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Working Group Demography and Employment of the Alpine Convention

PRELIMINARY PAPER TO THE XI ALPINE CONFERENCE



Structure of the report:

- 1. Introduction
- 2. Demographic framework and migratory fluxes
- 3. Economic framework: regional development and labour market
- 4. Education and training
- 5. Brain-drain and the role of ICTs
- 6. Welfare, health and disability services
- 7. Preliminary conclusions
- 8. ANNEX A: Charts, tables and maps
- 9. ANNEX B: Good practices collection
- 10. ANNEX C: Brief on the Forum "Demography and employment The contribution and experiences of the European Territorial Cooperation Projects"

1. Introduction

The Report produced by the WG provides a general overview of the main topics described in the mandate of the WG Demography and Employment. The issue of population changes is one of the main themes of the Alpine Convention, and has also been considered in the Declaration on Population and Culture. The WG Demography and Employment was born to broaden and at the same time deepen our knowledge of demography and employment in the Alps and deliver a preliminary paper which could become a reference and a starting point for a future Report on the State of the Alps.

In fact, partly because of time constraints and partly because of the difficulty in dealing with and analyzing in detail such a wide and complex issue, this outcome of the activities of the WG has necessarily to be considered as a provisory report. More numerous and more homogenous data from the Contracting Parties to the Convention would have made it possible to work out a more balanced report, offering in a more consistent way insights on several Alpine sub-regions. Nevertheless, the collected information as presented and systematized in this Report hopefully provides a good and solid basis both for an immediate understanding of the current state of demography and employment in the Alps, and their relations, and for further work to be enriched with new elements, reflections and contributions from different Alpine actors. The possibility of collecting more updated data and information would indeed be of great help to refine and complete the picture that emerges from this report.

Since demography is capable of influencing, directly or indirectly, a wide range of different aspects of everyday life, affecting both the economic and the social behaviour of local communities, an investigation of the large and branching implications of demographic trends needs undoubtedly a broader, more articulated and finer tuned approach than other more specific studies. This is particularly the case of the Alps, where demographic tendencies related to geographical and economic factors are intersected by a pronounced cultural / ethnic diversity clearly signalled by the map of the linguistic groups in the territory of the Alpine Convention. As shown by the map, diversity is made visible both at a macro scale by the existence of four Alpine official languages (French, German, Italian and Slovenian), and at a micro scale by the presence, especially in the Southern Alps, of a number of linguistic minorities. As some experts have pointed out, the Alps can be seen as an "anthropological laboratory" where linguistically and culturally different populations are called to face largely similar challenges in a unique transnational space. There can be little doubt, on the one hand, that demographic trends will be influenced by the cultural specificities of these groups, and, on the other, that the viability or even the survival of linguistic minorities will heavily depend on the working of delicate demographic processes.



Map 1.1 – Alpine languages

Language groups throughout the territory of the Alpine Convention

The present Report consists of this introduction followed by 5 thematic sections, plus a final section containing some "preliminary conclusions" and 3 annexes containing respectively: A) some charts and tables describing in more detail the information provided in the thematic sections, B) a collection of good practices, C) a brief on a forum session of the WG open to the results of and expectations from other research and cooperation projects dealing with close topics. The thematic sections refer to a set of topics agreed upon by the WG and already reported in the mandate, namely: Demographic framework and migratory fluxes (section 2); Economic framework: regional development and labour market (section 3); Education and training (section 4); Brain-drain and the role of ICTs (section 5); and Welfare, health and disability services (section 6)¹.

In more detail:

- Section 2 is specifically focused on population dynamics and demographic trends, with particular
 reference to changes that are occurring in the structure and composition of the population. In
 addition to population density and the natural balance of births and deaths, both demographic
 ageing and migratory dynamics emerge as key aspects of the whole study, and the use of relevant
 indicators reveals the existence of significantly different trends between the various Alpine
 Countries and regions.
- Section 3 aims to highlight the state of economic development in the Alpine area, paying special attention to the labour market and to employment and unemployment rates. Commuter balance comes out as another important phenomenon, which contributes to the evolution and modification of local labour markets by polarising more favourable labour conditions towards some specific areas.
- Section 4 deals with the role of education systems throughout the Alpine countries and their mountain regions, focusing on the contribution of training and lifelong learning programmes in furthering the spread of knowledge. Both geographical factors and socio-economic reasons (first and foremost labour market conditions) have been found to have a part in improving or worsening the effectiveness of education systems, thus producing deeper inequalities and imbalances.
- Section 5 tackles the issue of the so-called "brain drain". Know-how is increasingly proving a key factor in promoting and developing well-being and competitiveness in our "knowledge society". However, its dynamics and likely future trends in the Alpine area are currently far from being precisely known and defined: the goal of this section is to show how different territories are affected negatively or positively (brain gain areas) by this phenomenon and how they can be expected to react. By investing in local human capital and attracting skilled personnel, the implementation of Information and Communication Technologies (ICTs) could help solve some of the problems.
- Section 6 concentrates on welfare regimes, health care and disability services in the Alps and, in
 particular, on how isolation and scarce accessibility to services by small and rural communities in
 the core territories may turn into discriminatory factors for the attainment of a stable standard of
 living. A clearly urgent issue is represented, especially in the Southern Alps, by the ageing of the
 population, for which specific policies and adequate measures are badly needed.

¹ In order to tackle these questions the WG started its activities by producing a "working bibliography" which has been organized into 8 thematic sections: demographic framework, data and scenarios (1); regional development, economic framework and labour market (2); occupation and commuting (3); education (4); brain drain (5); information and communication technologies (6); migratory fluxes (7); welfare systems, health and disabilities (8). This bibliographic reconnaissance has highlighted a dearth of studies in some crucial fields like education, brain drain, ICTs and welfare regimes.

