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Survey of Apprenticeship Training in 2015 Structural Data, Trends and Prospects

The strong decline in the number of apprentices and training companies, which is mainly due to demographic reasons, gives rise to concern about how to guarantee the future demand for skilled workers in Austria. This is indicated by the latest issue of the *ibw* “Survey of Apprenticeship Training” study, which has been published every year since 2000 (with funding provided by the Federal Ministry of Economy, Family and Youth BMWFV and the Austrian Federal Economic Chamber WKO) and provides an overview of currently available statistical data on apprenticeship training in Austria. As well as the apprenticeship statistics themselves, it also comprises the latest data on youth unemployment, labour market success and entry-level incomes broken down by highest educational attainment, apprenticeship and school dropout numbers, public expenditure for programmes at the upper secondary level and much more.

International comparative data:

- In 2014 Austria boasted the second **lowest youth unemployment rate** among all EU countries **among those below the age of 25** (10.3%). But this “youth” unemployment rate increased slightly in 2014 (in contrast to the EU average).
- Also the **share of early school and training leavers** (i.e. the percentage of 18- to 24-year-olds who did not have any upper secondary qualification and were not attending any education, training or CET programme) was **clearly below the EU average** (11.1%) in Austria (7.0%) in 2014.
- Therefore, when looking at the situation from the reverse perspective, the share of 20- to 24-year-olds who held at least an upper secondary qualification was higher in Austria (89.6%) in 2014 than in **the whole of the EU** (82.3%). In this comparison, Austria had the **highest share of vocational education and training** (i.e. pupils in the VET school sector) at the upper secondary level within the EU.

Structural data on apprenticeship training in Austria:

- The **number of apprentices** in Austria is essentially closely connected with the demographic development (number of 15-year-olds). In addition, certain effects of the international financial and economic crisis were

noticeable. At the end of 2014, a total of 115,068 apprentices were in training across Austria, which was more than 5,000 fewer than in 2013 (120,579) and more than 16,000 fewer than at the end of 2009 (131,676).

- Apprentices’ figures develop very differently in the various Austrian provinces: In the period 1990-2014, there was only a **very small decrease in the number of apprentices in Vorarlberg (-2%)** whereas the **declines** in the provinces of **Styria (-34%), Burgenland (33%) and Carinthia (-30%)** were significant. By far the **most apprentices are in training** in the province of **Upper Austria** (24,644 apprentices at the end of December 2014).
- The “**apprenticeship beginners’ rate**” – i.e. the share of apprentices in their first year among 15-year-olds – has remained **relatively constant** since the mid-1990s. **Some 40% of youths** in each age group **are taking up apprenticeship training** (2014: 38.8%). In 2011, however, this share reached 42.3%, and since 2012 a drastic and continual decline has been observed.
- The **average age of apprentices in the first year of training** is rising slightly (2014: 16.5 years).
- Analysis of the **previous educational attainment of apprentices in the first year** shows that, in the 2013/14 school year (only), slightly more than one third (34.5%) of pupils in the first grade (10th year of schooling) of part-time vocational school had attended **pre-**

vocational school beforehand; 16.2% had attended a school for intermediate vocational education, 11.9% a general secondary school, and 11.0% a college for higher vocational education. Only **0.8% of pupils in the first grades of part-time vocational school** had passed the upper secondary school-leaving certificate and thus have the higher education entrance qualification, i.e. these are graduates of the upper cycle of academic secondary school or a college for higher vocational education (in Germany, this share is significantly higher, with an increasing trend: in 2013 it was around 25%).

