

Future tertiary-level enrolments in Germany – Let's calculate!

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Many educational institutions depend for planning purposes on good prognoses of future enrolments figures. They are of vital interest for the scheduling of various resources—not only teaching personnel but also premises, administration staff, equipment, government funding and so on. Whilst in primary and secondary education the single most important factor for predicting student numbers is demographic development, the situation in tertiary education is much more complex.

To mention just a few relevant factors apart from the purely demographic ones: The fraction of persons leaving school which are qualified and willing to take up academic studies—in contrast to, e. g., vocational education—is constantly changing and the prospective students are (more or less) free in their choice of academic institution and field of study. Due to Germany's federally structured educational system, a whole set of further influencing factors have to be taken into consideration: The states' school systems are very different from each other. Furthermore, in the course of the next years, the effect of massive modifications to the school systems, the introduction of tuition fees in some (but not all) states, and the abolition of military and alternative service in Germany will have a considerable and hard to predict influence on enrolment figures.

In this paper, I will restrain myself to briefly describing a couple of important factors affecting the number of students taking up tertiary education in a very general manner, i. e., without going into too much detail, focusing on any one of the federal states, or even giving exact figures. In contrast to this, the poster presented at the conference will give an overview of the calculating process by illustrating the key elements that have to be taken into consideration, the various relations amongst them, and an estimate of their influence on the result. Though the state Brandenburg will serve as the example for the calculations in the poster presentation, the approach will be neither specific to Brandenburg nor to the German educational system: most of the factors discussed have equivalents in other countries' educational systems as well.

Basic demography: Population shrinkage

It is hardly surprising that demographic development is an important factor when it comes to tertiary enrolment. In a nutshell, the fewer people there are in the population of a specific age range, the fewer of them should be expected to take up tertiary education. So information about population development is crucial for the task at hand. Germany's population is shrinking in nearly all of the 16 federal states; moreover, there has been—as a reaction to the fall of wall—an enormous break-in in the birth rate in the eastern states (i. e., former East Germany) and in parts of Berlin in the early 1990ies. In spite of the fact that the age range of persons entering third level education is really wide, the deviation is rather small: about 90 % of the beginners are between 19 and 25 years of age.

In the course of the next couple of years, the effect of the 1990ies break-in will lead to a noticeable decrease of the population in this age group and, accordingly, in potential first-year students.

(Slightly) more advanced demography: Migration and regional differences

In contrast to a lot of other countries, inter-regional migration in Germany is not very high. People, most generally, tend to stick to the region they grew up in. Nonetheless, there is—for a

number of reasons, some of which will be sketched below—a good deal of migration in between the federal states when it comes to taking up tertiary level education.

In order to account for this, the demographic development in the various states as well as the age-group specific migration patterns in between the states have to be payed attention to.¹ This is even more important since in both respects massive differences between, e.g., eastern and western Germany and the the more rural and more urban regions can be found.

Post-compulsory school participation rises

More and more students in Germany attend school longer than compulsory and finish their secondary school with the *Abitur*. 'Abitur' (or, more formally, 'allgemeine Hochschulreife') is the German expression for the final exams taken at the end of secondary education—more or less the German counterpart to the British A-levels, fulfilling the function of an university entrance exam as well.

These higher rates of educational participation in the federal states have an interesting effect: In spite of the fact that—for the demographic reasons sketched above—there are lesser people in the age group relevant for taking up tertiary education, a much greater share of them is formally eligible to do so. For the time being, in most of the federal states the effect of these higher participation rates even outweighs the effect of demographic development.

What about IIIb? Vocational education as an alternative

With the number of young adults having gained the formal qualification to take up tertiary level education, a very important intermediate result for calculating the enrolment figures is available. Nonetheless, not all the persons qualified are also willing to take up studies in tertiary education.

It is worthwhile to note that vocational education is extremely popular in Germany. In contrast to many other countries, Germany has a strongly regulated and internationally prestigious vocational training system. Most of the young people interested in vocational education try to get an apprenticeship in the highly competitive 'dual education system': a combination of more practical education in a trade or industry company and more theoretical education in special vocational schools. Applicants having passed the *Abitur* have a very good chance to obtain one of the sought-after apprenticeships in this sector.

Vocational education and tertiary education are competing career tracks for young adults and the choice between the two is—at least for those people with *Abitur*—in many cases very much a matter of individual preference and, as such, hard to predict.

***Abitur* after twelve years**

As has been mentioned before, educational matters are in the responsibility of the federal states. After the German reunification, in some states the *Abitur* was taken after twelve, in other states after thirteen years of schooling. In 2007, the Standing Conference of the Ministers of Education and Cultural Affairs (KMK) agreed to harmonise the duration, making the *Abitur* after twelve years the standard case for the whole of Germany. Nevertheless, the exact time and way of the conversion was still a matter of the individual federal states' business. Whereas some states have made the change

¹Here a more practical problem occurs that is, again, rooted in Germany's federal system: Each of the 16 federal state makes its own calculations regarding its future demographic development—most often based on tacit assumptions significantly differing from those of the other states. On the basis of these figures no coherent picture of Germany's demographic development can be drawn. (For a more detailed discussion see Ulrike Rockmann's paper in this volume.) Luckily, with the *Koordinierte Bevolkerungsvorausberechnung des Statistischen Bundesamtes* a very good alternative source for the required demographic data is available.

already (e. g. Mecklenburg-Vorpommern in 2008), the changeover in most states is due in the course of the next few years, ending with Schleswig-Holstein and Rhineland-Palatinate in 2016.

The effect of this harmonisation will be twofold: On the one hand, the more or less steady flow of people leaving school and taking up vocational or tertiary education will fluctuate: In each state there will be a year in which the last 13-year as well as the first 12-year pupils end school together. On the other hand, this fluctuation will have a hardly predictable effect on the careers of the young people: Though vocational training programs as well as tertiary institutions will try to provide capacities for the in some cases much larger amount of prospective applicants, resources are limited. Especially the lesser qualified young people can be expected to suffer from this situation.

Suspension of military and alternative service

As of July 1, 2011, military and alternative service in Germany are suspended. Whereas for the male part of the German population nine months (only six months since December 1, 2010) of conscription were obligatory, this is now no longer the case.²

Apart from the grave consequences for the military and the public sector, this decision has an influence on the educational system as well: The obligatory delay of up to twelve months between ending school and continuing education has vanished, so as a one-time effect the number of young people entering higher-level education and vocational training in 2011 will be higher than in ordinary years. This effect resembles the one from the reduction of school time mentioned in the last section, though on a much smaller level. Things will get more problematic, though, when in some states both events coincide with one another.

Where to go from here

Apart from the more influential factors described in the above sections, there are, of course, more. To name just two: In some of the German federal states, tuition fees for tertiary education were introduced after a Constitutional Court decision from 1997—a scheme that led to an uproar in parts of the society and resulted in a (although moderate) rise of inter-state migration. International migration—foreign students—has to be kept in mind, too, as it plays an important role for a number of the larger universities.

Knowing—or, better, predicting—first time enrolments in third level education is, as has been pointed out, rather important for a whole number of reasons. Nonetheless, they are but a small piece of a much more complex picture. More interesting work has to be done to get to other results, e. g. the total numbers of students attending the different kinds of third level institutions and parts thereof, like specific universities, schools, or even courses.

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²Though it is hard to get reliable data here, there is good evidence that in the last years less than half of the male population actually did serve in the military or alternative service.