2. Demographic framework and migratory fluxes

Population is the engine of any form of territorial and social development. As of 2001², Alps were inhabited by 13,948,452 people on a 190,568 km² territory, with a population density of 73 inhabitants per km² (that makes the Alps one of the less populated areas in Europe, although countries such as Greece and Spain have similar population density)³.

Population density and distribution

Population density can serve an index to assess human pressure on a territory⁴.

The analysis of population density by NUTS-4 level (map 2.1) reveals that the higher concentrations can be found in the peri-Alpine areas and in the wider valley bottoms such as Adige Valley, Rhone Valley, Valtellina, Inn Valley and Drava Valley.

In contrast to the large intra-Alpine valleys and the peri-Alpine areas, many municipalities with low population density belong to territories characterized by a scarce accessibility. These territories are in particular the areas close to the central mountain chain and the more far from the metropolitan areas of the plans, especially in the Maritime, Provence, Cottian, Dauphiné, Lepontine, Tauern, Carnic and Julian sectors of the Alps.

The situation is actually more complex than it seems, as topography (see map 2.2) play an important role in the distribution of human settlements. Population density appears to be higher in the valley bottom areas as they allow easier settlement and offer more spaces for infrastructures, housing and productive activities. Map 2.2, which depicts the Austrian situation in this regard, shows that even in scarcely populated areas (as analysed by NUTS-4 level), the valley bottom areas are characterized by high concentrations. For this reason, to set up a more realistic and comparable picture of the population density, the area of permanent settlement, should be taken into account (chart 2.3).

² In 2000-2002 according to the data provided by the National statistical offices. See the figure 2.1. for details.

³ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁴ Ut supra

Map 2.1 – Population density in 2000-2002

Population density by NUTS-4 level in 2000-2002 (permanent inhabitants / km²)



Data source: AT: STATISTIK AUSTRIA (2001), CH: BFS (2000), DE: LfStaD (2000), FR: INSEE (1999), IT: ISTAT (2001), LI: AVW (2000), MC: Gouvernement de Monaco (2000), SI: Statistical Office of the Republic of Slovenia (2002)



Chart 2.3 - Population density

Population density in some Alpine regions also considering the areas of permanent settlement

Region	Inhabitants (2005)	Area [km²]	Population density [inhabitants/km²]	Area of permanent settlement [km²]	Population density [inhabitants/km²]
1	2	3	2/3	4	2/4
Tirol	692,281	12,648	54.7	1,542	449.0
Vorarlberg	363,237	2,601	139.7	621	583.0
Salzburg*	524,400	7,154	73.3	1,540	340.5
Styria*	1,183,303	16,392	72.2	4,948	239.1
Germany – Area of the Alpine Convention	1,473,881	11,072	133.1	5,650	260.9
Autonomous Province of Bolzano/Bozen	477,067	7,400	64.5	612	779.5
Switzerland – Area of the Alpine Convention	1,827,754	24,862	73.5	3,475	525.8

Tab. B1-4: Population density in some Alpine regions [Source: Salzburg (Amt der Salzburger Landesregierung 2004), Vorarlberg (BMVIT 2005), Styria (Amt der Steirischen Landesregierung 2001), Tirol (Amt der Tiroler Landesregierung 2004), Bolzano/Bozen (Autonome Provinz Bozen-Südtirol 2004), DE (LfStaD 2004), CH (FSO 1985)].

* belongs partially to the AC area.

Source: ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

If you put the population of the Alpine region in relation to the area that is actually suitable for settlement instead of to the total territory, the Alpine space ranks among the most densely populated regions in

Europe⁵. The area currently computable as available for permanent settlement amounts to the 17.3% of the Alpine territory and was populated in the year 2000 by nearly 14 million inhabitants, resulting in an effective population density of 414 people per km². Similarly high densities can also be found in other mountainous regions across the world and are comparable to densely populated regions outside the Alps (e.g. the German region of Hannover, the Italian Region Campania)⁶.



Across the Alpine arc, however, severe disparities emerge (see map 2.4): while the Bavarian Alps represent one of the more densely populated areas in the total territory, the French Maritime Alps and the East of Austria show significantly lower figures. Large parts of these areas return population densities below 200 people per km². A much more diverse situation can be found in the centre of the Alps, where regions with high population density alternate with those of low density. The economically booming Labour Market

⁵ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁶ DIAMONT INTERREG IIIB PROJECT, Typology of the Alps based on social, economic and environmental aspects - Final Report DIAMONT Work Package 8: Specification and Test of Data for an Alpine Wide Information System, March 2008; TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Without call into question the scientific soundness of the Project's results, it is necessary to point out that all the elaborated data and the maps extrapolated from the Project DIAMONT (as well as from the "Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps") haven't been approved by the National Statistical Offices of the Alpine Countries.

Areas (e.g. the surroundings of Grenoble, Lugano, Innsbruck, etc.) in particular show much higher population densities, comparable to the main urban agglomerations beyond the Alpine space. The rural, more remote, municipalities, however, show very low population densities⁷.

The picture of population density within the Italian Alps is consistent with the general Alpine scenario, as the higher concentrations can be found in the valleys crossing the Alps and in the areas adjacent to the big cities of the plains. With the exception of Friuli and the Langhe area, the population density of all foothills areas stands out, along with that of some of the wider valleys such as Val di Susa, Valtellina, Val Camonica, Adige Valley, Valsugana, the Belluno plain and the areas around the main lakes. On the other hand, the valleys located in the provinces of Cuneo and Turin (with the exception of Val di Susa), the peripheral areas of Valle d'Aosta and Val d'Ossola, the central Rhaetian Alps and the Friuli Alps in general appear to be scarcely populated.

