

ARTHUR SCHNEEBERGER, SABINE NOWAK

Apprenticeship Training at a Glance

Structural Data, Trends and Perspectives (Edition 2010)

The public shows continuing interest in information about apprenticeship training, with long-term developments being presented on the basis of key aspects. This information requirement is met by the periodical publication of the *ibw - Austrian Institute for Research on Qualifications and Training of the Austrian Economy*, which comes out under the title “Apprenticeship Training at a Glance”.

Two thirds of apprentices are male, one third is female

In late 2009, almost 132,000 young people were in an apprenticeship programme, with over 115,700 or 88 % in the various *Crafts, Trade and Services segments*. In 2009, 34 % of all apprentices were female; their share has remained largely constant since the 1970s.

Training by sections

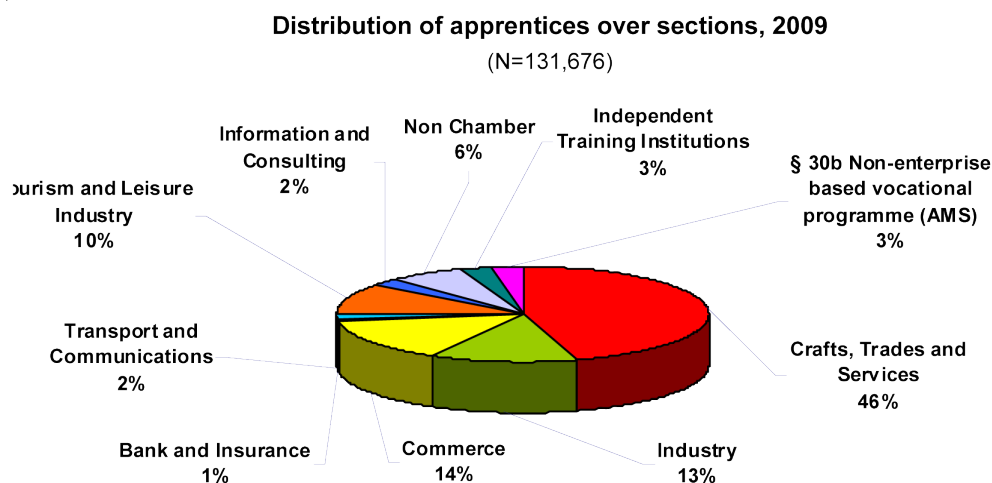
45 % of apprentices are trained in the largest training section, viz. *Crafts, Trade and Services* (see Graph 1). As can be expected, this predominance applies even slightly more to the distribution of training enterprises: 55 % of more than 38,400 training enterprises are active in this section.

The second largest training section is *Commerce* with more than 19,000 apprentices, followed by *Industry* (more than 16.600), and the *Tourism and Leisure Industry* section with around 13,500 apprentices. The Information und Consulting section, which was introduced in 2002, boasted as many as over 3,000 apprentices in 2009

Strongest route after completion of compulsory schooling

Apprenticeship training is the by far strongest training route in Austria both when analysing input (students in the tenth grade), with more than 40 % of school-attending youth, and even to a greater degree when

Graph 1



Source: Austrian Federal Economic Chamber, Apprenticeship Statistics

analysing output. Without the specific integration and skilling options provided by dual training in training enterprises and part-time vocational schools, the share of young adults without vocational qualification would be estimated more than 20 %.

As can be expected, the share of apprentices (students at part-time vocational school) is even higher by far among male than among female youth, which is due to gender-specific occupational preferences: With a total rate of almost 40 %, the provinces Upper Austria, Vorarlberg, Tyrol and Styria come to 50 % and more of male students in the tenth grade.

Differences by provinces

The available data material shows that apprenticeship training has taken different courses of development in the various provinces. In the distribution of young people in the first year of post-compulsory education, pronounced differences between the provinces can be observed, which are due *inter alia* to predominant economic and occupational structures. In Upper Austria, Tyrol, Vorarlberg, Styria and Salzburg for example, the rate is more than 40 % of schoolchildren in the tenth grade, whereas this share is partly clearly lower in Lower Austria and Burgenland.

Age of apprenticeship beginners

In Germany and other countries (such as Denmark, the Netherlands, Finland etc.), apprenticeship beginners are older than in Austria. In the year 2009, around 71 % of Austrian apprentices at the standard age of 15/16 were in their first year, with pronounced differences between the sections. The age of apprenticeship beginners constitutes a significant variable for the initial vocational education and training (IVET) routes' system development.

