ibw research brief

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Survey of Apprenticeship Training in 2016

Structural Data, Trends and Prospects

he strong decline in the number of apprentices and training companies, which is mainly due to demographic reasons, is leading to growing concentration tendencies in the apprenticeship training sector: smaller companies now hardly receive any job applications whereas the share of apprentices in large companies is rising continually. Apprentice figures will probably go up (slightly) soon, at least among beginners. This is indicated by the latest issue of the ibw "Survey of Apprenticeship Training" study, which comes out every year (with funding provided by the Federal Ministry of Science, Research and Economy BMWFW 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 figures themselves, it also comprises the latest data on the labour market success of apprenticeship graduates, apprenticeship and school dropout numbers, public and company expenditure for apprenticeship training, and much more.

Number of apprentices and training companies

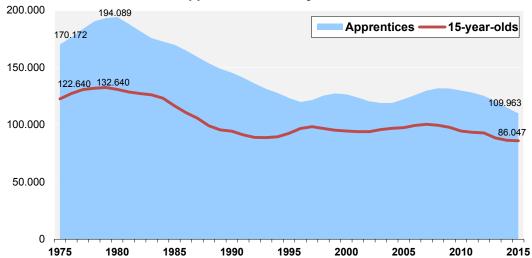
The number of apprentices in Austria (cf. Diagram 1) is in particular closely connected with the demographic development (number of 15-year-olds). At the end of 2015, a total of 109,963 apprentices were in training across Austria, which was more than 5,000 fewer than in 2014 (115,068) and more than 21,000 fewer than at the end of 2009 (131,676).

Analogous to the development of apprentice figures, a clear decline in the number of training providers can also be observed. Between 2009 and 2012 this decline in training companies (counted on the basis of chamber members) was at around 1,000 companies a year and it has even increased since 2013 to around 1,500 companies a year (to 29,164 training companies in 2015).

From a demographic perspective, however, the number of 15-year-olds and apprentices in the first year of training will soon stabilise or even increase again slightly.

DIAGRAM 1

Number of apprentices and 15-year-olds in Austria



Source: Austrian Federal Economic Chamber: apprenticeship statistics (at the end of December of the respective year) and Statistics Austria: 15-year-olds on an annual average

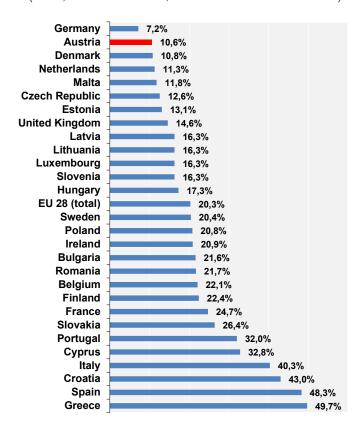
International comparative data:

Countries with a strong dual training system (apprentice-ship training) have the clearly lowest youth unemployment rates within the EU. In 2015 Austria boasted the second lowest youth unemployment rate of all EU countries among those below the age of 25 (10.6%). But this "youth" unemployment rate has recently increased slightly (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 (10.9%) in Austria (7.3%) in 2015.

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 in 2015 was higher in Austria (88.7%) than in the whole of the EU (82.6%). In the upper secondary sector, Austria has one of the highest shares of vocational education and training (pupils at VET schools and colleges including apprenticeship) within the EU (70% in Austria compared to 47% on an EU average).

