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## 2019 Survey of Apprenticeship Training

### STRUCTURAL DATA, TRENDS AND PROSPECTS

**B**oth the number of apprentices and the number of training companies increased in 2018 for the first time in 10 years, and the number of apprentices in their first year of training rose for the third time in a row. However, these figures do not imply that an all-clear signal can be given regarding the current and future shortage of skilled workers, because the share of apprentices among all employees is at an all-time low, the demand for apprenticeship graduates remains high and demographic trends are unfavourable. At the same time, the career prospects of apprenticeship graduates are truly promising. Their unemployment rate is well below the average and their income two years after acquiring their apprenticeship diploma is even slightly higher than that of graduates of colleges for higher vocational education (BHS). This is illustrated by the current issue of the annual ibw publication “Survey of Apprenticeship Training” (“Lehrlingsausbildung im Überblick”), which aims to present all relevant and available statistical data and indicators on apprenticeship training in Austria.

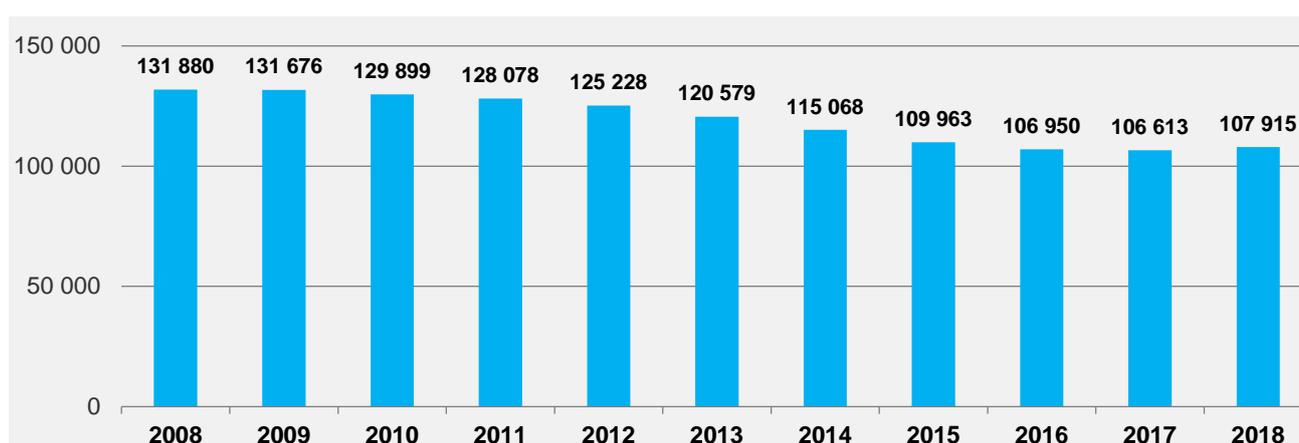
By the end of December 2018 there were 107,915 apprentices in Austria (see Diagram 1). This means that the total number of apprentices rose in 2018 for the first time in 10 years (+1,300 compared to 2017). However, the number of apprentices in their first year of training increased for

the third time in a row. In addition to a slight increase in the number of 15-year-olds (cf. Chapter 7), this was primarily due to the fact that recently the share of young people who opt for an apprenticeship within an age cohort has also risen again (cf. Diagram 2).

DIAGRAM 1:

#### Apprentices in Austria (2008-2018)

(end of December of the respective year)



