

ÖROK-PROJECTION 2001-2031

PART 1: POPULATION AND LABOUR FORCE – SUMMARY

Introduction

The intention of this report is to show evolving population trends which might affect the demographic landscape of the 35 NUTS 3-regions and 118 districts (including 23 districts of Vienna) in Austria by age and sex. This report describes how regions are projected to become demographically diverse over the next three decades. Even the future development of number and structure of the labour force in Austria and its regions are predicted. Our projections can be used as basic input to many federal, state, and local projection models that produce detailed statistics on education, labour force, health care and other topics. Thus, the results are useful to regional planners in both public and private sectors.

The present small-area population projection is consistent with the official population projection by Statistics Austria which was published in fall 2003. This is guaranteed due to the same methodical approaches as well as using the same multiregional population model. Assumptions concerning fertility, mortality, interregional migration and international migration could therefore be synchronized. Moreover, due to adjustment procedures it was assured that the results of the population projection by "The Austrian Conference on Spatial Planning" (ÖROK) are in concordance with the corresponding projections variants by Statistics Austria.

The ÖROK population projection is presented in three scenarios and four variants. The "main scenario" describes the future population path that is most likely. Consequently, the "main scenario" covers all requirements for empirical based population prognoses. In the "main scenario" it is assumed that the Total Fertility Rate (TFR) in Austria remains on a long-term basis by 1.4 children per woman. The life expectancy (LE) – like in the past – will increase constantly (80.4 years for men and 85.7 years for women; in year 2031). It is to be expected that the international migration inflow will be intensified at short notice as a result of the EU-Enlargement (from 90 000 in 2001 to 95 000 in 2006) and will decline by 80 000 persons per year till the end of the projection period (2031).

In addition to the "main scenario" a "growth scenario" and an "ageing scenario" are considered. The "growth scenario", which leads on a long-term basis to the strongest increase in population, assumes a rise of the TFR to 1.7 children per woman and a stronger regression of mortality, which consequently leads to higher LE (83.1 years (men) and 87.8 years (women) in 2031). The international migration inflow will rise to 105 000 persons in 2006 and then drop to 90 000

persons per year. The annual immigration level is around 10 000 persons higher than in the "main scenario". The "ageing scenario" combines certain markedness of the forecasting parameters that lead on a long-term basis to a demographically very old population structure. It combines a low TFR (1.1 children per woman) with the high increase of LE (2031: 83.1 years for men and 87.8 years for women). Even the international migration inflow will be reduced on a long-term basis to 70 000 persons per year.

In four variants of the presented population projection, the effects of the modification of individual indicators are considered separately, while in each case the other parameters remain according to the "main scenario": The "fertility variant" assumes a long-term rise of the TFR; the "life expectancy variant" focuses on a significant reduction of mortality; the "high migration variant" emphasizes the effects of high immigration to Austria and the "low migration variant" outlines the effects of international migration on a low immigration level.

Population development 1991-2001

Total population

According to the census 2001 8 032 926 inhabitants were registered in Austria. Consequently, since the last census of 1991 (7 795 786 inhabitants) the total population has grown around 237 140 respectively +3.0%. During this period this increase in population was attributed to approximately 70% to the positive migration balance. In the 1990s about 168 000 persons immigrated to Austria. Similarly, the natural demographic component in this period added 30% to the population growth. Between the two last censuses around 69 000 more births than deaths were registered.

The population growth did not distribute uniformly over the entire federal territory in the last decade. While the population increase in the western part of Austria was considerable, the population growth in the east and south of the country was rather modest. Between the censuses 1991 and 2001 the population growth was most significant in Salzburg (+6.8%), Tyrol (+6.7%) and Vorarlberg (+5.9%). In Vorarlberg however, the increase was based exclusively on birth surpluses while in Tyrol (30%) and in Salzburg (40%) the population growth was to some extent affected by immigration. An average increase in population was observed in Upper Austria (+3.0%). However, the birth surplus dominated the population development unlike in the other federal states. In Carinthia the birth surplus and positive migration balance was more or less

equal (+1.1). The population development in Styria was different (-0.1%): The negative migration balance was higher than the small birth surplus. In Vienna, (+0.7%), in Salzburg (+2.5%) and in Lower Austria (+4.9%) the birth deficits were more than compensated by immigration.