- The **share of female apprentices** increased slightly until about 1990 and has recently stabilised at a relatively constant level of around 34%.
- **Among female apprentices, a particularly pronounced focus on a small number of apprenticeship occupations** can still be seen. In late 2014, almost half (47.4%) of female apprentices were being trained in merely 3 apprenticeships (retail trade, office assistance, hairdresser). Among male apprentices, the share of the 3 most frequently attended apprenticeships combined was only around 36%. Furthermore these are modular apprenticeships with different main modules.
- Whereas the number of training providers in Austria had remained largely stable for a long period (at slightly below 40,000) since the late 1990s, a **marked decline in the number of training companies** has again been noted in recent years, the main cause of which can be seen in the declining number of 15-year-olds (apprenticeship applicants).
- In the 2013/14 school year, **some 40% of pupils in year 10** were attending **schools for intermediate vocational education or colleges for higher vocational education (apprenticeship)**, and 23% an academic secondary school. Over the past 3 years, a clear **decline in the number of pupils in year 10 at part-time vocational school** has been observed, whereas academic secondary schools in particular showed increases.

Challenges: Demography and integration of youths with a migration background

- **Closely connected with the development of apprenticeship figures is demographic development, i.e. the availability of (suitable) youths/apprenticeship seekers.** Another drop in the number of 15-year-olds can be expected **by around 2016**. According to the main scenario in Statistics Austria's population projection, the number of 15-year-olds will decrease from

100,396 at the interim peak in 2007 to 84,383 in 2016.

- The integration of young people with a migration background into the upper secondary IVET system can be seen as a particular challenge, but it also offers particular potential for recruiting additional apprentices and skilled workers. The **share of youths with a migration background drops sharply from the 9th school year onwards**. Among young people with a migration background who leave the IVET system early, incidentally, **no gender-specific differences** can be found.
- The **underrepresentation of young people with a migration background** in the upper secondary IVET system is **especially pronounced in the apprenticeship sector**. Whereas (in the 2013/14 school year) the share of young people who do not speak German as their mother tongue was still 26.6% at primary schools, it was merely 12.0% at part-time vocational schools.

Dropouts and the “apprenticeship with the matriculation exam”, “inclusive IVET” and “supra-company training” schemes

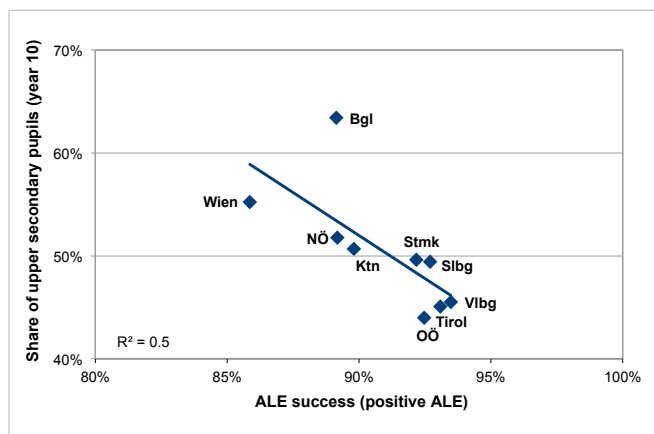
- A special WKO evaluation now also allows the calculation of a **dropout rate from apprenticeship training** for the 2010–2013 graduation year groups. In 2013, a total of **16.3%** of those who finished an apprenticeship programme in Austria did not complete their apprenticeship period nor did they take an apprenticeship-leave exam (ALE) by the end of 2014, therefore they are considered **apprenticeship dropouts**. Broken down by economic sectors, the share of apprenticeship dropouts (among all those who finished an apprenticeship programme in 2013) in Austria – as well as supra-company apprenticeship training, for which methodological specificities need to be considered – is highest in the tourism and leisure industry (25.8%). The share of apprenticeship dropouts in industry (6.0%) and in the banking and insurance sector (6.5%) is particularly low.
- Overall, the share of apprenticeship dropouts (16.3% in 2013) in Austria is clearly below the **share of dropouts from full-time school-based programmes** (upper cycle of academic secondary schools: 26%, schools for intermediate vocational education: 47%; colleges for higher vocational education: 34%). Due to different calculation methods, however, **the data is not directly comparable**.
- Some **6%** of all apprentices take part in the scheme called **Apprenticeship with the Matriculation Exam** (official title: “Berufsmatura: Apprenticeship with Reifeprüfung”). Related participant figures have increased significantly since the project was launched (in 2008).