If otherwise the trend is analysed relating population densities to the areas that are actually suitable for permanent settlements (map 2.4), it can be observed that wide areas of the Italian Alpine sector show very high population densities (often higher than 600 inhab./ha), deriving from dense agglomerations and narrow spaces for settlement; this is true in particular in: Susa Valley, Province of Biella, Ossola Valley, provinces of Varese, Como and Lecco, Valtellina, lower Orobie, Val Camonica Valley, Lombardy foothills and Garda Lake, Valli Guidicarie, Fiemme Valley, Cadore. On the contrary, low density are occurring particularly in the Provinces of Cuneo, Imperia and Savona (Ligurian, Maritime and Cottian Alps).

The Bavarian Alpine region comprises 15.8% of the area of Bavaria and 3.1% of the German territory; that represents 11.9% of the population in Bavaria and 1.8% in Germany. The population density at 133 inhabitants per km² is low (Bavaria 177, Germany 229). The settlement density, however, at 1813 inhabitants per km² of settlement and traffic area is relatively high. This means that the valleys are quite densely populated.

In the light of the analysis of the density, the key role played by topography emerges in analyzing the reasons for the observed population density pattern in mountainous regions; many parts of the Alps must be considered unsuitable for human settlements⁸. It can therefore be preliminarily stated that the differences in demographic growth are influenced by accessibility, topography and altitude, socio-economic factors, as well as the position and role of the Alpine region in each Country.

Population balance

It is worth mentioning that the strong concentration of Alpine population in valley bottoms is a relatively recent fact. Until the XIX century, in fact, the exposition to sunlight of cultivated slopes was still a deciding factor. At the time economy mainly revolved around animal farming and agriculture and the rivers of the valley bottoms for the most part hadn't yet to be banked, thus making settlements on valley sides was more frequent. The following development of industry called for more space and easier transports, changing the Alpine model and leading to the concentration of population in the valley bottoms.

Between the end of the XIX and the beginning of the XXI century Alpine population doubled⁹, growing at an on-going annual rate of about 7‰, but these figures are but the result of deep changes that saw the general anthropisation of valley bottoms and the depopulation of mountain slopes and of the valleys that were difficult to reach or far from the main cities, particularly in the Alps of Piemonte and Friuli.

In the Province of Cuneo, valleys such as Val Grana and Val Maira lost between 70 and 85% of their permanent population over the twentieth century. A depopulation exceeding 80% also took place in some areas of Carnic and Julian Alps (in Pordenone and Udine provinces)¹⁰.

⁷ Ut supra

⁸ Ut supra

⁹ Ut supra

¹⁰ CAMANNI ENRICO, La Nuova Vita delle Alpi, Torino, Bollati Boringhieri, 2002

Chart 2.5 - Population change

Country	Area [km²]	Municipalities	Inhabitants ¹	Change in inhabitants² [%]	Population density [inhabitants/km²]
1	2	3	4	5	6
Austria	54,620	1,148	3,255,201	+4.8	60
France	40,804	1,749	2,453,605	+9.2	60
Germany	11,072 ³	285 ³	1,473,881	+15.7	133
Italy	51,184	1,756	4,210,256	+5.7	82
Liechtenstein	160	11	34,600	+13.2	229
Monaco	2	1	32,020	+6.8	16,010
Slovenia	7,864	60	661,135	+1.2	84
Switzerland	24,862	944	1,827,754	+13.1	74
Alps	190,568	5,954	13,948,452	+7.8	73

Tab. B1-1: Population change and density in the Alpine Convention area during the 1990s (Sources: AT (UBA), FR (IFEN), DE (LfStaD), IT (ISTAT), LI (AVW), SI (Statistical Office of the Republic of Slovenia), CH (FSO).

1) Date of survey: AT: 2005, DE, IT, LI, SI and CH: 2004, MC: 2000, FR: 1999.

2) Due to data availability the reference year varies between 1987 and 2001: MC: 1990/2000, AT: 1991/2001, FR: 1990/1999, DE: 1987/2000, IT: 1990/2000, LI: 1990/2000, SI: 1991/2000, CH: 1990/2000

3) Not included 10 municipality-free areas

Source: ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

During the 1990s, population in the Alpine Convention area increased by 7.8% (with an on-going annual rate of population growth of about 7,51‰) reaching in 2001¹¹ about 14 million inhabitants (see chart 2.5). The demographic process is not homogeneously spread across the Alpine regions: areas with growth and decline are located closely together (see the map 2.6)¹².

The highest population growth was registered in Germany (+15,7%) and in Liechtenstein (+13,2%), as well as in certain areas of Tirol and Salzburg (AT), Savoie, Haute-Savoie and Alpes Maritimes (FR), Valais, Ticino and central Switzerland (Nidwalden, Obwalden, Zug, Luzern, Schwyz) (CH, +13,1% the whole Alpine part of the Country). In these prospering regions of the Alps an increase in urbanization of the valleys' centres has been registered. Due to the influence of booming tourism the population has even increased in remote municipalities that are not easily accessible, e.g. touristic centres in the Swiss Alps, French Alps etc.¹³.