Young people without Austrian citizenship

The share of foreigners among apprentices is some 7 %. This share has been declining since the mid-1990s. But the variable of their *citizenship* constitutes only a short hint for the share of young people with a migration background. According to the school statistics of Statistics Austria the share of young people with non-German common speech was 8,2 % in 2008/09. The VET schools with 27 % contribute comparatively more than the apprenticeship training to integration..

The apprenticeship post market and problems of transition

Late September is the time that problems on the apprenticeship post market emerge, if any. The theoretical gap of apprenticeship posts clearly narrowed in late September 2007 as compared to 2003 and then widened again.

In addition it can be noted that the number of apprenticeship posts that are offered but cannot be filled increased from some 2,900 in 2002 to about 4,900 (September 2010).

The introduction of integrative vocational training has proven a success, with the number of participants rising from 1,940 in 2005 to over 4,600 in 2009.

Distribution by apprenticeship occupations

The breadth of the apprenticeships is a topic consistently given attention to in education science and education policy discussions. Thus in the recent OECD-Review of vocational training and education in Austria.

Concerning the question of the breadth or possible broadening of the profession profiles one should take into consideration that already today a majority of apprentices is trained in quite large apprenticeships. So 61,800 apprentices or 47 % are allotted to the 10 biggest apprenticeships, with reference to the 20 biggest apprenticeships there are 63 %.

In late 2009, the 50 most popular apprenticeships or apprenticeship combinations (i.e. double training programmes) accounted for some 82 % of training relationships.

The by far most frequently chosen apprenticeship is the (in itself differentiated) occupation "retail trade services" (i.e. "retail trade services specialising in general services" plus retail trade services with different specialisations) with almost 15,400 apprentices, followed by "office assistant", "motor vehicle engineering", "hairdresser and wigmaker (stylist)", "cook" and "installations and building services engineering".

By combining all apprenticeship occupations into four domains it is possible to make the structures and structural changes visible. In the segment of *technical and trade apprenticeships* (53 % of training relationships), a relative decline in training relationships as against 1994 can be observed. *Office and commerce* combine one quarter of all training relationships; *tourism, food & beverages, and personal services* one fifth. The *ICT* occupations make more than 3,800 training relationships in 2009.

Training by company size

The breakdown of apprenticeship figures by company size shows clearly that apprenticeship training has a pronounced SME focus: Almost 70 % of apprentices are trained in companies with fewer than 50 employees; firms with between 50 and below 500 employees account for 25 %, and 6.5 % receive their training in large enterprises.

Workplaces have to be distinguished by definition from enterprises, as an enterprise can have more workplaces. Recent data concerning the statistical distribution of apprentices by size of the enterprise is provided by the apprenticeships statistics of the Austrian Federal Economic Chamber. Hereafter 21 % of the apprentices with reference date December 2009 were trained in enterprises with under 10 employees, 51,5 % of the apprentices relate to enterprises with under 50 employees. In the medium size enterprise segment (50 bis 249 employees) 19 % of the apprentices were trained, in the large scale enterprise segment the respective share is 30 %.

Apprenticeship rates by sections, sectors and economic sections

Pursuant to the chamber classification, there was a spread of the rate of apprentices in the workforce in 2009 (as of December) of between 1.2 % (*Bank and In-surance*) and 9.2 % (*Crafts, Trade and Services*). Apprenticeship rates for Industry were 4.0 %, for *Commerce* 5.6 %, and for the *Tourism and Leisure Industry* section 4.9 %. In total apprentices account for 5.4 % of the circa 2.2 million employed persons in the business economy.

Output of dual training with impact on the labour market

By the age of 20, students should mostly have completed the VET programmes they are attending. According to the latest census, 45.5 % of the economically active population aged between 20 and 24 had an apprenticeship certificate, 13.5 % had successfully completed a VET school (BMS), and 15.3 % a VET college (BHS) or a post-secondary course in VET. This means that – when analysing output with impact on the labour market – the dual training system is the quantitatively by far strongest qualification route.

Due to more pronounced interest in dual training or the occupations accessible via this route among male young people, also output of apprenticeship training is clearly higher among them: Among 20-to-24-year-old men in gainful employment, the rate is at nearly 57 %, among women at 33 %.

Final apprenticeship exam and quality assurance of the dual vocational training

Passing the final apprenticeship exam shows significant evidence for the quality of the apprenticeship training particularly as the apprenticeship exam drastically reduces the risk of unemployment in comparison with persons without educational attainment.

