companies take a long time to fill vacant positions, or are unable to fill them at all, their competitiveness suffers. A special analysis of the KfW SME Panel data shows that there are a great many factors that can lead to recruitment problems but SMEs clearly see the qualification of labour supply as the greatest hurdle. Companies expect to have trouble filling future vacancies because of shortages of applicants in certain occupations, salary expectations and the lack of additional qualifications on the part of the applicants.

Even though SMEs are somewhat more likely to be concerned about the shortage of applicants, they are substantially more optimistic about recruiting skilled workers overall than they were a few years ago. However, this may only be a temporary phenomenon, as impending demographic bottlenecks on the labour market could materialise in as little as ten years' time.

Qualified employees are crucial to a company's success. Given the increasing level of qualifications demanded by our knowledge-based society, this is now truer than ever. If suitable workers cannot be found, if it takes too long to find them, or if it is only possible to find them by lowering the bar in terms of qualifications, then productivity suffers. But do SMEs have bigger problems with recruitment today¹ than they did a few years ago? A comparison of the KfW SME Panel data from 2010 and 2014 provides some answers.²

Companies are much less likely to be concerned about recruitment problems than in 2010

Among SMEs seeking to take on skilled workers by 2016, 57% expect to experience recruitment problems – i.e. they anticipate that they will not be able to fill at least one position, it will take a long time to do or they will have to reduce their requirements in terms of qualifications in order to fill it. This equates to 34% across all SMEs, meaning that SMEs have become markedly more optimistic over the last four years. In 2010, almost 75% of companies that were hiring anticipated recruitment problems.

This improved outlook is all the more noteworthy because the proportion of

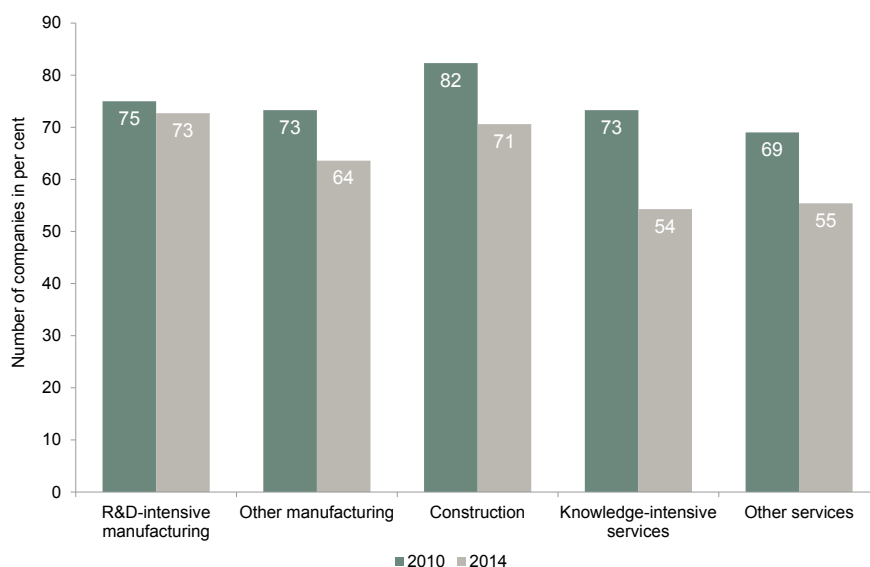
companies that are hiring has since risen considerably: In 2010, only around a third of companies were planning to recruit skilled workers at all – by 2014 the proportion had almost doubled (60%).³ Not only that, recruitment problems would actually have been expected to become more pronounced in view of the fact that the unemployment rate is currently very low. On the other hand, rising labour participation is a reason for optimism. Recent immigrant flows from EU member states also increase labour supply – at least temporarily.

Service sector more optimistic; virtually no improvement in R&D-intensive manufacturing

Fortunately, expectations of recruitment problems have fallen in every sector of the economy (Figure 1). The improvement in outlook is most pronounced in the service sector, particularly in the knowledge-intensive companies that make up just under half of the sector. In contrast, the situation in the R&D-intensive part of the manufacturing sector has barely improved at all. Roughly three quarters of R&D companies (that

Figure 1: Companies that are hiring and expect recruitment problems (2010 and 2014)