Quite strong decreases can be observed in the central-eastern Austrian Alps (throughout eastern Steiermark, southern parts of Niederösterreich, peripheral areas of Kärnten), in the Uri Canton (CH) and in several areas of the Italian Alps. Furthermore a tendency of light decrease is observed in the higher parts of the Slovenian Alpine region, but the whole Slovenian Alpine area is substantially stationary (+1.2%). The French Alps in particular, but also the Swiss ones, show a heterogeneous demographical pattern, where depopulated regions and dynamic regions alternate within a narrow space.

¹¹ See footnote number 2

¹² ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

³ STMWIVT – Bayerisches Staatsministerium für Wirtschaft, Infrastruktur, Verkehr und Technologie, *15. Raumordnungsbericht*, München, 2004

Map 2.6 – Population change 1990-2001

Population trend in Alpine municipalities between the last two census



Source: ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007





Population development (change of inhabitants in %) by NUTS-4 level

Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

In the Italian Alps at a first glance the impression would be that of a strong, general population decline. However, between 1991 and 2001, the population of the Italian alpine area increased by 5.7% (not far from the +7.8% of the whole Alpine area). One can therefore assume that, while population decreased over the most part of the alpine territory, there was a stronger growth in certain specific –and smaller- areas. The most depopulated zones are those far from both the large urban areas of the Po plain, the main valleys crossing the alps and the touristic flows: namely the most part of Maritime and Ligurian Alps, the Piemonte's Graie Alps (Lanzo Valleys and Canavese), Lepontine and Pennine Alps (Valsesia, Ossola Valley, Biella Province), the most part of the western Rhaetian alps (Val Chiavenna, Val Malenco, upper Valtellina), upper Orobie, part of the southern Rhaetian Alps (upper Val Camonica, upper Valle dei Non, eastern Val di Sole), eastern Dolomites (Primiero and Cadore) and most of the Carnic and Julian Alps.

The population kept growing at a moderate pace in the Cuneo and Turin pre-alpine areas, Susa Valley, Aosta Valley, Como and Varese provinces, lower Orobie and lower Val Camonica, Trentino-Alto Adige/Südtirol, Garda Lake's area and in the pre-alpine area of region Veneto. Peaks of population growth, finally, were registered in the suburbs of Turin, in the proximities of Aosta and along the foothills of Lombardy and Veneto, as well as in the Adige valley.

To explain the total population growth of the Italian Alpine sector of the 5.8% has to be said (and a comparison of the maps 2.1 and 2.6 can be helpful) that population mainly decreased in the smaller towns and villages, increasing in the most densely populated areas.

Across the whole Italian alpine arc, in fact, out of the 1535 (25.8% of the 5954 alpine municipalities) municipalities that saw their population decrease by more than 1% across the last decade of the XX century, 995 (64.8%) had less than 1000 inhabitants. These municipalities represent 50.0% of the Italian Alpine municipalities, but only 8.9% of the total population as of 2001. On the other hand, 3448 (57.9%) municipalities experienced a population growth above 1%, while only 6.6% remained stable $(-1 < x < +1\%)^{14}$.

¹⁴ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps*, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007 - from data: AT (UBA), FR (IFEN), DE (LfStaD), IT (ISTAT), LI (AVW), SI (Statistical Office of the Republic of Slovenia), CH (FSO)

Chart 2.8 – Population change 2001-2007: total average population, by NUTS-2 regions (1,000 inhabitants)

Total resident inhabitants in a region; average of population at the beginning of the year and population at the end of the year