Unemployment rate of under 25-year-olds
(2015, EU-28 countries, Eurostat calculation method)



Source: EUROSTAT

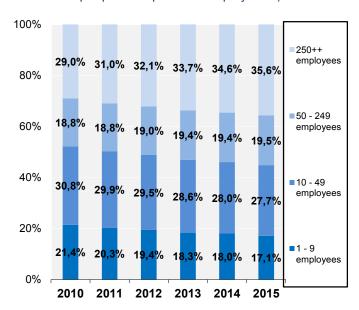
Concentration tendencies: apprentices by size of training company

The strong decline in the number of apprentices and training companies (which is mainly due to demographic reasons) leads to a concentration of apprenticeship training on larger companies, with a further upward trend. The (increasingly necessary) more and more aggressive (advertising- and cost-intensive) recruitment of apprentices by large companies leads to a further concentration of the flows of applicants. This has the result that smaller companies receive (even) fewer applications and that, despite a lack of apprenticeship seekers, many applications (at large companies) continue to be unsuccessful and many applicants have negative experiences when applying for jobs. This growing concentration can also be illustrated based on the distribution of apprentices by company size (cf. Diagram 3): the share of apprentices in companies with fewer than 10 employees is continually decreasing (2010: 21.4%, 2015: 17.1%), whereas it is rising in companies with more than 250 employees (2010: 29.0%, 2015: 35.6%).

DIAGRAM 3:

Distribution of apprentices by size of training company (employees)

(size of training company based on the number of people in dependent employment)



Source: WKO (2010-2015): Apprentice rates – share of apprentices among people in dependent employment. Vienna.

+ ibw calculations

Public expenditure for apprenticeship training compared to other education pathways

Based on model calculations for 2014/15 (cf. Table 1), the total public funds spent on (company-based) dual apprenticeship training can be quantified at EUR 6,065 per apprenticeship post (N.B.: costs for part-time vocational school and subsidisation for apprenticeship posts based on § 19c of the Vocational Training Act (BAG)¹). 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 vo-

cational education (EUR 9,746) or in supra-company apprenticeship training commissioned by Public Employment Service or AMS (EUR 17,264). 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. The major part of training expenditure (and training time) in this sector is borne by companies, which however also generate revenue from the training (see further below).

TABLE 1:

Model calculations: Comparison of public expenditure for initial vocational education and training per apprentice/pupil on an annual basis

(for 2014 or 2014/15)

Education pathway	Detailed costs per person/ training place and year (in EUR)	Gesamte öffentliche Ausgaben pro Person/Ausbildungsplatz und Jahr (in EUR)
(Company-based) apprenticeship training	Part-time vocational school: 4,646.00 Subsidisation for apprenticeship posts based on § 19c BAG: 1,419.00	6,065.00
Supra-company apprentice- ship training commissioned by Public Employment Service (AMS)	Part-time vocational school: 4,646.00 AMS costs: 11,202.00 Funds provided by provinces: 1,416.00	17,264.00
Schools for intermediate vocational education and colleges for higher vocational education	9,746.00	9,746.00

Source: Statistics Austria (2016): Education in Figures 2014/15 – Volume of Tables, Vienna (costs of schools) + AMS (costs of supra-company apprenticeship training) + WKO (subsidisation for apprenticeship posts) + ibw calculations

Costs and benefits of apprenticeship training for companies

A recent survey² conducted among 581 training companies in the 20 most popular apprenticeships reveals:

Total annual gross costs per apprentice amount to an average of € 19,739 in the first, € 22,274 in the second, € 26,528 in the third apprenticeship year and (for apprenticeships with a duration of three and a half years) € 17,164 in the six months of the fourth apprenticeship year. The breakdown of the cost structure reveals that the wage costs to be paid for apprentices constitute the main cost dimension and that the shares total between 57% in the first apprenticeship year and 75% in the fourth. Personnel costs for IVET trainers and administra-

tion amount to between one third and one fifth of the overall costs, depending on the apprenticeship year. Other costs for equipment and materials as well as other cost factors accruing in apprenticeship training are rather low. Here the total gross costs sometimes vary considerably depending on the apprenticeship duration, groups of apprenticeship occupations, sectors and training company size.

