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FIVE QUESTIONS TO ALEXANDER EICKELPASCH

»East-West Gap in private research, development, and innovation in Germany: Research-intensive industries and larger companies represented weakly«

1. Mr. Eickelpasch, after reunification, we saw a substantial increase in research and development, or R&D, activities in eastern Germany. How big is the gap between the east and the west of the country today? If we look at the number of R&D employees as a share of the total workforce in Germany, or what is known as R&D labor intensity, and R&D expenditure as a percentage of GDP, it becomes clear that eastern Germany is still lagging far behind western Germany. In terms of R&D intensity, the eastern German economy only reached around 50 percent of the western German level. The situation in public and publicly funded research institutes and universities looks much more favorable, however. R&D intensity in public and publicly funded institutions in eastern Germany is in fact twice that of western Germany.
2. What do the research findings reveal? Based on patent applications, it is apparent that research output in eastern Germany is still lagging far behind western Germany and the gap has shown no real sign of narrowing in recent years. The number of new products launched by companies as a share of their overall turnover is similarly weak in eastern Germany. This is an indicator of companies' innovative strength which shows that in eastern Germany, revenue from product innovations in the manufacturing industry is only 12 percent and the corresponding figure for western Germany 20 percent. In terms of the proportion of industrial products that are market innovations, the share of turnover accounted for by these products is 3.9 percent in western Germany and only 2.0 percent in the east.
3. Why was eastern Germany unable to catch up with the west, despite the strong expansion mentioned earlier? Simply because not every company needs to conduct research and not every company actually does conduct research. As a rule, R&D is conducted by what are known as research-intensive industries, which includes mechanical and automotive engineering as well as the chemical, pharmaceutical, electro technical, and electronics industries. These research-intensive sectors are not as well established in eastern Germany as they are in the west of the country. In eastern Germany, these industries account for 39 percent of manufacturing employment, whereas in western Germany the corresponding figure is over 50 percent. The other reason is that there are fewer larger companies in eastern Germany than in the west and these tend to invest more in R&D than smaller enterprises.
4. How stark is regional dispersion? It is important not to view eastern Germany as a homogenous region but rather to recognize that there is also relatively significant regional dispersion here, as there is in western Germany. One important region for research and development is the city state of Berlin, but the federal states of Saxony and Thuringia invest heavily in R&D, too. We can also see that in western Germany, the state of Schleswig-Holstein, for example, invests much less in research than Baden-Württemberg or Bavaria. Bearing this in mind, we should also take regional dispersion into account.
5. What can policy-makers do in order to drive research and development forward in eastern Germany? If we look at how policy programs have developed since reunification, we can see that in this field, since 2008, the German government has focused on harmonizing research and funding programs for the private sector. One example of this is the Central Innovation Program for SMEs or ZIM which has been open to companies in both western and eastern Germany since 2008. We should also not lose sight of the fact that innovation policy in Germany is a growth-based policy which is not intended to close regional development gaps. From this point of view, harmonizing funding conditions in 2008 was a step in the right direction. In our opinion, it would make sense to go even further and, once current funding programs specific to eastern Germany expire in 2020, the government should consider moving toward harmonization of funding conditions here, too.

Interview by Erich Wittenberg



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