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On-going annual rate c population growth (‰)	7,29	2,58	9,01	9,68	6,23	8,17	3,59	10,30	10,01	11,63	10,15	4,85	2,57	5,40	0,12	2,59	3,62	4,36	6,76	6,51	0,68	3,90	11,70	10,96	4,63	3,94	8,08	7,83	7,50
Variation % 2001- 2007	4,47	1,56	5,56	5,98	3,81	5,03	2,18	6,38	6,19	7,23	6,28	2,95	1,56	3,29	0,07	1,57	2,19	2,65	4,14	3,98	0,41	2,37	7,27	6,80	2,81	2,39	4,97	4,81	4,60
Variation 2001- 2007	183,8	27,5	320,5	275,4	160,6	6,0	34,3	575,1	28,6	34,4	283,7	34,9	4,3	50,8	0,4	18,6	30,2	13,7	27,9	14,0	4,4	21,6	2,4	89,1	46,8	25,0	34,0	15,0	2363,0
2008					4416,9	126,5	1612,4	9692,5	496,4	516,6	4858,9	1226,5	282,2	1600,8	560,5	1206,2	1408,5	528,3	702,6	366,7	1078,3	943,0		1423,2	1723,1	1079,8	728,0	330,7	incompl.
2007	4296,3	1787,5	6089,5	4882,3	4377,0	125,4	1608,9	9593,9	490,8	510,2	4802,9	1217,3	280,7	1593,4	560,8	1204,9	1406,9	530,1	702,0	365,7	1084,3	933,8	35,4	1399,4	1709,9	1069,6	718,4	326,7	53704,0
2006	4258,7	1787,8	6043,7	4839,6	4347,3	124,4	1609,0	9510,3	485,2	504,8	4755,9	1210,4	279,8	1585,5	560,4	1203,0	1403,9	529,0	698,9	364,2	1079,9	926,9	35,0	1383,1	1700,2	1063,6	711,2	323,6	53325,3
2005	4224,7	1787,5	5992,5	4791,9	4336,0	123,4	1601,2	9434,1	479,9	500,0	4719,1	1206,5	278,8	1575,5	560,1	1199,8	1399,1	527,2	694,6	362,2	1078,5	922,0	34,8	1369,5	1693,3	1060,7	706,1	321,1	52980,1
2004	4203,4	1784,3	5934,2	4743,8	4300,2	122,5	1584,9	9319,9	474,4	494,2	4671,4	1201,5	277,4	1563,3	559,5	1194,8	1392,7	524,6	689,1	359,4	1078,3	918,7	34,0	1339,6	1678,3	1053,8	696,7	316,3	52511,2
2003	4182,7	1779,4	5877,6	4697,1	4250,8	121,5	1574,8	9177,7	469,5	487,0	4610,2	1194,9	276,6	1553,3	559,4	1191,0	1386,9	521,7	684,2	356,8	1079,1	916,6	34,0	1339,6	1678,3	1053,8	696,7	316,3	52067,5
2002	4154,4	1771,8	5823,3	4652,3	4222,3	120,2	1571,1	9071,1	465,3	480,3	4553,6	1187,6	276,7	1547,7	560,5	1190,1	1382,5	519,1	679,4	354,4	1080,7	915,0	34,0	1325,5	1671,4	1049,1	692,2	313,2	51664,8
2001	4112,5	1760,0	5769,0	4606,9	4216,4	119,4	1574,6	9018,8	462,2	475,8	4519,2	1182,4	276,4	1542,6	560,4	1186,3	1376,7	516,4	674,1	351,7	1079,9	912,2	33,0	1310,3	1663,1	1044,6	684,4	311,7	51341,0
2000	4055,9	1749,2	5715,2	4562,9	4222,3	119,1	1583,4	8987,6	459,8	472,4	4496,8	1179,7	276,1	1537,3	560,1	1182,7	1371,6	513,9	669,5	349,3	1080,0	910,2	33,0	1299,3	1657,6	1042,6	678,6	309,7	51075,8
1999	4014,8	1741,1	5658,7	4518,3	4228,8	118,7	1592,9	8957,9	457,2	468,8	4474,6	1177,7	276,5	1532,9	560,8	1183,1	1368,3	512,0	665,8	347,4	1080,1	905,4	32,0	1290,0	1653,7	1040,2	674,0	307,3	50839,0
1998	3994,0	1734,8	5624,5	4491,0	4235,6	118,3	1603,1	8933,5	454,7	465,5	4454,3	1177,1	277,0	1528,8	561,0	1183,7	1365,4	511,1	662,5	345,8	1078,7	903,9	32,0	1281,6	1647,9	1037,4	669,6	305,9	50678,7
1997	3991,8	1731,1	5595,0	4465,6	4242,0	117,8	1613,6	8912,0	452,1	462,4	4435,4	1177,5	277,4	1525,6	561,3	1184,3	1363,8	510,5	659,3	344,4	1082,0	904,8	31,0	1275,8	1644,1	1036,4	665,7	305,2	50567,9
1996	3984,8	1725,7	5566,5	4438,9	4247,9	117,3	1624,0	8891,4	449,5	459,6	4417,9	1179,1	277,7	1523,5	561,7	1185,1	1362,6	509,2	655,5	343,1	1084,9	906,3	31,0	1272,9	1642,0	1034,9	661,2	305,0	50459,2
1995	3968,8	1716,5	5538,7	4416,0	4255,8	116,9	1635,2	8878,7	447,3	457,1	4404,7	1181,7	277,7	1520,6	561,3	1185,8	1361,0	507,5	651,6	342,0	1084,2	903,3	31,0	1267,8	1637,3	1030,3	655,4	303,7	50337,9
NUTS 2 level \ Year	Oberbayern	Schwaben	Rhône-Alpes	Provence-Alpes-Côte d'Azur	Piemonte	Valle d'Aosta/Vallée d'Aoste	Liguria	Lombardia	Provincia Autonoma Bolzano/Bozen	Provincia Autonoma Trento	Veneto	Friuli-Venezia Giulia	Burgenland (AT)	Niederösterreich	Kärnten	Steiermark	Oberösterreich	Salzburg	Tirol	V orarl berg	Vzhodna Slovenija	Zahodna Slovenija	Liechtenstein	Région Lémanique	Espace Mittelland	Ostschweiz	Zentralschweiz	Ticino	Alpine Region - data for the whole NUTS 2 territories within the Alpine Convention territory

Source of Data: Eurostat - Elaboration: Italian delegation - Last update: 16.12.2010 - Date of extraction: 17 Dec 2010 09:16:13 MET Hyperlink to the table: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tgs00001

A first general analysis of 2001 to 2007 data (chart 2.8) seems to confirm the trends noticed across the whole XX century. Alpine population kept growing at a steady rate: an on-going annual rate of population growth of about 7‰ from 1900 to 1991, 7.51‰ between 1991 and 2001 and a substantially unvaried 7.50‰ between 2001 and 2007. It is worth mentioning that, growing at such a rate, the population will double in just 92 years.

The 2001-2007 data, however, are not limited to the Alpine space, but also consider NUTS-2 administrative units that include at least a part of alpine territory. The statistics therefore include wide non-Alpine territories comprehending also urban areas such as Lyon, Nice, Marseille, Geneva, Lausanne, Bern, Turin, Genova, Milan, Brescia, Verona, Venice, Trieste, Ljubljana, Graz, Linz, München and Augsburg, which could significantly alter the results.

Compared to the alpine data of the period 1991-2001, the strong demographic growth of Liechtenstein (since the Nation in entirely located in the Alps data suffer no distortion) seems confirmed, as do those of France and Switzerland (even if the growth is slightly slower than in the previous decade). The demographic growth of Slovenia remains weak. Demographic change in Austria also seems to be in line with the previous decade, with Tirol and Vorarlberg as the more dynamic zones and Kärnten remaining stable; Land Niederösterreich, instead, seems to be inverting the previous (negative) trend, but the data should have been distorted by the Wien area.