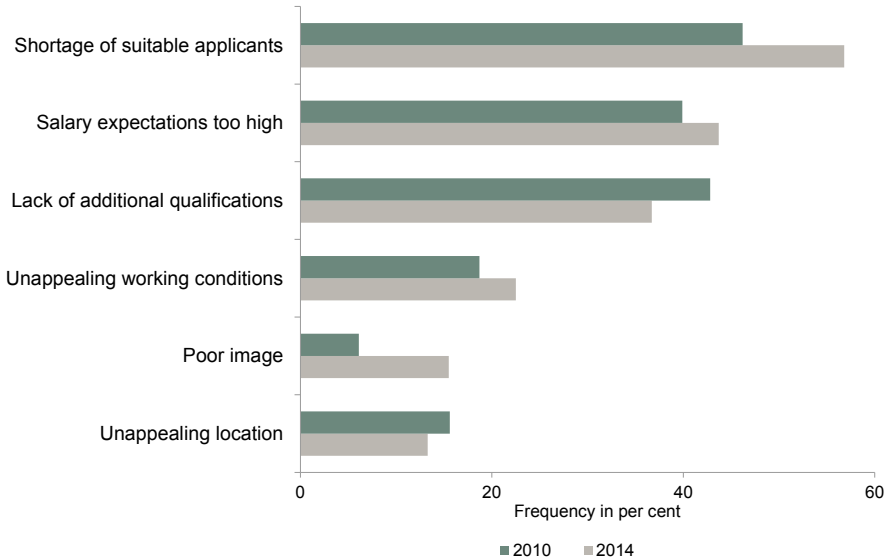
Percentage of companies that expect to have problems recruiting skilled staff. Relates to companies seeking to take on skilled workers within three years.



Source: KfW SME Panel 2010 and 2014.

Figure 2: Reasons for recruitment problems (2010 and 2014)

Frequency of reasons cited by companies experiencing recruitment problems (multiple answers permitted). Relates to companies seeking to take on skilled workers within the next three years and that anticipate recruitment problems.



Source: KfW SME Panel 2010 and 2014.

are hiring) still have concerns about recruiting skilled workers.

While the construction sector expected to see the biggest problems with recruitment in 2010, R&D-intensive manufacturing now heads the list. Differences between sectors are now also more marked. The notable improvement both in knowledge-intensive and other service companies has now led to a gap of almost 20 percentage points between service companies and R&D-intensive manufacturing.

Qualification problems widespread

What specific problems do companies anticipate when recruiting skilled workers? Problems associated with professional qualifications are particularly prevalent. The most common concern among SMEs is “shortage of applicants in the occupation”, followed by “salary expectations too high” (Figure 2). Both of these reasons have become even more pressing compared with 2010.

A shortage of applicants in a specific occupation points to structural problems with qualifications. These tend to be long-term in nature, as the labour market lags behind in this respect. Labour supply in specific occupations is dependent on long-term decisions about education,

while demand from companies depends on long-term investment decisions. However, targeted immigration of qualified workers and increased labour participation can provide a short-term remedy.

The second most common problem cited by companies is that applicants’ “salary expectations are too high”. This may be an indication that market wages are rising due to excess demand for certain oc-

cupations. It is also conceivable that there may be cases where employees and/or employers have unrealistic salary expectations – for example because they have wrongly judged developments in the labour market, the applicant’s qualifications or location factors.

The third most common problem cited by companies is also related to qualifications: a lack of additional qualifications. Unlike the occupation-specific shortage of applicants, it is possible to address this problem quickly by implementing further education and training initiatives.

Companies place significantly less importance on unappealing working conditions, poor image and unappealing locations. Nonetheless, image problems have become more important, although they remain at a low level.

R&D-intensive manufacturing: Salary expectations and additional qualifications

There are clear differences in the reasons cited for recruitment problems within different economic sectors (Figure 3) and by industries within those sectors.⁴

The occupation-specific shortage of applicants is only of moderate importance in the R&D-intensive manufacturing industry.⁵ Companies expect problems to arise as a result of high salary expecta-

Figure 3: Reasons for recruitment problems by sector (2014)

Frequency of reasons cited by companies experiencing recruitment problems (multiple answers permitted). Relates to companies seeking to take on skilled workers within the next three years and that anticipate recruitment problems.



Source: KfW SME Panel 2014.

tions and a lack of the required additional qualifications. These two points are more prevalent here than in any other sector. The lack of additional qualifications is of particular concern in the chemical/pharmaceutical and mechanical engineering industries.⁶ High salary expectations are also a particular issue in mechanical engineering – an industry which is reliant on STEM graduates⁷.