- In late December 2014, a total of **6,475 apprentices** were in an **IVET programme pursuant to § 8b of the Vocational Training Act (prolonged apprenticeship period or partial qualification)**, this being 323 or 5.3% more than in the previous year. (As a result of the 2015 Amendment to the Vocational Training Act, this form of training is no longer termed **inclusive/integrative VET** as before.) A continual increase in the number of participating young people has been observed since the introduction of this scheme in 2003. Overall, the overwhelming majority of so-called “§8b apprentices” (60%) was again trained at companies in 2014. In 2014, around 76% of §8b apprentices completed their VET in prolonged apprenticeship schemes, some 24% in partial qualification programmes.
- The number of participants (people in programmes) in **supra-company training programmes commissioned by Public Employment Service (AMS)** in the training year 2014/15 **totalled 11,885**. These included **9,554 participants in supra-company apprenticeships according to §30b of the Vocational Training Act** and 2,524 participants in a scheme pursuant to §8b of the Vocational Training Act (“inclusive VET”) commissioned by AMS.

Apprenticeship-leave exams

- In 2014, according to the statistics of the Austrian Federal Economic Chamber, 57,589 **apprenticeship-leave exams** were completed (exam attempts). The number of successfully completed exams was 47,046 (81.7%) in 2014. Therefore the **success rate** was slightly below the year 2013 (82.3%).

Diagram 1: Connection between ALE success and share of pupils at upper secondary schools (2013/2014)



Source: WKO + Statistics Austria (school statistics) + ibw calculations

17% of successfully completed apprenticeship-leave exams were taken in second-chance education – i.e. mainly based on informal and non-formal learning in the form of an exceptional admission to the apprenticeship-leave exam (pursuant to §23 (5) (a) of the Vocational Training Act). A **special WKO evaluation at the individual level** reveals that (by the end of 2014) **90.2%** of apprenticeship graduates in 2013 completed the **apprenticeship-leave exam successfully** and **5.0% negatively** (after one or more attempts). **4.9% never took** the apprenticeship-leave exam (by the end of 2014).

- The more young people in the respective province attend an upper secondary school, the lower is the success rate in the apprenticeship-leave exam (cf. Diagram 1). More specifically, at the provincial level, there is a clearly negative correlation between success in the ALE with the share of pupils at upper secondary schools in year 10 ($r = -0.71$). This empirical finding illustrates the **competition for especially talented youths**, which is further intensifying in the wake of expected demographic developments and takes place not just between individual companies but also between the apprenticeship system overall and (upper secondary) schools.

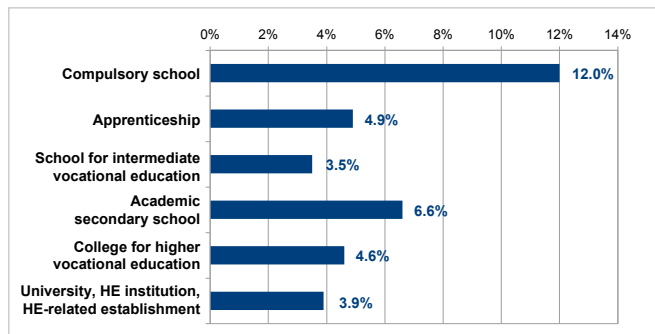
Public expenses/funding

- Based on model calculations for 2013/14, the **total of public funds spent on (company-based) dual apprenticeship training** can be quantified at **EUR 5,745 per apprenticeship post** (N.B.: costs for part-time vocational school and subsidisation for apprenticeship posts pursuant to § 19c of the Vocational Training Act). This means that public expenses per apprentice are clearly below the costs per student at a school for intermediate vocational education or a college for higher vocational education (EUR 10,113) or in supra-company VET commissioned by AMS (EUR 15,878). Therefore, company-based apprenticeship training requires **by far the lowest public funds** of the three analysed and most important IVET forms at upper secondary level.