Although caution is needed due to the non-homogeneous data, a strong demographic growth of the Alps seems nevertheless evident: along with all NUTS-2 administrative units population increased by 4.60% in just 6 years.

As for Italy, the prospect of map 2.9 (see more precisely in chart A.15 in the Annex A) seems to be more accurate since it features NUTS-3 data (provinces) instead of regions (NUTS-2). Anyway, that is still not sufficient to regard the featured data as purely "Alpine" since many provinces include plain territories that are not included in the Alpine Convention territory. The reports, in fact, also include non-alpine urban realities such as Turin, Bergamo, Brescia, Verona, Vicenza and Udine, for a total of about 13 million inhabitants versus the 4,5 millions of the Italian Alpine space. Anyway – but perhaps also thanks to the wealthy and densely populated foothills of Lombardy and Veneto and of the Turin area – the Italian alpine provinces therefore show a 2001-2007 population growth (8.49‰) that is superior both to that of the Alpine regions (7.50‰ over the same period), the Italian alpine regions (7.71‰, although NUTS-2 levels put relatively non-dynamic provinces such as Cremona, Mantova and Rovigo back in the picture), Italy as a whole (6.13‰) and the EU (EU-15: 5.92‰; EU-27: 3.91‰).

These data therefore present the Alpine region and its close proximities as one of the fastest growing regions in Europe from the demographic point of view, but the spatial extension of the areas considered in the statistics needs to be carefully evacuate. The situation emerging from a study of the entirely alpine provinces (in blue) appears to be different: Verbano-Cusio-Ossola, in fact, present one of the lowest growth rates of Piemonte Region (the lowest one is that of Biella, with an almost entirely Alpine territory); Sondrio has the lowest rate in Lombardia and the same can be said for Belluno as far as Region Veneto is concerned. The Friuli-Venezia Giulia data are more complex since there is no entirely Alpine province to consider, but a relatively strong increase in population can be noticed (+4.01‰). The on-going growth rates, finally, appears to be steady and fast-paced in the entirely Alpine regions of Aosta Valley and Trentino- Alto Adige/Südtirol that seems to be to the general Italian Alpine situation.

Finally, the data for the 2007-2010 do not substantially alter the trends, although the growth appears to be accelerating in most areas, with a 9,22‰ growth on a province basis and an 8,43‰ at the regional level.

Map 2.9 – Population change in Italy 2001-2010

On-going annual rate of population growth 2001-2010 (‰) by NUTS-3 level – see chart A.15 in the Annex A



SOURCE:

- Italian data 2001, source ISTAT: http://dawinci.istat.it/MD/index.html (census)

- Italian data 2010, source ISTAT: http://demo.istat.it/ (estimates)

- Elaboration: Italian delegation

- Map: Eurac Research, Institute of Regional Development and Location Management

At the end of 2009 in the Bavarian region of the Alpine Convention had 1,484,212 inhabitants with their main place of residence. Compared with 1999, population growth at 3.6% was above average (+2.9% Bavaria, Germany -0.4%), even if the ratio is strongly lesser than the +15.7% experienced between 1990 and 2001.

The population of the German area of the Alpine Convention, by the current projection of the Bavarian Statistical Office for 2029 (see map A.11 in the annex), is expected to grow by 1.3% (Bavaria + 0.3%) compared to 2009 values¹⁵. In Germany, on the basis of comparable assumptions, a decline of 4.3% is expected¹⁶. Growth rates, however, will range from -4.4% in the district of Garmisch-Partenkirchen to +4.0% in the district of Rosenheim.

These differing developments do not imply that demographic change -which has become a major topic of discussion in Germany and the Alpine region - is of less importance in the Bavarian Alpine area. Strong immigration of younger people from other German states has merely delayed the onset of the permanent population decline in the German Alpine region.

¹⁵ Bayerisches Landesamt für Statistik und Datenverarbeitung: Regionalisierte Bevölkerungsvorausberechnung für Bayern bis 2029, München, 2010

¹⁶ Statistisches Bundesamt: Bevölkerung Deutschlands bis 2060, Ergebnisse der 12. koordinierten Bevölkerungsvorausberechnung, Wiesbaden, 2009



Map 2.11 – Population change in Slovenia 1950-2050

Population change per sex in Slovenia: data 1950-2006, projections 2010-2050

	1950	1960	1970	1980	1990	2000	2006	2010	2020	2030	2050
Population	1474149	1588904	1731787	1909566	1999945	1990094	2010377	2014802	2016690	2005997	1900849
Males	/	1	835328	926928	970229	972742	986982	992407	1000451	994522	993116
Females	/		896459	982638	1029716	1017352	1023395	1022395	1016239	1011475	967733

Sources: Statistical Office of the Republic of Slovenia http://www.stat.si/; Eurostat, EUROPOP 2004

At the end of 2006 there were 2,010,377 people living in Slovenia (986,982 men and 1,023,395 women). That is 25% more than in 1953 and, according to the EUROSTAT's projections (EUROPOP 2004), 5% more than in it will be in 2050. In the last twenty years the number of population grew by 24,891 (+1.3%).

The Statistical Office of the European Communities prepared population projections for all Member States of the European Union and the EU25 for the 2004-2050 period. The assumptions of the projection of the population of Slovenia carried out by the EUROSTAT envisage a further increase in life expectancy for men and women and an increase in the total fertility rate in Slovenia. The migration increase should rise from the current level to a little less than 7,000 persons per year, whereas the total size of the population will not change fundamentally. Since 2004 when the population was 1,997,000 in the middle of the year, the population will first slightly increase to around 2,020,000 inhabitants until 2015, and will then start to decline and reach (given the described assumptions) 1,897,100 inhabitants in 2050.