Passing the final apprenticeship exam is a fundamental information for the discussion of quality aspects in VET although not being considered isolated as e.g. previous

educational attainment plays a role. 85 % of the female exam candidates, which also had a better basic education¹ achieved a positive result in the reference year 2009, whereas the male exam candidates came up to 81 %.

Office and trade apprenticeship professions come up better than most of the technical apprenticeships in crafts, trade and service. In total in 2009 around 30 % of the exam candidates in the final exam achieved a “honour” or a “good success”, whereas 34 % of the bricklayer apprentices. This fact and the below average failure rate of the building apprenticeships (bricklayer, carpenter etc.) point out that a third learning facility (“Lehrbauhof”) might be an important support for training enterprises and apprentices. Questions concerning quality development in apprenticeship training are increasingly getting relevant, which is also emphasised by measures of the Federal Ministry of Economy, Family and Youth, as e.g. the half-time practical proof (“Praxistest”) as well as the documentation of the vocational training in the enterprise (“Ausbildungsdokumentation”). The quality development in the apprenticeship training especially is influenced by the previous educational attainment and the continuous cooperation of the places of learning².

Apprenticeship graduates in the employment system

According to the microcensus, more than 39 % of all 4.2 million Austrians in employment had an apprenticeship certificate in 2009. This share was 49 % among men and 30 % among women.

The occupational group „craft and related trade workers“ has the highest percentage share of apprenticeship graduates (73 %). In the occupational group of the „managers“ their share is 36 %, their respective share in the occupational group of the “technicians and associate professionals” is nearly one third.

The unemployment rate and the labour force participation rate are fundamental indicators to point out the efficiency in the practice of VET. A continuative question relates to the extent of adequate employment. Hereunto it can be stated that nearly 89 % of the apprenticeship graduates are in qualified occupational activity, only 11.3 % are active in elementary occupations.

Good performance on the labour market

The unemployment rate among apprenticeship graduates is 6 percentage points lower than among people who have not completed a VET path. In 2009, the unemployment rate among apprenticeship graduates was 4.1 %, and hence clearly below the average of 4.8 %, as well as below the unemployment rate of graduates of secondary schools (AHS) (see Graph 2).

The apprenticeship graduates' duration of unemployment was an average of 106 days in 2009, whereas the average duration for all educational categories was clearly higher with 115 days.

The relationship between vacancies (as published in the print media) and registered unemployed over the year is more favourable for apprenticeship graduates than for graduates of BMS, Higher Schools (Secondary Schools and VET Colleges) and university-related institutions.

In 2009 the requested qualification „apprenticeship certificate / master craftsman's certificate“ accounts for 49 % of the job openings in print media whilst the respective share of the job advertisements for graduates of Secondary Schools, VET Colleges, VET Schools and Universities was around 5 % in each case.

Negative presentations of the labour market situation of apprenticeship graduates as they are sometimes published in the media are based on a misinterpretation of statistical material, in that the number of unemployed people by formal educational attainment is analysed without taking into account the high share of apprenticeship graduates among the economically active population. Under that perspective, merely the distribution of registered unemployment by formal educational attainment forms the basis, whereas the perspective substantiated from the viewpoint of educational economics³ is the qualification specific share of unemployed in the economically active population.

Graph 2

Unemployment rate by formal educational attainment, 2009, in %



Source: Statistics Austria, Labour Force Survey 2009

¹ Cf. Schöberl, Susanne; Pointinger, Martin (2009): Charakterisierung der Schüler/innen in den berufsbildenden Schulen. In: Schreiner, Claudia; Schwantner, Ursula (Hrsg.): PISA 2006. Österreichischer Expertenbericht zum Naturwissenschafts-Schwerpunkt, Graz, S. 218

² Schneeberger, Arthur (2010): Einflussfaktoren und Gestaltungsfelder der Qualitätsentwicklung in der Lehrlingsausbildung. In: Niedermair, Gerhard (Hrsg.): Qualitätsentwicklung in der beruflichen Bildung – Ansprüche und Realitäten, Schriftenreihe für Berufs- und Betriebspädagogik 3, Johannes Kepler Universität Linz, Linz.

³ Whether within the meaning of the filter theory or the human capital theory, cf. Williams, Gareth L.: The Economic Approach. In: Burton R. Clark (ed.): Perspectives in Higher Education, Berkeley - Los Angeles - London, 1987.

The entire study can be obtained from ibw in a reprint form (ibw-Forschungsbericht Nr. 158, ISBN 978-3-902742-02-5) or [online](#).