Career entry, labour market, requirement for skilled labour

- In 2014 the **unemployment rate** (calculation based on international definition) of those whose highest educational attainment was compulsory schooling was 12% in Austria (cf. Diagram 2). The unemployment rate for graduates of academic secondary schools was 6.6%. But, from this perspective, the rate of all other education levels was below 5% (apprenticeship: 4.9%), which underlines the high degree of vocational applicability and labour market relevance of VET in Austria.

Diagram 2: Unemployment rate by highest educational attainment (2014) (unemployment rate based on international definition)

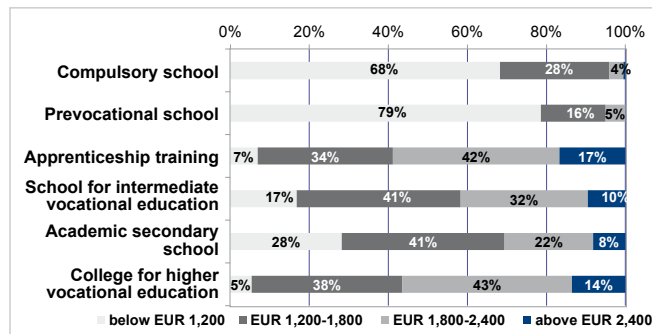


Source: Statistics Austria (microcensus labour force survey) + ibw calculations

- The breakdown of youth unemployment rates by province reveals a very pronounced negative correlation with the “apprenticeship beginners’ rate”, i.e. the **youth unemployment rate tends to be lower the more youths of an age group complete an apprenticeship**. As this also applies to the unemployment rate for 20- to 24-year-olds, who as a rule have already completed an apprenticeship programme, this illustrates the **positive effect of dual training on the labour market integration of teenagers and young adults**.
- According to **qualification-related professional career monitoring** (“BibEr”) conducted by Statistics Austria (commissioned by the Federal Ministry of Labour, Social Affairs and Consumer Protection BMASK and AMS), apprenticeship graduates in the first 18 months or 2 years after completing their training – compared with graduates of other educational pathways (schools for intermediate vocational education, academic secondary schools, colleges for higher vocational education) – boast the highest share of the workforce, the shortest period until they find their first employment, and (similar to colleges for higher vocational education) the highest (entry-level) incomes (cf. Diagram 3).
- In absolute figures, **the majority of vacancies** in Austria in 2014 (not considering online job ads) were clearly offered for **graduates of an apprenticeship/master craftsperson exam**. (At least) 136,433 job ads in print media and 190,283 vacancies registered with AMS addressed graduates of an apprenticeship/master craftsperson exam.

Diagram 3: Gross monthly income 18 months after graduation (inflation-adjusted)

(graduations in training year 2010/2011)



Source: Statistics Austria: Qualification-related professional career monitoring (commissioned by BMASK and AMS) + ibw calculations

- **92.1% of apprenticeship graduates** in 2014 were either employed or economically active in line with their qualification – i.e. at least at the skills level corresponding with their previous IVET pathway.
- According to the 2014 Labour Force Survey, **34% of all self-employed people** in Austria have an **apprenticeship certificate** as their highest qualification. Therefore, apprenticeship training is by far the most important qualification for the self-employed in this country.
- In the coming years, “**demographic pressure**” on **skilled labour availability** is expected from **two sides**: from a **declining number of job entrants** (young people) and an **increasing number of job leavers** (retirements). This development can be illustrated particularly clearly by comparing the number of 20-year-olds (assumed average age of job entrants) with the number of 60-year-olds (assumed average retirement age). From about 2016 onwards, there will be more 60-year-olds in Austria than 20-year-olds. At the **peak of this demographic “gap” in 2024** (as has been projected based on 2014), there will be more than 135,000 60-year-olds, compared with merely some 95,000 20-year-olds in Austria, i.e. 60-year-olds will outnumber 20-year-olds by more than 40,000.

The entire study in German (ibw Research Report No. 183, ISBN 978-3-903053-36-6) can be obtained from ibw in printed form or online at <http://www.ibw.at/de/ibw-studien>.