In contrast, for R&D-intensive manufacturing, working conditions and image are a positive factor in terms of recruitment when compared with other sectors.

Shortage of applicants in other manufacturing and the construction sector

Businesses operating in the other manufacturing sector are more likely than average to be concerned about a shortage of applicants, particularly in the metal-working industry. This is the problem of typical bottleneck jobs.⁸ Image worries are also widespread in the other manufacturing sector, particularly in the food industry.

The occupation-specific shortage of applicants is most frequently cited in the construction sector, which is fundamentally prone to cyclical labour shortages. The sector is also a good example of the fact that unappealing working conditions and image problems often go hand in hand.⁹

Knowledge-intensive service sector concerned about lack of qualifications

The main issue for knowledge-intensive service companies is a lack of additional qualifications on the part of applicants. This is particularly true of finance and IT companies. Expectations of high pay are also a specific recruitment problem for providers of IT services.

Among companies within the service sector, only those in the healthcare industry rank a shortage of applicants above the average level – a sign of the familiar bottleneck in healthcare and caring professions.

Knowledge-intensive service companies, on the other hand, enjoy the benefits of appealing working conditions and a good image. In this respect they consider

themselves to be as well-placed as R&D-intensive manufacturing.

Other services: Working conditions vs. salary expectations

Compared with other sectors, other service providers have the lowest level of issues with occupation-specific applicant shortages. Instead, the sector finds itself caught between unappealing working conditions and salary expectations. Concerns about a mismatch between these two factors are most common in industries such as education, gastronomy and transport. As it is primarily the smallest companies that experience problems with high salary expectations, the other services sector, which tends to be more fragmented, is particularly affected by this.

Strong regional effects

Regression analysis also shows that there is a strong regional effect: In shrinking labour markets, virtually all companies anticipate problems with recruitment. These regions, which are mostly rural and suffer from high unemployment, a shrinking population and falling tax revenues, are predominantly located in the eastern federal states.¹⁰ From the point of view of SMEs in such locations, the main issue is that wage demands are frequently too high.

Despite the difficult situation in specific regional labour markets, companies tend to view their location in a positive light. In assessing their recruitment problems, companies attributed the lowest importance to the “unappealing location” category.¹¹

Summary of results

Investigation of the recruitment problems faced by SMEs, based on the KfW SME Panel, reveals four key results:

(1) Recruiting skilled workers is not a trouble-free process for SMEs: Over half of companies that are hiring are concerned that they will have difficulty filling at least one post over the next three years.

(2) SMEs are nonetheless much more confident about recruiting skilled workers than they were in 2010 – in spite of an

increase in demand and a smaller pool of jobseekers. The improved sentiment is present in every economic sector and is particularly pronounced among service companies. Even so, concerns in the R&D-intensive manufacturing industry remain high, which is bad news in terms of economically important innovations.

(3) For SMEs, the core problems are related to the qualification of labour supply. On the one hand, they are worried about a shortage of applicants in specific occupations, above all in the construction sector and in other manufacturing. On the other hand, many companies are concerned about the available applicants’ lack of additional qualifications, particularly in the R&D-intensive manufacturing industry and among knowledge-intensive service companies. In view of this, there are various areas where action can be taken: In the short term, immigration and greater labour participation can supply qualified individuals to mitigate the impact of structural bottlenecks whereas a lack of additional qualifications calls for measures targeted at providing further education and training.

(4) In addition, econometric analysis also shows how significant regional labour markets can be when it comes to recruitment problems. From the point of view of companies, however, location only plays a minor role and to some extent this may mean that they view it with too much optimism.

Outlook: The calm before the storm

Recruitment problems are a phenomenon that varies from company to company and can have a wide range of causes. Even so, the fact that SMEs are increasingly concerned that a shortage of applicants is leading to their specific problems may be an indication that there is a growing bottleneck in the supply of skilled workers.

As KfW Research has recently demonstrated, SMEs – or more specifically, their owners – are starting to feel the impact of demographic change: The fact that entrepreneurs are now older is already holding back levels of investment and innovation.¹² In terms of recruiting

skilled workers, the pressure has abated somewhat since 2010.

Nonetheless, growing concerns about a shortage of applicants in a wide range of occupations can be interpreted as an indication of population change to come. From around 2025 the retiring baby-boom generations will leave an enormous gap in the workforce.¹³ A demographic upheaval of this magnitude means that recruitment problems and bottlenecks in the supply of skilled work-

ers will increase noticeably, even in the medium term.

