# ibw research brief

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# Survey of Apprenticeship Training in 2014

### Structural Data, Trends and Prospects

The ibw "Survey of Apprenticeship Training" study, which has been published every year since 2000 (with funding provided by the Federal Ministry of Science, Research and Economy BMWFW and the Austrian Federal Economic Chamber WKÖ), provides an overview of the current situation of apprenticeship training in Austria. As well as the varied successes and strengths of apprenticeship training (such as the reduction of youth unemployment, entry-level incomes or encouragement of selfemployment), current problems are also illustrated: The strong decline in the number of apprentices and training companies (which is mainly due to demographic reasons) in particular gives rise to concern about how to guarantee the future demand for skilled workers in Austria.

#### International comparative data:

- Among all EU countries, in 2013 Austria holds the second lowest unemployment rate of people below the age of 25 (9.2%). This 'youth unemployment rate' has also risen far less in Austria since 2008 (the beginning of the international financial and economic crisis) than on an EU average.
- In 2013, the share of early school leavers and training dropouts (18- to 24-year-olds who have not acquired any upper secondary qualification and do not take part in any IVET and CVET programme) in Austria (7.3%) is also clearly below the EU average (11.9%) (note: VET = vocational education and training, IVET = initial VET, CVET = continuing VET).
- Therefore, when looking at it from the reverse perspective, the share of 20- to 24-year-olds who hold at least an upper secondary qualification in Austria in 2013 is also higher (87.4%) than in the EU overall (81.1%). In the upper secondary sector, Austria boasts the highest share of VET (students at VET schools and colleges) within the EU.

#### Structural data apprenticeship training in Austria:

• The **number of apprentices** in Austria is closely associated with demographic development (number of 15-year-olds). In addition, the effects of the international financial and economic crisis can also be felt. By the end of 2013, 120,579 apprentices were being trained, almost 5,000 fewer than in late 2012 (125,228) and more than 11,000 fewer than in late 2009 (131,676).

- The number of apprentices is developing very differently in the Austrian provinces: in the period 1990-2013 there were actually increases in apprenticeship figures in Vorarlberg (+2%), whereas considerable losses could be observed in the provinces Burgenland (-34%), Styria (-31%) and Carinthia (27%). The majority of apprentices by far are found in Upper Austria (25,696 apprentices in late December 2013).
- The apprenticeship beginners' rate i.e. the share of apprentices in their 1st year among 15-year-olds has remained relatively constant for a long time since the mid-1990s. Some 40% of youths of each age group take up apprenticeship training (2013: 39.9%). Whereas the share was still 42.3% in 2011, the first substantial decline in many years could be noted in 2012 and 2013.
- The apprentices' average age in their 1st apprenticeship year is increasing a little (2013: 16.5 years).
- An analysis of the apprentices' previous qualifications in their 1st apprenticeship year reveals that in the school year 2012/13, (only) slightly more than one third of students (35.2%) in their first classes (10th grade) of part-time vocational school had previously attended pre-vocational school, 16.7% a VET school, 14.3% a general secondary school, and 10.7% a VET college.
- The **share of female apprentices** increased slightly until about 1990 and has recently stabilised at a relatively constant level (at **some 34%**).

- A particularly pronounced focus on a few apprenticeship occupations can still be noted among female apprentices. In late 2013 almost 50% (47.6% to be precise) of female apprentices were 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 about 35%. 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) after the late 1990s, a marked decline in the number of training providers can again be noted in recent years – with this certainly also due to the impact of the international financial and economic crisis and the decreasing number of 15-year-olds.
- In the school year 2012/13 some 39% of students in year 10 were attending a VET school or college (BMHS), 38% a part-time vocational school (apprenticeship), and 23% an academic secondary school. Especially in the school year 2012/13 a clear decline in the number of pupils in year 10 at parttime vocational schools (-1.3%) in favour of AHS (+1.2%) can be observed.

## Challenges: Demography and integration of young people with a migration background

- Closely connected with the development of apprenticeship figures (and therefore also linked with the current decline) is demographic development, i.e. the availability of (suitable) youths/apprenticeship seekers. By approximately 2016 another clear drop in the number of 15-year-olds can be expected. According to the main scenario of Statistics Austria's population projection, the number of 15-year-olds will decrease from 100,396 at the interim peak in 2007 to 84,140 in 2016.
- The integration of young people with a migration background into the (upper secondary) IVET system can be seen as a particular challenge for the overall very successful Austrian VET system but also as 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 Austrian (upper secondary) IVET system early, incidentally, no gender-specific differences worth mentioning 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 school year 2012/13) the share of youths who do not speak German as their mother tongue was still 25.6% at primary schools, it was merely 11.7% at part-time vocational schools. Even in the upper cycle of academic secondary school (15.8%) and colleges of business administration (28.3%) the share of youths who do not speak German as their mother tongue is higher.