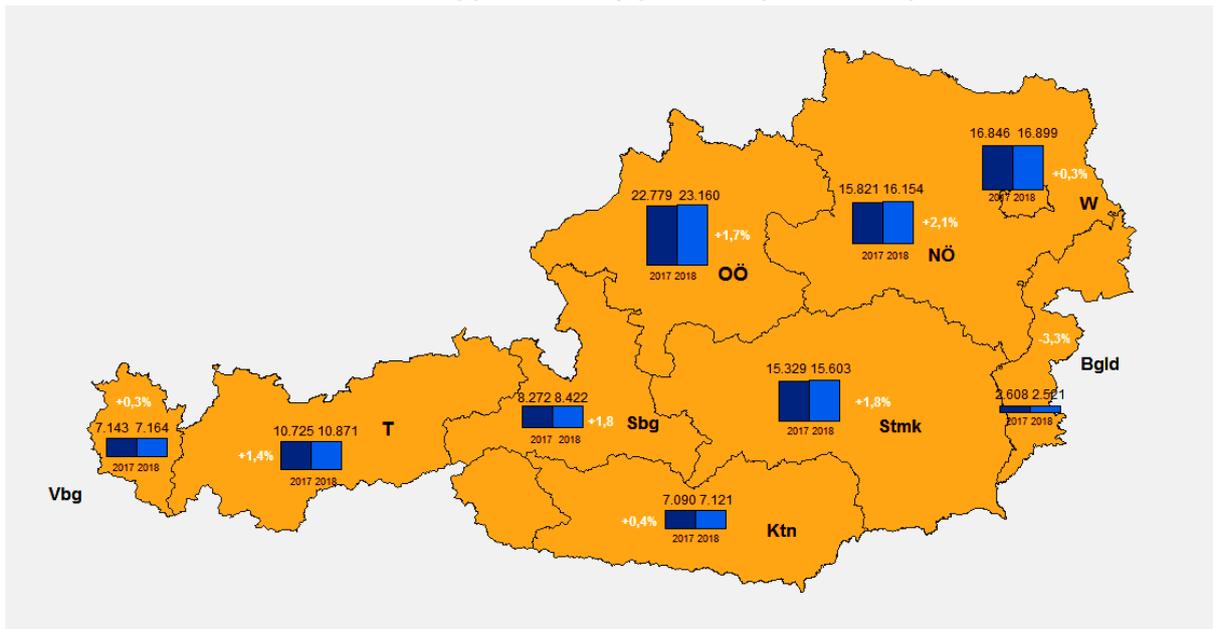
Source: WKO

In absolute terms, Upper Austria maintained its position as the leading Austrian province in apprenticeship training in 2018 (23,160 apprentices in 2018). With the exception of Burgenland (-3.3%), there was an increase in the number of apprentices in all provinces in 2018 (cf. Diagram 2), with the greatest relative increase in Lower Austria (+2.1%).

However, in order to assess the importance of apprenticeship training in a province, it is necessary to compare the number of apprentices with the number of all young people. The “apprenticeship beginners’ rate” determined in this way can be seen in Diagram 7.

DIAGRAM 2:

**Number of apprentices by province (2017 - 2018)**



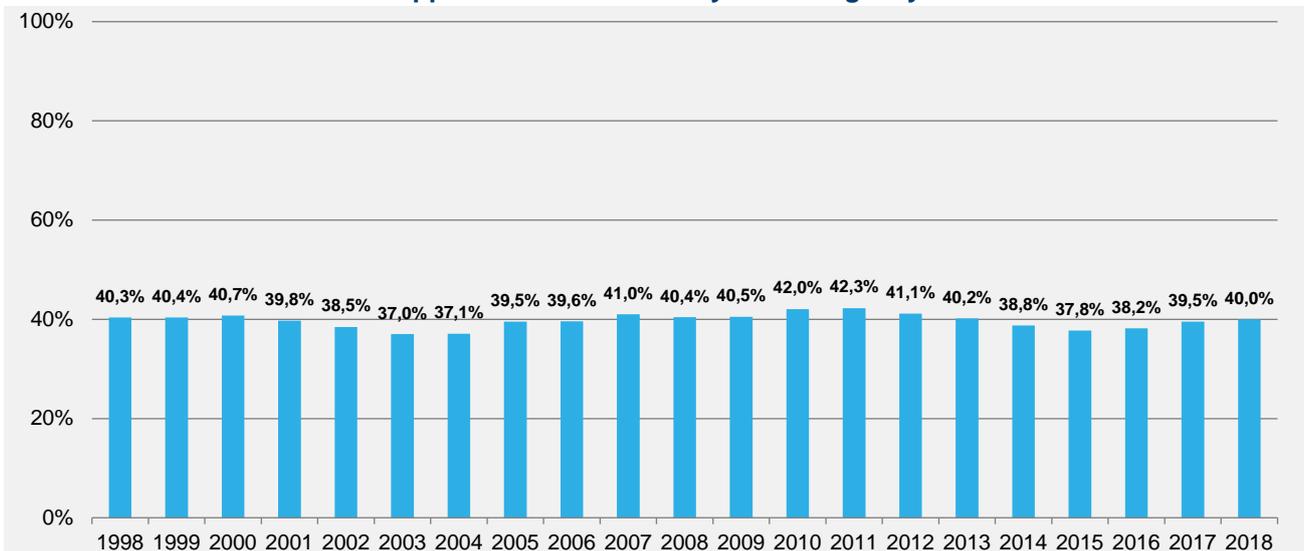
Source: WKO

Approximately 40% of young people in each year group take up apprenticeship training (cf. Diagram 3). The indicator “Share of apprentices in their first year among