However, past projections of labour supply have often underestimated positive trends in employment behaviour. Market forces increase labour participation, for example as a result of rising wages due to short supply. But efforts on the part of companies, along with political initiatives are also required to support the corresponding changes in the world of work.

The key aims are to continue to increase labour participation among women and older citizens, to integrate qualified immigrants on a sustainable basis and increase productivity through improvements in (further) education and constant innovation.¹⁴

Another special analysis of the KfW SME Panel to be published soon will look at the steps SMEs are taking. ■

¹ The subject of this analysis is the recruitment problems faced by individual companies. Recruitment problems on a company level may be caused by a number of factors, not least a disparity between candidates' and employers' conception of what is an appropriate salary or unappealing working conditions. A distinction needs to be made between factors such as these and the shortage of skilled workers that arises when overall demand in the economy for specific professions exceeds supply.

² See Reize, F. (2011): *Fachkräftemangel im Mittelstand: generelles oder partielles Problem?*, Akzente no. 41, KfW Banking Group, Frankfurt am Main (only available in German).

³ The difference in demand between 2010 and 2014 can largely be explained by the economic and labour market prospects in those years.

⁴ For the purposes of this paper, the KfW SME Panel data has been analysed not just by sectors but also using more narrowly defined industries, so as to provide an approximation of occupation-specific differences. Even in large, representative data sources such as the KfW SME Panel, the limited number of cases makes analysis harder. The detailed analyses relate solely to industries with a sufficiently large number of observations and statistically significant differences.

⁵ The electrical engineering industry is an exception to this. Our data support evidence of supply shortages identified by observers of the labour market by looking at vacancy rates and search durations. See Federal Employment Agency (2014): *Der Arbeitsmarkt in Deutschland – Fachkräfteengpassanalyse* December 2014, Nürnberg (only available in German).

⁶ This may be due to the higher requirements these highly innovative industries place on staff but also to the degree to which they are internationalised – it may be that particular language requirements are a problem. In general, companies that operate internationally are particularly likely to suffer from a shortage of additional qualifications, across all sectors.

⁷ STEM stands for science, technology, engineering and mathematics.

⁸ See Federal Employment Agency (2014): *Der Arbeitsmarkt in Deutschland – Fachkräfteengpassanalyse* December 2014, Nürnberg (only available in German); Czepek, J. et al. (2015): *Betriebe im Wettbewerb um Arbeitskräfte, Bedarf, Engpässe und Rekrutierungsprozesse in Deutschland* (only available in German). Aktueller Bericht no. 5, Institut für Arbeitsmarkt- und Berufsforschung, Nürnberg (only available in German).

⁹ The financial services sector is an exception to this: Despite offering good working conditions, banks and insurance companies are concerned about their image.

¹⁰ The standardised district types and labour market regions used here (categorized by changes in population/employment levels and trade tax revenue, for example) are those developed by the Federal Institute for Research on Building, Urban Affairs and Spatial Development (*Bundesinstitut für Bau- Stadt- und Raumforschung*).

¹¹ From a statistical point of view, it is population density, rather than the situation on the labour market, that is the key factor when considering location: Companies in rural areas are much more likely to be concerned about the disadvantages of their location than those in towns and cities. Nonetheless, even in the countryside the "unappealing location" category is of minor significance when compared with other recruitment problems.

¹² See Gerstenberger, J. and M. Schwartz (2015): *Ageing of German SME owners is putting a dampener on investment*, Focus on Economics No. 85, KfW Banking Group, Frankfurt am Main; Schwartz, M. and J. Gerstenberger (2015): *Succession planning in SME sector in full swing: Half a million hand-overs by 2017*, Focus on Economics no. 91, KfW Banking Group, Frankfurt am Main.

¹³ Between 2025 and 2035 the workforce is estimated to fall from 37 million to 33 million – even with annual migration surpluses of 200,000 people and a participation rate that is approaching levels seen in Scandinavia (participation rate among 20 to 64-year-olds rising from 77.5 to 80%). Our own calculations based on the 12th coordinated population projection from the Federal Statistical Office with a base population from 2013, adjusted to revised census figures.

¹⁴ See Zeuner, J. (2013): *Solving the demographic problem*, Focus on Economics no. 34, KfW Banking Group, Frankfurt am Main.