In suburban areas the demographic development was determined by solid population growth which was basically led back to interregional migration. The most significant increase in population took place in the districts Salzburg-Umgebung (+14.4), Imst (+12.4%), Tulln (+12.1%), Urfahr-Umgebung (+11.5%), Korneuburg (+11.4%), Graz-Umgebung (+11.2%), Kufstein (+10.7%), Baden (+9.9%), Gänserndorf (+9.7%) and Innsbruck-Land (+9.6%).

During the period 1991-2001 a significant population loss was registered particularly in cities like in Linz (-9.6%), Graz (-4.9%), Innsbruck (-4.0%), Sankt Pölten (-1.8%) and Salzburg (-0.9%). Similarly, the districts of the so called „old industrial areas“ recorded the most significant population loss in the northern part of Styria, e.g. Leoben (-7.6%), Bruck/Mur and Mürzzuschlag (each -4.1%) as well as Judenburg (-3.8%). Even geographic peripheral regions were determined by a loss of population numbers. A strong decrease in population was observed in several districts in the northern part of Carinthia (Hermagor -2.4%), in the western and southern part of Styria (Murau -2.4%, Radkersburg -2.9%) as well as in the middle and southern part of Burgenland (Güssing -2.8%).

The future population development in Austria

In the “main scenario”, the number of inhabitants in Austria will increase from 8.05 million (2002) to 8.36 million (2016) and achieve a historical maximum in 2027 with 8.43 million. In the next decades, the migration impact will still be higher than the losses through the surplus of deaths about births. Therefore, an increase of inhabitants is likely to be expected in the next decades. Nevertheless, the population growth will come to an end in 2027. From this point of time, the positive migration balance will no more compensate the relatively high birth deficit according to the “main scenario”. The number of inhabitants will consequently decrease till the end of the projection period (2031: 8.42 million).

A possible negative demographic development is presented by the “ageing scenario”. In this scenario Austria will be regarded as a minor attractive immigration country in combination with a considerably reduction of the TFR (1.1 children per woman) and with a considerable increase of the LE by 7.5 years for men (2031: 83.1 years) and by 6.2 years for women (2031: 87.8 years). Under such circumstances the population will decrease and will be affected by a severe demographic ageing process. In this case, the rising birth deficits will not be compensated by positive migration balances anymore. In the “ageing scenario” the number of inhabitants of Austria will

already achieve a maximum of 8.15 million in 2012 and will shrink to 7.95 million till 2031.

The other spectrum of possible future population development is shown by the “growth scenario”. In this scenario the number of inhabitants in Austria will continue to increase based on assumed high fertility (1.7 children per woman (to 2015), an expected higher LE (83.1 years (men) and 87.8 years (women) in 2031) as well as an amplified migration inflow with a migration balance of up to +39 000 persons annually (2006). Based on these assumptions, the Austrian population would increase enormously in the next decades (2021: 8.89 million; 2031: 9.22 million).

In the “fertility variant”, an increase of the TFR of 1.7 children per woman is assumed. Migration inflow and LE are based on the “main scenario”. Due to the higher fertility level birth surpluses are to be expected up to the year 2025. Afterwards, the birth deficit will be compensated by the positive migration balance. As a result, the population in Austria will increase to 8.63 million (2021) respectively to 8.77 million of persons in 2031.