15-year-olds” has remained relatively unchanged for a long time since the mid-1990s. After an interim low in 2015 (37.8%), it has since risen again (to 40.0% in 2018).

DIAGRAM 3:

**Share of apprentices in their first year among 15-year-olds**



Source: WKO (apprentices in their first year of apprenticeship), Statistics Austria (15-year-olds) + ibw calculations

Notes: data query 15-year-olds: 04.06.2019, last update: 21.05.2019.

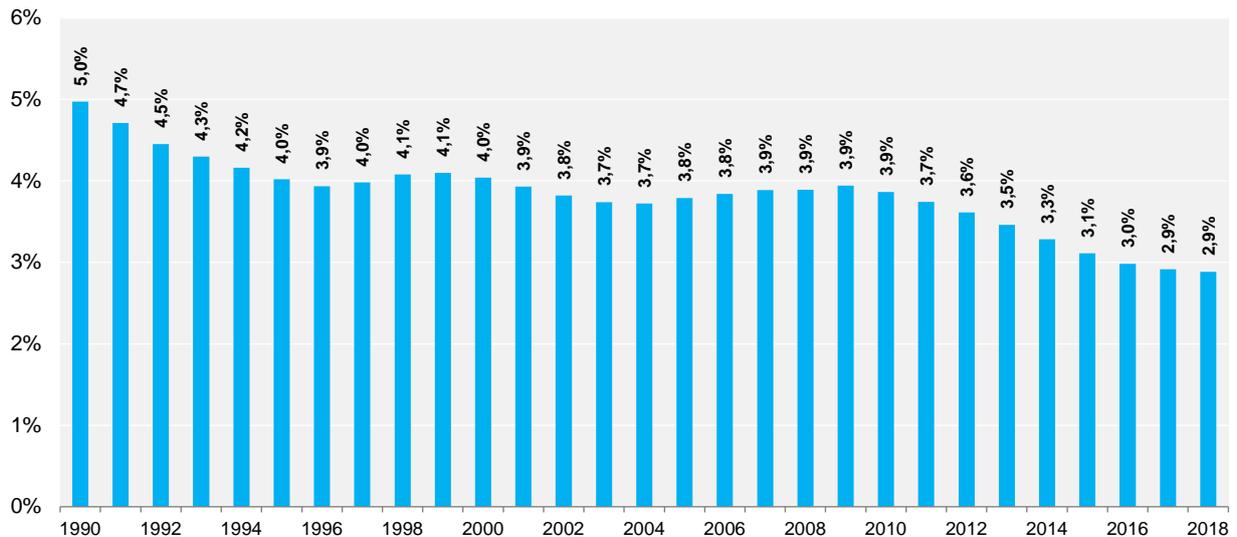
The numbers of apprentices are year-end values; the number of 15-year-olds is an annual average.

The share of apprentices among all people in dependent employment nevertheless reached a low in Austria in 2018: The long-term sharp absolute decline in the number of young people, and consequently also in the number of apprentices, combined with the (almost) steady increase in the number of employees, resulted in a considerable

drop in the share of apprentices among all people in dependent employment (of 5.0%) since 1990 (2018: 2.9%), which means the share almost halved (cf. Diagram 4). These figures therefore provide a clear indication that the long-term availability of skilled young workers is at acute risk.

DIAGRAM 4:

Share of apprentices among all people in dependent employment (1990-2018)



Source: WKÖ + Main Association of Austrian Social Security Institutions + ibw calculations

Notes: In relation to all people in dependent employment in Austria (3,741,495 persons in 2018).