When the gross costs of apprenticeship training are subtracted from the value of productive work generated by apprentices during the training, this equals the net earnings or net costs respectively. The average net earnings are negative in all apprenticeship years (net costs) because the gross costs are on average higher than the

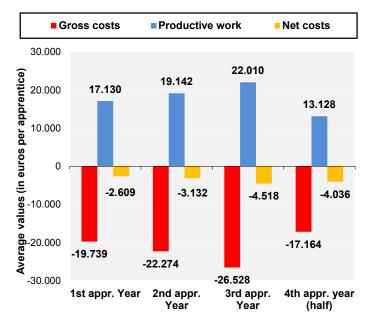
earnings (cf. Diagram 4). In the first apprenticeship year, net earnings are \in -2,609, in the second apprenticeship year \in -3,132, in the third apprenticeship year \in -4,518 and in the six months of the fourth apprenticeship year (for apprenticeships with a duration of three and a half years) \in -4,036.

The net costs of apprenticeship training are relatively high for Austrian training companies in an international comparison (CH, D), which is in part connected with the relatively high apprenticeship remunerations and lower wages for skilled workers (as a comparative value for productive work rendered by apprentices). It is additionally striking that – based on data of the Austrian survey – negative net earnings increase with every apprenticeship year, whereas they decrease in Germany and Switzerland with every (additional) apprenticeship year.

The basic subsidisation (as part of subsidies for incompany training places based on § 19c BAG), which is not considered in this calculation (among other things to enhance international comparability), cannot fully cover the (average) negative net earnings but makes a substantial contribution to reducing them.

DIAGRAM 4:

Average costs and earnings (productive work) of apprenticeship training by apprenticeship years



Source: öibf company survey 2015 (n=581 companies active in training).

Published in: Schlögl, Peter / Mayerl, Martin (2016): Company survey on the costs and benefits of apprenticeship training in Austria. Sub-report (öibf) as part of the ibw-öibf study "Background analysis on the effectiveness of subsidies for in-company training places (based on § 19c BAG)". Vienna.

Note: Costs/earnings without consideration of basic subsidisation (based on §19c BAG).

The net costs of training can be compared with the recruitment costs arising from the new recruitment of skilled workers from the external labour market. For companies active in training, recruitment costs turn into opportunity earnings if the graduated apprentices can be employed after their training. In that case, the training of apprentices carried out in-house saves the costs needed for covering the demand for skilled labour on the external labour market. Based on the responses of the training companies in the sample, an average of some 63% of their skilled workers are still employed in the company one year after graduation and as many as 47% three years afterwards.

For companies active in apprenticeship training, the average recruitment costs per skilled worker amount to € 10,398, and for those not active in training they total € 15,279. This means that, for an average training company, the possibility of employing trained apprentices can in the long run — after the training, when taking basic subsidisation into account — compensate for the negative net earnings accruing in the course of the training. This is only the case if the trained apprentice can actually be employed or kept in the company, however.

Employment in line with qualifications

Based on the microcensus labour force survey, in 2015 a total of 92.3% of apprenticeship graduates in employment were employed at skilled worker's level or above – and therefore in line with their qualification – either in dependent employment or self-employed. (Only) 7.7% of the labour force whose highest educational attainment is an apprenticeship were employed as unskilled workers.

The entire, extensive study "Lehrlingsausbildung im Überblick 2016" ("Survey of Apprenticeship Training in 2016") in German (ibw Research Report No. 188, ISBN 978-3-903053-79-3) can be obtained from ibw in printed form or online at http://www.ibw.at/de/ibw-studien.

¹ Strictly speaking, the companies actually finance the subsidies for incompany training places themselves, as the funds used for this purpose (from the Insolvency Remuneration Fund) are supplied by employers' contributions. Therefore it is frequently stated that this subsidisation scheme for in-company training places is in reality a VET fund.

² Cf. Schlögl, Peter / Mayerl, Martin (2016): Company survey on the costs and benefits of apprenticeship training in Austria. Sub-report (öibf) as part of the ibw-öibf study "Background analysis on the effectiveness of subsidies for in-company training places (based on § 19c BAG)". Vienna.