

# Young academics at tertiary education institutions

## B 1-3

### Development of the structure of personnel at tertiary education institutions

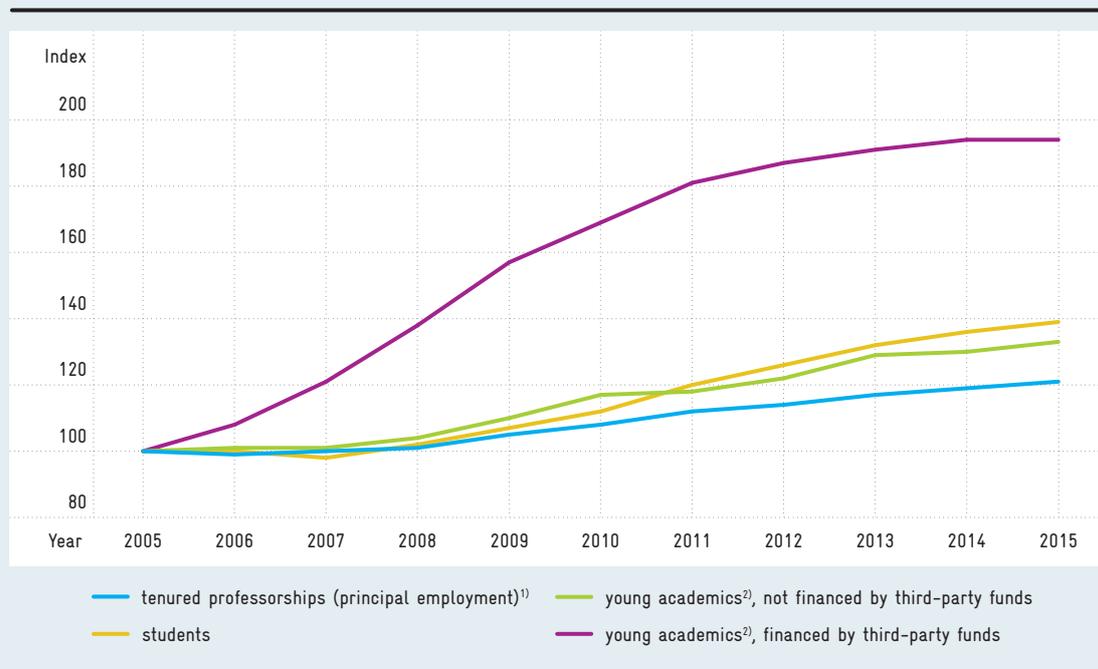
The structure of personnel at German tertiary education institutions has changed considerably over the last decade – among other things as a result of the Higher Education Pact, the Excellence Initiative and the increase in third-party funding (cf. Chapters B1-1 and B 1-2; Figure B 1-5-1).<sup>53</sup> The number of full-time

tenured professors<sup>54</sup> grew comparatively slowly from 2005 to 2015 (plus 21 percent to 43,700), and was unable to keep pace with the growth in the number of students (plus 39 percent to 2.76 million). The number of young academics<sup>55</sup> not financed by third-party funds (114,400) grew slightly faster (at a rate of 33 percent) than the number of professors. The number of young academics financed by third-party funds grew by far the most (plus 94 percent to 71,300). The

**Development of the number of professorships, the number of scientific and artistic staff who can be classified as young scientists, and the number of students at German tertiary education institutions, 2005 to 2015**

Fig. B 1-3-1

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Index: 2005 = 100

<sup>1)</sup> Tenured (principal employment) professorships do not include temporary professorships paid according to the C2 scale (or equivalent remuneration grades) or junior professorships.

<sup>2)</sup> Young academics include the following personnel categories: temporary professorships paid according to the C2 scale (or equivalent remuneration grades), junior professorships, lecturers, assistants, academic and artistic staff.

Source: own calculations based on Statistisches Bundesamt (Federal Statistical Office), Fachserie 11, Reihe 4.4 and 4.1.

### Programme for the Promotion of Young Scientists

The aim of the Programme for the Promotion of Young Scientists is to create 1,000 additional tenure-track professorships, and retain them permanently within the overall number of professorships at universities. After the programme expires, the number of permanent professorships at universities should have increased by the same amount.<sup>56</sup>

The Federal Government is making funds of up to one billion euros available to finance the programme over the period from 2017 to 2032. Decisions on the funding of tertiary education institutions are taken by a selection committee in a competitive procedure.

