



Karl Brenke, Scientific Advisor to the Executive Board of DIW Berlin

SIX QUESTIONS TO KARL BRENKE

»University Graduates Alone Meet Demand«

1. Mr. Brenke, the Association of German Engineers (Verband Deutscher Ingenieure, VDI) estimates there will soon be huge demand for engineers because the average age of today's engineers is now very high. Does this coincide with your observations? No, VDI's figures clearly include engineers who have already retired. The VDI claims that the average age of engineers is 50 to 51. That only applies if retirees are counted as well. The average age of engineers currently in employment is 43. That may sound high, but the average age of academics is generally high due to the lengthy training periods.
2. So which engineers are we talking about here? Primarily about manufacturing-related engineers. Construction-related engineers such as architects, interior designers, structural engineers, and surveyors are excluded because there's obviously no demand there. But we need to take a closer look at manufacturing-related engineers because we've had very different developments in recent years. For example, the number of electrical engineers has been declining for years. We have seen slight increases in the number of mechanical and automotive engineers; there has also been a boom in the number of industrial engineers.
3. But are there really more engineers leaving the profession than joining it? No, the opposite is true. If you calculate the figures realistically, you get about 20,000 engineers retiring from the workforce each year due to their age. But the number of university graduates is somewhere around 45,000 to 50,000. This means the number of graduates currently leaving university is more than sufficient to meet the demand generated by engineers leaving the profession and to cover any additional demand.
4. Where does this false perception that we need more engineers come from? Is it based purely on their average age or are there other arguments? The VDI has conducted regular studies, but their methods are flawed. It determines how many vacancies there are for engineers at Federal Employment Offices, then multiplies this figure by a factor of seven because it says that not every vacancy for an engineer is registered at the Federal Employment Office, which is certainly true. The number of vacancies is compared to the number of unemployed, and then they record the difference. That does not surprise me at all, as large parts of the job market are hidden. The large majority of engineering positions are not filled through employment agencies. Vacancies are filled by an engineer going from one firm to another, or by university graduates entering the labor market—that plays a much more important role.
5. The call for more engineers is not new. Is the VDI simply mistaken or is it more calculated than that? Well, of course, that's difficult to say. On the one hand, I think the industry association has got somewhat on the wrong track. On the other hand, of course, it's true that if you keep saying that we need this or that labor, then you will encourage the younger generation to study certain subjects. The consequence is that the supply of labor will be more than ample, and that automatically drives wages down.
6. What is the actual demand for engineers? According to what we can deduce from the figures, we need around 30,000 a year. But we easily meet that demand with university graduates.

Interview by Erich Wittenberg.

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