In Switzerland the evolution of population size has been very heterogeneous in the last years (see map A.25 in the Annex A), both within the Alpine area and the other mountainous areas compared with the Swiss Plateau. Despite this fact, the difference between all the mountainous areas¹⁷ and the rest of Switzerland has become smaller, especially due to a strong demographic growth of the central to western parts of the Northern Alps and the Southern Ticino. The general demographic framework has been strongly influenced by the following developments in the last 10-20 years: a strongly improved accessibility of remote areas, a

¹⁷ As defined in the former investment assistance legislation

considerable economic growth of the metropolitan areas around Geneva and Zurich, a structural change in agriculture and of important state-owned enterprises (mail, railway, telecommunication and army). For rural areas it is very important to be in the reach of a regional centre, often providing for positive internal migration balances.¹⁸

Map 2.12 - Swiss population between 2000 and 2005

Evolution of population in the Swiss mountainous regions as defined by investment assistance legislation



Source of the data: BFS

¹⁸ ARE 2007. Bericht zur Motion der Kommission für Umwelt, Raumplanung und Energie des Ständerates vom 25. May2004 Alpenkonvention und Berggebiet (04.3260). Egger, Thomas (SAB) and Parvex, François (SEREC). Also available on

http://www.are.admin.ch%2Fthemen%2Fraumplanung%2F00228%2F00290%2Findex.html%3Flang%3Dde%26download%3DNHzLpZeg7t%2Clnp6l0 NTU042l2Z6ln1acy4Zn4Z2qZpnO2Yuq2Z6gpJCDflB7gmym162epYbg2c_JjKbNoKSn6A--&ei=4DdMTcPVMM-

Settlements

In 2001, 4,547 (76.4%) of all Alpine municipalities counted fewer than 2,500 inhabitants – and among these there were 2,975 (50,0% of the total) municipalities with less than 1,000 inhabitants. Nevertheless, these 4,547 municipalities, were representing only the 27.1% of the Alpine population. On the contrary, towns with more 50,000 inhabitants, which represent the 0.2% of all municipalities, account for 8.8% of the Alpine population. A high percentage of the total population (20.1%) is concentrated in municipalities with 2,500 to 5,000 people. About 35.7% of the people live in urban centres of between 5,000 and 25,000 inhabitants. And another 17.1% live in cities with more than 25,000 inhabitants¹⁹.

Thus, in the Alpine arc a large share of the population is concentrated in tows and larger municipalities. These municipalities that, in the European context, are nothing but "small municipalities", are considered as "centres" in the Alpine arc due to their role area of influence²⁰. About 55% of the Alpine population lives in municipalities with more than 5,000 inhabitants (that in the alpine framework can be considered at least semi-urban realities), whereas 35% of the people are concentrated in cities with more than 10,000 residents. These small urban centres play a major role in the surrounding communities²¹.

The establishment of urban centres within the Alps and the ongoing process of peri-urbanisation has led to a change in living standards. The Alps no longer constitute a mainly-rural area with a rural population but now they can be considered the preferred residence for people who want to combine the advantages of urban infrastructure with the attractiveness of unspoilt countryside²².

During the second half of the XX century the urban centres rose both in quantity and in population. Now, about 71% of the jobs in the whole Alpine area are concentrated in the main 50 towns of the Alpine space²³. Therefore these centres are important places for the economic and demographic development of Alpine regions. Many of these municipalities are located on the Alpine fringe, where they are influenced by the large metropolises bordering the Alps like Milano, Torino, Lyon, München or Wien²⁴. These metropolises located close to the Alpine arc have a strong impact on the settlement activities at the Alpine fringe. Other main alpine towns are located in the large intra-alpine valleys (Etsch, Rhône, Inn, Aosta, Isère). Thus it can be stated that external and internal accessibility play a significant role in the movement of population. Moreover, all big intra-Alpine cities with more than 50,000 inhabitants are very easily accessible from the outer-alpine area by highways, railways etc.²⁵

Concerning the development of large "Alpine metropolises" (see chart 2.13), a decrease in population can be observed in six of these municipalities, respect the only case of Maribor where was decreasing all the area of urban agglomeration. As these centres are closely interlinked with their surrounding hinterland it is not sufficient to analyse them exclusively²⁶. The comparison of the population development between the metropolises and their bordering agglomeration belts shows a higher growth rate in the belts than in the metropolises themselves.

¹⁹ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

²⁰ PERLIK, M., MESSERLI, P., Urbanization in the Alps: development processes and urban strategies, Mountain Research and Development, vol. 24, no 3, 2004

 ²¹ F.J. GALLEGO, Mapping rural/urban areas from population density grids, Institute for Environment and Sustainability, JRC, Ispra (Italy)
 ²² ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

²³ FAVRY, E., ARLOT, M.-P., ATMANAGARA, J., CASTIGLIONI, B., CERNIC MALI, B., EGLI, H.-R., GOLOBIC, M., MASSARUTTO, A., PFEFFERKORN, W. & T. PROBST, Regalp – Projektbeschreibung, Hauptergebnisse und Schlussfolgerungen, 2004

 ²⁴ PERLIK, M., DEBARBIEUX, B., *Die Städte der Alpen zwischen Metropolisation und Identität*. In: 2. Alpenreport, CIPRA (ed.), Schaan: 86-95, 2001
 ²⁵ TORRICELLI, G. P., *Reti di trasporto e reti di città – il caso dell'Arco Alpino*. In: G. Dematteis, E. Dansero (eds.): Regioni e reti nello spazio unificato europeo. Memorie geografiche delle Rivista Geografica Italiana 1996, No. 2: 275–294