People in dependent employment plus employees with a freelance contract pursuant to § 4 (4) of the General Social Insurance Act ASVG. People in marginal employment are not included. Incl. people completing their compulsory community service and recipients of childcare allowance or recipients of benefits for 'non-working periods'.

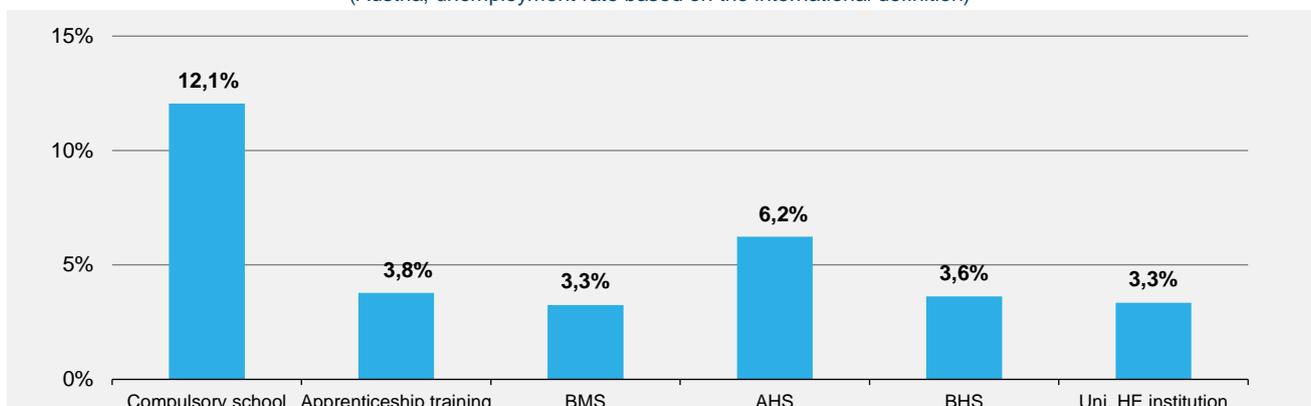
The absolute, and relative (to total employment), decline in the number of apprentices in recent decades can be seen not only as an intensification of the skilled labour shortage but also as untapped occupational potential. The analysis of unemployment rates by highest level of educational attainment (based on the international definition) in 2018 (see Diagram 5) shows that the **unemployment rate of persons who have completed compulsory schooling as their highest education pathway is many times higher (12.1%)** than that of persons who have completed more specialised vocational education and training programmes.

The **lowest unemployment rates** in 2018 can be observed among **graduates of a university/HE institution (3.3%)**, a **school for intermediate vocational education (BMS)<sup>1</sup> (3.3%)**, a **college for higher vocational education (BHS) (3.6%)** and an **apprenticeship (3.8%)**. These data provide rather impressive evidence of the high professional usability and labour market relevance of vocational education and training in Austria, especially since graduates of academic secondary schools (AHS) are faced with a noticeably higher unemployment rate (6.2%). According to this method of calculation, the total unemployment rate in Austria for 2018 was 4.8%.

DIAGRAM 5:

Unemployment rate by highest educational attainment in 2018

(Austria; unemployment rate based on the international definition)



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

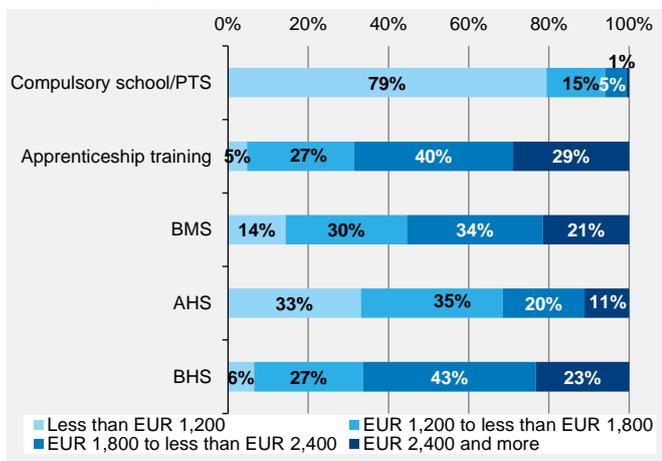
<sup>1</sup> However, the group of schools for intermediate vocational education covers very heterogeneous forms of education (such as also schools for healthcare and nursing, sports academies, etc.).