The funding can be used for the following:

- personnel expenditure for tenure-track professorships,
- personnel expenditure for follow-up positions (W2 or W3 equivalent) for up to two years,
- equipment costs,
- 15 percent strategy premium on personnel expenditure and equipment costs.

The Länder where the institutions are located<sup>57</sup> are responsible for securing the total funding of the programme.<sup>58</sup>

growth rate here was thus more than four times higher than the rate for professors over the past decade.<sup>59</sup>

On the one hand, the sharp increase in the number of young academics is desirable, because it is the result of the above-mentioned programmes and the intended increase in third-party funding. On the other hand, this also causes a considerable imbalance in the personnel structures – specifically in the ratio between junior staff and tenured full professors. Such a development adversely affects long-term employment opportunities for young academics in the higher education sector. The problem is further aggravated by the fact that a large proportion of the newly established positions for young academics explicitly aims to train junior staff for an academic career. However, the number of tenured professorships as potential ‘landing’ places for the trained junior staff

is falling further and further behind. The professorships vacated by retirement cannot rectify the resulting imbalance.<sup>60</sup> The enormous growth in the number of young academics is greatly aggravating the ‘bottleneck’ problem. The insufficient number of tenured full professorships will aggravate this ‘bottleneck’ in the coming years.

Structural changes in the system are urgently required to counteract this growing imbalance in the personnel structure and to prevent investment in training and employment opportunities from drifting further apart. On the one hand, additional tenured full professorships need to be created – not just to generate new employment opportunities, but also to sustainably improve the quality of research and teaching. On the other hand, the training of young academics should focus more on career prospects outside the higher education sector.<sup>61</sup> The issue here is that it is necessary not only to create new employment opportunities, but also to intensify the transfer of knowledge and technology that is so important for innovation. When junior staff move from tertiary education institutions to the business sector, the knowledge generated in research is transferred directly to established companies or spin-offs. Both steps – the creation of additional tenured full professorships and extending qualification targets to also cover the labour market outside academia – can sustainably strengthen the tertiary education and innovation system in Germany.

In this context, the Commission of Experts considers it necessary to also adapt the student/faculty ratios<sup>62</sup> by creating additional tenured professorships, so that the quality of training can be improved, the time available for research can be increased, and the teaching loads can be made more internationally competitive. Without an adjustment of the student/faculty ratios, any increase in the number of tenured professorships will result in the need for tertiary education institutions to increase the number of students. This could lead to a lowering of both entry thresholds and training standards.

### Law on Fixed-Term Employment Contracts for young academics

Most young academics at tertiary education institutions have fixed-term contracts. Such contracts are subject to the Law on Fixed-Term Employment Contracts in Science (WissZeitVG), which came into force in 2007 and was modified in 2016.<sup>63</sup> This amendment eliminated several shortcomings in the previous

version. However, the Commission of Experts is doubtful whether the revised version of the law will lead to a general and sustainable improvement in the situation of young academics. Furthermore, tertiary education institutions are heavily burdened with additional bureaucracy and their flexibility restricted. At the same time, the key issue – the small number of tenured full professorships – is not being addressed.

### Programme for the Promotion of Young Academics

In June 2016, the Federal and Länder governments agreed a Programme for the Promotion of Young Academics (cf. Box B 1-3-2) pursuant to Article 91b paragraph 1 of the Basic Law.<sup>64</sup>

Although in Germany it was in principle also possible to offer tenure-track careers to promote young academics even before the establishment of the Programme for the Promotion of Young Academics, tertiary education institutions made only very limited use of this option. From the point of view of junior researchers, this may have reduced the attractiveness of German tertiary education institutions compared to international competitors (cf. Chapter B 1-5).<sup>65</sup> In its 2012 Report, the Commission of Experts already recommended that tenure-track careers should also be established at German tertiary education institutions, and that the number of tenured full professorships be simultaneously increased.<sup>66</sup>

Of course, it is too early to see any effects of the new Programme for the Promotion of Young Academics adopted in June 2016. However, the Commission of Experts doubts that all the Länder will be able or willing to guarantee the overall financing of the programme. The Commission of Experts is concerned that the tenure-track positions funded by the Federal Government will in many cases simply be used to bring regular appointment decisions forward. The Alliance of Science Organisations also sees this risk, should the Länder fail to meet their financing commitments.<sup>67</sup> The ‘bottleneck’ problem would not be resolved, but at best postponed for a while, and could even worsen.