The “high migration variant” assumes an international migration balance of maximal +39 000 persons per annum. TFR and LE are identical with the assumption of the “main scenario”. Although a birth deficit is already to be expected under these conditions by 2004, the population growth is the result of high immigration over the entire projected period (2021: 8.58 million; 2031: 8.69 million). The “low migration variant” considers a modest international migration balance between +8 000 and +19 000 persons per year. TFR and LE are identical with the assumption of the “main scenario”. Under such demographic conditions, the birth deficit will already not be compensated by positive migration balance in 2018. Consequently, the population will decrease by 10 000 persons in 2021 (8.23 million) and will decline substantially till 2031 (8.14 million). The projection variant with a significant increase of LE (assumptions concerning fertility and migration are similar to the “main scenario”), speeds up the number of inhabitants to 8.49 million (2021) respectively 8.58 million (2031). This variant represents a realistic demographic path with special focus on future mortality development, assuming the same LE dynamic like in the past.

Chances in the age structure

In all scenarios the proportion of youth under 20 years will drop significantly till the end of the projection period: In the “main scenario” it will decline from 23% (2001) to 18% (2031). According to the “ageing scenario” the proportion of the youth will decrease enormously: Only 15% (2031) of the population will be younger than 20 years. On the other hand, in the “fertility variant” (2031: 21%) and in the “growth variant” (2031: 20%) the proportion of the Nation’s young will shrink not that quick.

On the contrary, the proportion of elderly (65 years and older) will increase in the next decades. In the “main scenario” a rise from 16% (2001) to 25% (2031) is to be expected. In the “ageing scenario”, the size of the elderly population is projected to increase even stronger (2031: 28%). In the “fertility variant” and in the “high migration variant” the growth in elderly population will be insignificant lower than in the “main scenario”.

The proportion of the population aged 20 to 64 years will first increase slightly in the future (2013) but a decrease at end of the projection horizon is to be expected. In 2031 only 57% of the total population will be between 20 and 65 years. A similar development is shown in the “ageing scenario” and in the “high migration variant”. According to the “high migration variant” and “fertility variant” about 55% (2031) of the total population will be between 20 and 65 years. The proportion of the economically active population will be even lower in the “life expectancy variant”.

Population development in the regions

Opposite trends will characterize the regional population development in the next decades. While the number of inhabitants will increase in some regions significantly, in some other regions of the country a population loss is predicted. Depending on our scenarios, these divergent demographic trends are marked differently; however, the diverse assumptions do not change essentially the basic trends of the future population development. The rate of population change among the nine states will vary substantially during the next decades. According to the “main scenario” Tyrol (+13%), Vorarlberg (+11%) and Salzburg are expected to have the most rapid population growth. Even in the eastern part of Austria a population increase is to be estimated: In 2031 Lower Austria and Vienna will count about 7% more inhabitants than today. In Upper Austria the population will increase about 4% and in Burgenland a growth of only 1% can be expected. The southern part of Austria stands at the other end of the continuum with a population loss till 2031: Carinthia will have a population decline by around -5% and Styria by around -3%.

The urban agglomerations will be the „winner“ of the future population development. Due to economical tendencies of the last years (increase of the service sectors, internationalization of enterprises), cities and suburban areas are attractive both for interregional and international migrants. In all urban agglomerations in Austria the population will increase considerably, especially in the “Vienna Region” (+9%), in Innsbruck (+11%) and in Salzburg (+8%). However, a counterrotating development is also expected: while the inner cities will lose population, the suburban municipalities will face a strong population growth.

An increase of population is even to be expected in

those regions with important arterial roads of the country. Along these traffic networks, strong economical dynamics has been observed in the past. These locations show a good reachability and are attractive for industries and service enterprises. In those regions the impact of relevant arterial roads together with advantages concerning general urban agglomeration, special spatial dynamics are observed. E.g., in the southern suburban region of Vienna, the train railroad system and the highway A2 guarantee an outstanding reachability of the industry region to the town centre and “Vienna Region” in general. The situation is quite similar in the northern and north-western suburban areas of Vienna. One of the highest increases in population in Austria is predicted for the district Tulln (2031: +19%), which is well connected with Vienna by two rapid train railway lines, the highway A22 and the road B14. The strongest population growth in Austria will be expected to the district Korneuburg (2031: +21%) in the north of Vienna, where good traffic conditions certainly favour such population development.