#### Drop-Outs, Apprenticeship with Matura, IBA, ÜBA

- A special WKÖ evaluation now also allows the calculation of a dropout rate from apprenticeship training. Overall 14,5% of apprentices, who terminated their apprenticeship relationship in Austria in 2012, did not complete their apprenticeship period nor did they take an apprenticeship-leave exam (LAP) by the end of 2013, therefore they are considered **apprenticeship dropouts**. Broken down by economic sectors, the share of apprenticeship dropouts (among all those finishing an apprenticeship programme in 2012) is particularly high in Austrian supra-company apprenticeship training (36.5%) and in the tourism and leisure industry (24%). The share of apprenticeship dropouts in industry (4.6%) and in the bank and insurance sector (6.5%) is particularly low.
- Overall the share of apprenticeship dropouts (14.5% in 2012) in Austria must be clearly below the share of dropouts at full-time school-based programmes (upper level of academic secondary school: 26%, VET school: 50%; VET college: 34%), even though it must be noted that the data is not directly comparable.
- Some 6% of all apprentices take part in the Apprenticeship with Matura scheme (official title: 'Berufsmatura: Apprenticeship with Reifeprüfung') (note: Matura and Reifeprüfung are German for the upper secondary certificate). Related participant figures have increased significantly since the project was launched (in 2008).
- In late December 2013 a total of 6,152 apprentices were in an integrative IVET programme, 411 more than in the previous year. Since the establishment of integrative IVET (or IBA in German) in 2003, the number of young people has continually increased. Overall, the overwhelming majority of IBA apprentices (61%) in 2013 are also trained in companies. In 2013, around 76% of IBA apprentices are completing integrative IVET in the form of a prolongation of the apprenticeship period, some 24% in the form of a partial qualification.
- The number of participants in supra-company training programmes commissioned by Public Employment Service (AMS) in the training year 2013/14

totalled 11,329. These included **9,183 participants** in supra-company apprenticeship training (ÜBA in German) according to §30b of the Vocational Training Act or BAG and 2,332 participants in an integrative (inclusive) IVET programme commissioned by AMS.

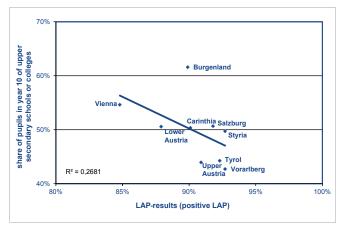
#### Apprenticeship-leave exams

- In 2013, according to the statistics of the Austrian Federal Economic Chamber WKÖ, 56,815 apprenticeship-leave exams were completed (exam attempts) - slightly less than in 2012 (58,034). The number of successfully completed exams was 46,743 (82.3%) in 2013. Therefore the success rate was slightly above the year 2012 (82.1%). Broken down by economic sectors, the highest share of passed exams is found (also) in 2013 in the bank and insurance section (94.9%), the lowest (74.4%) in the field of supra-company training establishments. 16% of successfully completed apprenticeship-leave exams were taken in second-chance education - that is in the form of an exceptional admission (according to §23 (5) lit. a of the BAG). A special WKÖ evaluation at the individual level reveals that 89.4% of apprenticeship graduates in 2012 (by the end of 2013) completed the apprenticeship-leave exam successfully and 5.4% (after one or more attempts) negatively. 5.2% never took the apprenticeship-leave exam (by the end of 2013). Also based on this approach, the highest share of apprenticeship graduates with a **negative LAP result** (10.6%) and, in particular, also by far the highest share of apprentices who did not take the LAP (12.8%) can be found in supracompany apprenticeship training.
- In addition, negative effects on the quality of results in the apprenticeship-leave exam can be observed the more young people in the respective province attend an upper secondary school or college (cf. Diagram 1). In concrete terms, success in the apprenticeship-leave exam at the provincial level stands in a clear negative correlation with the share of pupils in year 10 of upper secondary schools or colleges (r = -0.52). This empirical finding illustrates the competition which will still intensify in the course of the demographic developments that can be expected for especially talented youths; this competition cannot only be found between the individual companies but also between the apprenticeship training sector overall and the (upper secondary) school sector.