In comparison with other education or training programmes, the **incomes of apprenticeship graduates 18 months after completing their training are comparatively favourable** (cf. Diagram 6): Only for 5% is the (inflation-adjusted) monthly gross income 18 months after completion of apprenticeship training less than EUR 1,200, for 29% it is as high as over EUR 2,400. The starting incomes of apprenticeship graduates are therefore somewhat higher than those of graduates of colleges for higher vocational education and even significantly higher than those of graduates of schools for intermediate vocational education or academic secondary schools. By far the lowest starting incomes are earned by those who have only completed compulsory schooling or a prevocational school: 79% of them earn less than EUR 1,200 per month 18 months after graduation. It should be noted that these are **average** income values, with **considerable differences between occupational groups and sectors**, of course.

DIAGRAM 6:

**Gross monthly income 18 months after graduation (adjusted for inflation)**

(Graduations of the training year 2014/2015. Restricted to those who have not taken up any additional training within the first 2 years after graduation and are already employed.)



Source: Statistics Austria: Qualification-related professional career monitoring (commissioned by the Austrian Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK) and Public Employment Service (AMS)) + ibw calculations (data query: 06.05.2019; last update: 17.12.2018)

“Compulsory school/PTS” = lower secondary schools, new secondary schools, lower cycles of academic secondary school and special needs schools, prevocational schools (PTS).

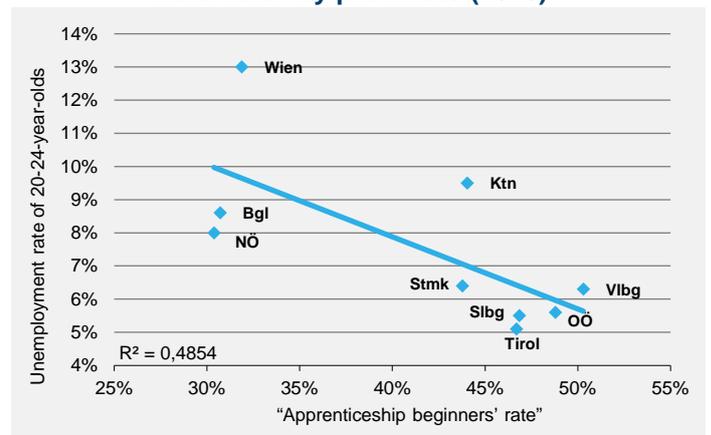
“BMS” = schools of engineering, crafts, business, schools for occupations in the services industries management, for social occupations, as well as schools of agriculture and forestry (i.e. excluding schools for healthcare and nursing or master craftsperson examinations, for instance).

“BHS” = colleges for higher vocational education.

Apprenticeship training also plays an important role in reducing youth unemployment - not only by international standards but also within Austria: In 2018, the youth unemployment rates by province again show a very strong negative correlation (15-19 years:  $r = -0.75$  / 20-24 years:  $r = -0.70$ ) with the number of apprentices in their first year of apprenticeship in relation to 15-year-olds (here simply referred to as the “apprenticeship beginners’ rate”). This can be interpreted as meaning that the **youth unemployment rate tends to be lower the more young people in an age cohort complete apprenticeship training**. Since this also applies to the unemployment rate of 20-24 year-olds, who have usually already completed their apprenticeship training, this illustrates the positive effect of dual vocational training on the labour market integration of young people and young adults (cf. Diagram 7).

DIAGRAM 7:

**Relationship between the youth unemployment rate (of 20-24-year-olds) and the “apprenticeship beginners’ rate” by provinces (2018)**



Sources: BMASGK (BALIweb): Youth unemployment rate (annual averages 2018),

Statistics Austria: Annual average of 15-year-olds, WKO: Number of apprentices in first apprenticeship year (31.12.2018) + ibw calculations.

Notes: “Apprenticeship beginners’ rate” = apprentices in the first year of apprenticeship / number of 15-year-olds (of the respective province).

Trend line by means of linear regression.

The entire study (funded by the Federal Ministry of Digital and Economic Affairs BMDW and WKO) can be obtained from ibw in printed form in German (ibw Research Report No. 200, ISBN 978-3-903310-25-4) or downloaded from <https://ibw.at/biblio-thek/id/505/>.