Regions outside of commuter belts of Vienna and outside of other regional capital cities will loose population. These areas are too far away to commuting and probable less attractive to reactivate new labour markets. In those regions the population will decrease like in Waldviertel, in the northern part of Styria or in peripheral sited alpine districts in Carinthia and East-Tyrol.

Leoben, Hermagor, Judenburg, Murau and Gmünd state the list of districts with population losses. The pattern of the peripheral districts with population decrease remains relatively stable like in the past but its dynamic will change over time. The last ÖROK population projection estimated that in the above named districts the population loss will be about 30% within twenty years. In the present projection a loss of 22% (2031) is expected. In some cases this relative improvement of population development can be associated with economic stabilization and new economical dynamics.

The population dynamic in the districts of Vienna, whose future development is computed for the very first time by ÖROK, will be very different. A continuation of emigration processes in the core of the city is to be assumed. Therefore, the number of inhabitants will increase significantly in the districts Donaustadt (2031: +36%) and Simmering (2031: +29%). Even the districts Floridsdorf (2031: +12%) as well as Liesing (+10%) will have more inhabitants in 2031 than today.

The future development of the labour force

The future development of number and structure of the labour force according to the livelihood concept is predicted in two variants. The trend scenario combines an extrapolated age- and sex structure of activity rates based on the “main scenario” of our population projection. This scenario assumes a further increase of the employment quote for women and higher activity

rates in higher ages according on reforms in the Austrian pension system. The “activation scenario”, which is based on the “low immigration scenario” of the population forecast, assumes a stronger recruitment of the domestic potential of employees and implies a stronger rise of age- and sex specific participation of employees. Both variants represent similar results and point out different paths how policy can react to the ageing of the population and the expected drop of employees. On the one hand immigration can help to solve the problem to some extent; on the other hand, the amplified activation of labour reserves leads to similar results.

According to the “trend scenario” the demographic supply of employees will still increase nation-wide until 2015. The number of employees will be about 4.07 million people, around 261 000 persons or 6.9% higher as in the census year 2001 (3.80 million). After 2015 a decline of employees is predicted. For the year 2031 the present projection estimates 3.88 million of employees that is still 1.9% higher or 73 000 more than in the census year in 2001. This rise will be in the first place due to higher activity rates of women employment. While the number of male employees will climb around 5% to 2015, the number of women at the labour market increases around 9% to 2021. On a long-term basis the participation of female employees increases from 43.1% (2001) to 45.9% (2031). Differentiated by age the surplus among employees will take place particularly for people aged 45 years and older. The number of young adults

(under 30 years) will stagnate at the labour market within the next 10 years and will then decrease rapidly due to long-term decline of birth rates.

The labour force will increase in the individual states differently. According to the “trend variant” the peak value of labour potential will be reached between 2011 (Carinthia) and 2020 (in Vienna as well as in Tyrol and in Vorarlberg). In 2011, the number of employees will be higher in Carinthia (+2.7%) compared to 2001 followed by Styria (2012: +3.7%) and Burgenland (2012: +4.0%). In Upper Austria the maximum value of employees will be reached in 2015 (+7.5%) followed by Lower Austria (2016: 7.2%) and Salzburg (2016: +7.5%). The numbers of employees will increase until 2020 in Vienna (+8.1%), in Vorarlberg (+12.0%) and in Tyrol (+13.7%).

Similar to the predicted population development the number of employees in the individual areas will increase or decrease. In the future the central regions in Austria will still have a higher supply on employees while in peripheral and disadvantage areas a decrease is to be expected. According to the “trend scenario” a considerable increase of employees on a long-term basis will be expected in the Inntal of Tyrol as well as in the northern surrounding area of Vienna. Significant losses are predicted for regions in the eastern and northern part of Styria, for some areas in Carinthia and for Liezen (East-Tyrol). However, all regions have in common a rather solid ageing of employees.