#### **Public Funds**

 According to a model calculation for 2012/13, total public funds for (company-based) dual apprenticeship training are estimated to be EUR 5,654 per apprenticeship post (note: costs for part-time vocational school and the subsidisation scheme for apprenticeship posts according to § 19c of the BAG). Public funds per trainee are therefore clearly below the costs per student at VET schools and colleges (EUR 9,528) and supra-company IVET programmes commissioned by AMS (EUR 15,635). This means that company-based apprenticeship training requires **by far the lowest public funds** of the three analysed and most important IVET forms at upper secondary level.

#### Diagram 1: Correlation LAP results and share of pupils in upper secondary schools/ colleges (2012/2013)

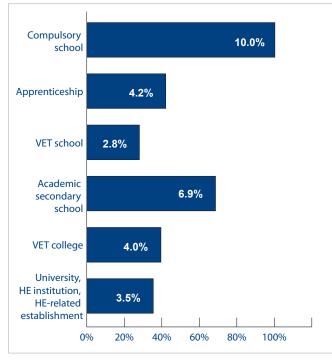


Source: WKÖ + Statistics Austria (school statistics) & ibw calculations

## Transition into employment, labour market, demand for skilled labour

- Regarding the analysis by educational level (cf. Diagram 2) the calculation of the unemployment rate (according to the international definition) reveals the following: in 2013 the unemployment rate of those whose highest educational attainment was compulsory schooling was 10% in Austria. The unemployment rate of academic secondary school graduates was 6.9%. In this analysis, the rate of all other groups (educational levels) was clearly below 5% (apprenticeship training: 4.2%).
- The breakdown of youth unemployment rates by provinces 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 of 20- to 24-year-olds, who as a rule have already completed an apprenticeship pathway, this illustrates the positive effect of dual training on the labour market integration of youths and young adults.

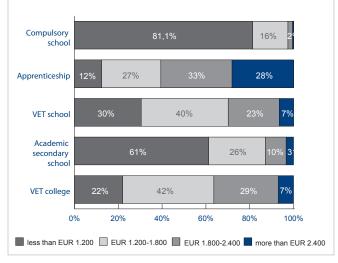
#### Diagram 2: Unemployment rate by highest educational attainment (2013) (Unemployment rate according to the international definition)



Source: Statistics Austria (Microcensus Labour Force Survey) + ibw calculations

- According to the qualification-related professional career monitoring which was conducted by Statistics Austria, apprenticeship graduates in the first 2 years after completing training – compared to graduates of other educational pathways (VET school, academic secondary school, VET college) – boast the highest share of the workforce, the shortest period until they find their first employment, and the highest entrylevel incomes (cf. Diagram 3).
- In absolute figures, the majority of vacancies in Austria in 2013 were clearly offered for graduates of an apprenticeship/master craftsperson exam. In (at least) 147,803 job ads in print media, in 188,626 vacancies registered with AMS and in (at least) 2,251 online ads, graduates of an apprenticeship/master craftsperson exam were sought.
- 92.4% of apprenticeship graduates in 2013 were either employed or economically active in line with their qualification - i.e. at least at the skills level corresponding with their previous IVET path-way.

#### Diagram 3: Entry-level incomes: Gross monthly income in first post-graduation employment (Graduates of 2009/2010)



Source: Statistics Austria (Microcensus Labour Force Survey) + ibw calculations

- According to the 2013 Labour Force Survey, **35% of all self-employed** in Austria have an **apprenticeship certificate** as their highest qualification. Therefore, apprenticeship training is by far the most important qualification of self-employed people in Austria.
- In the next years 'demographic pressure' on skilled labour availability is expected from two sides: from a declining number of job entrants (youths) 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 2015 onwards there will be more 60-year-olds in Austria than 20-year-olds. At the peak of this demographic 'gap' in 2024 some 135,000 60-year-olds will compare with fewer than 92,000 20-year-olds in Austria, i.e. 60-year-olds will exceed 20-year-olds by more than 40,000 people.

The entire study can be obtained from ibw in printed form (ibw research report no. 180, ISBN 978-3-902742-87-2) or online <u>http://www.ibw.at/de/ibw-studien</u>.

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