Workforce shortage, sourcing difficulties: from inconvenience to bottlenecks

INSEE's economic outlook surveys in industry, services and building construction regularly ask companies about any difficulties they may be experiencing regarding workforce and sourcing. Several indicators are produced based on the responses to the various questions asked. To explain these, here we consider the example of the economic outlook survey in the building construction industry, aimed at a sample of companies with ten or more employees.

With regard to the workforce, there is a question every quarter about difficulties with recruitment, calling for a "yes" or "no" answer: "Do you have difficulties recruiting?".

Next, there is a set of questions aimed at identifying any obstacles that hinder the expansion of business. Companies are first invited to say whether there are currently any obstacles to the development of their activity, then to specify the nature of these obstacles, if any. They can tick several boxes in a short list of possible constraints, one of which is shortage of staff. This gives a proportion of companies that say they are prevented from developing their activity as they would wish, due to a shortage of staff: this is a limiting factor to their activity, an obstacle to their production.

The questionnaire continues with a question on their potential production margin: "If you received more orders, with your current resources could you increase your production?". From the companies that reply to this question, we retain those claiming that they would be unable to respond to greater demand and which, in addition, ticked shortage of staff among the factors hindering their expansion: these companies are facing a "workforce bottleneck".

Businesses experiencing a workforce bottleneck are therefore necessarily a subset of those reporting shortage of staff as a factor limiting their expansion. However, the respective proportions do not relate to the same totals: the share of companies reporting that the shortage of staff hinders their activity is calculated in relation to all companies that replied to the question on the existence of obstacles to production, whereas the share of companies facing a workforce bottleneck is calculated in relation to all companies that replied to the question on the possibility of increasing production in the event of additional orders. However, the companies surveyed do not all necessarily provide information on all the questions asked, and this partial non-response varies according to the questions: hence, we are not looking at the same denominator in both cases, and thus the resulting proportions do not strictly correspond. Overall, slightly fewer companies respond to the question on the possible increase in production in the event of additional orders, than to the question on the existence of obstacles.

Finally, we consider those companies that not only say that they could not increase their production if they received more orders, but they also tick lack of staff as the only factor limiting their production: these companies are experiencing a "bottleneck in workforce only".

This produces four tiered indicators (► **Figure 1**).

We also consider sourcing difficulties: obstacles limiting production or, even more disabling for a company, a bottleneck when companies encountering obstacles also say they are unable to increase their production if they receive more orders (► **Figure 2**).

All these proportions are calculated taking into account the respective weighting of the companies that responded: individual responses are weighted by workforce for the question on recruitment difficulties and by turnover for the questions on factors limiting activity and the production margin. Results for each elementary stratum (intersection of sector of activity x size category) are aggregated taking into account the relative economic importance of each stratum across the entire scope of the survey. In the case of the building industry survey, this secondary weighting is based on turnover per stratum for all the questions.

Every economic outlook survey has its own specific characteristics, due to the variety of questions that are harmonised at European level along with questions or items based on a national initiative. Thus in the economic outlook survey of the building industry, questions on factors limiting activity are monthly, whereas they are quarterly in the surveys in industry and services. ●

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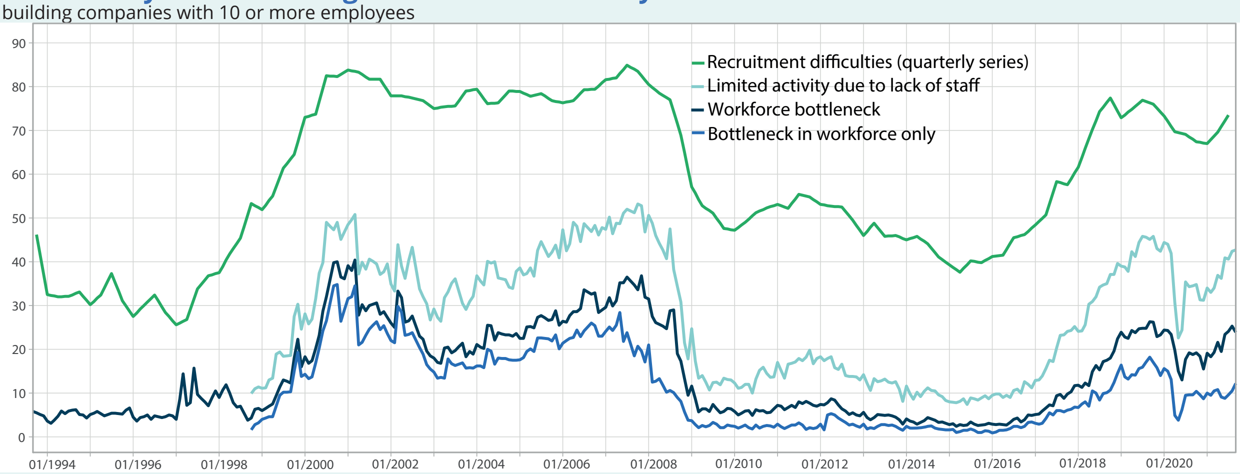
► 1. Different types of difficulty linked to the workforce shortage measured in the economic outlook survey in the building construction industry

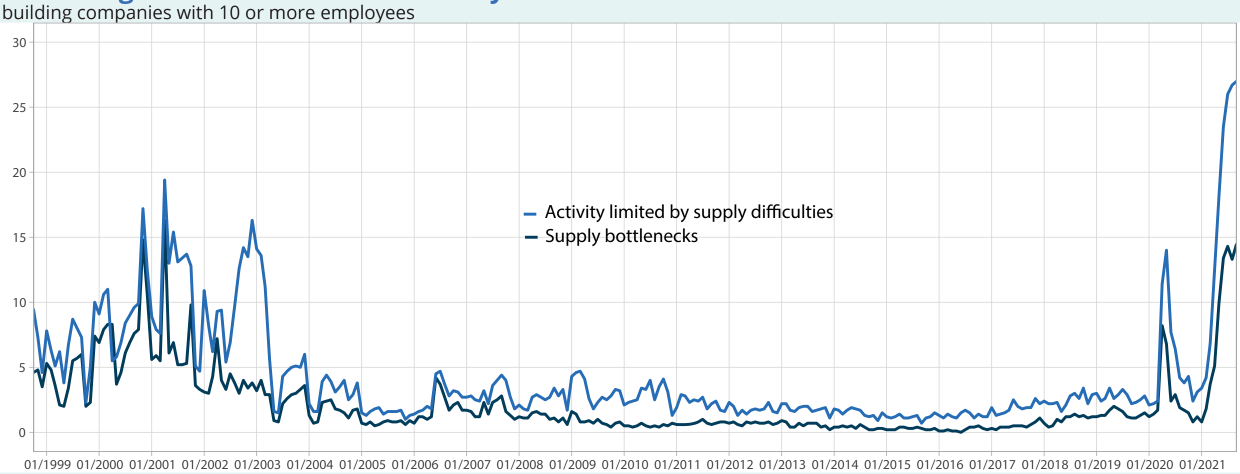
% of building companies with 10 or more employees



Note: the series are raw data. Within the elementary strata, individual responses are weighted by staff numbers for recruitment difficulties, by turnover for other questions. The results per stratum are aggregated, taking into account the relative importance of the stratum in the entire scope of the survey, according to turnover.
Last point: July 2021 for recruitment difficulties, September 2021 for other series.
Source: INSEE, Monthly survey of building

► 2. Sourcing difficulties: curb on activity and bottlenecks

% of building companies with 10 or more employees



Note: the series are raw data. Results are weighted by turnover.
Last point: September 2021.
Source: INSEE, Monthly survey of building