²⁶ PFEFFERKORN, W., EGLI, H.-R., MASSARUTTO, A., Regional Development and Cultural Landscape Change in the Alps – The Challange of Polarisation. Geographica Bernensia. G74 Bern, 2005

Chart 2.13 – Population change 1990-2000 in the 14 main alpine towns

Total resident inhabitants in the 14 main alpine towns and urban agglomeration in 1990 and in 2000

Municipalities	State	Inhabitants 2000	Inhabitants 1990	Change [%]	Agglomeration 2000	Agglomeration 1990	Change [%]
Annecy	France	52,100	51,143	1.9	156,727	142,252	10.2
Chambéry	France	57,592	55,603	3.6	131,547	119,208	10.4
Grenoble	France	156,203	153,973	1.4	394,787	384,086	2.8
Bolzano/Bozen	Italy	97,236	98,158	-0.9	139,152	133,744	4.0
Trento	Italy	110,142	101,545	8.5	136,591	123,750	10.4
Klagenfurt	Austria	91,723	89,415	2.6	117,003	111,949	4.5
Innsbruck	Austria	115,498	118,112	-2.2	171,554	170,020	0.9
Salzburg (city)	Austria	142,662	143,978	-0.9	211,229	199,317	6.0
Villach	Austria	57,829	54,640	5.8	78,544	74,034	6.1
Maribor ¹	Slovenia	114,436	132,860	-13.9	127,931	134,742	-5.1
Kranj 1	Slovenia	52,689	52,043	1.2	78,834	76,251	3.4
Luzern	Switzerland	59,904	61,034	-1.9	176,821	166,436	6.2
Kempten	Germany	61,576	61,906	-0.5	93,583	83,411	12.2
Rosenheim	Germany	60,108	56,340	6.7	145,345	120,508	20.6

Tab. B1-3: Overview of the growth of the Alpine metropolises (municipalities > 50,000 inhabitants) and their agglomerations in the Alpine Convention area. [Source: AT (Statistik Austria: Volkszählung 1991, 2001), DE (LfStaD: Bayerische Gemeinde- und Kreisstatistik Strukturdaten aus der Volkszählung 1987, Bevölkerungsstatistik 2000), IT (ISTAT: Censimento generale della popolazione 1991, 2001), SI (Statistical Office of the Republic of Slovenia: Population Census 1991, 2002), FR (INSEE: Recensement de la population 1990, 1999), MC (Gouvernement de Monaco: Recensement général de la population 2000 (incl. data of 1990)), LI (AVW: Volkszählung 1990, 2000), CH (FSO: Volkszählung 1990, 2000).]

¹After achieving independence from the former Yugoslavia in 1991 a major reform of municipalities/municipality structure took place in Slovenia. For this reason the year 1996 has been selected as the reference year for this study.

SOURCE: ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

Periurbanisation in the Alps shows the same tendency as observed in non-Alpine towns: the urban centres stagnate whereas the peripheral municipalities grow²⁷. The growth of the urban area is thus basically due to the growth of the municipalities surrounding the centre, often in uncoordinated situations²⁸.

Thus a remarkable population growth in the agglomeration belts becomes apparent, whereas the growth rate of the urban centres is decreasing. This extraordinarily dynamic development in the agglomeration belts is the reason for the less significant growth and stagnation in the Alpine metropolises *tout court*²⁹.

Ageing of the population

As an example, the average age of the population in the German territory of the Alpine Convention 43.5 years in 2009 (in Bavaria 41.2 years in 1999 and 43,4 in 2009). According to the projection of the Bavarian Statistical Office³⁰, the average age will rise by 2029 to 47.9 years (Bavaria 46.4). The proportion of children and adolescents (under 19 years) in 2009 was in the Alpine region (19.1%) slightly higher than the Bavarian average of 18.5%. So was the proportion of people aged 60 and over at 26.8%, while that of the 20 – 60 age group was lower. By 2029 the population share of the elderly will grow disproportionately to 35.8% (33.5% Bavaria).

²⁷ EEA – EUROPEAN ENVIRONMENT AGENCY, *Urban sprawl in Europe: the ignored challenge*, EEA Report, n° 10/2006, Copenhagen, European Commission, European Environment Agency, 2006

²⁸ GIBELLI M.C., Forma della città e costi collettivi: l'insostenibile città dispersa, In: Archivio di studi urbani e regionali, n° 83, Milano, Franco Angeli, 2005, pp. 19-38

²⁹ Perlik, M. (1999): Processus de périurbanisation dans les villes des Alpes. In: Revue de Géographie Alpine, 1: 144-151.

³⁰ Bayerisches Landesamt für Statistik und Datenverarbeitung: Regionalisierte Bevölkerungsvorausberechnung für Bayern bis 2029, München, 2010



Ageing is a general trend in European countries, being the result of low fertility rates and longer life expectancies. The old age dependency ratio in Europe is likely to increase further in the next decades (see chart 2.14)³¹. However, as population structure depends not only on both fertility and life expectancy/mortality but also on immigration, in view of the possibly higher fertility rate of immigrant populations it is necessary to be careful in projections.

The economic effects of this trend – which is clearly visible within the Alpine area – are severe: a slower growth –or even a decline- of the labour force, declining standard of living, a growing rate of private ("senior nannies", etc.) and public expenses (public pensions, health care expenditures, etc.) held to these matters³².

Chart 2.15 – European old age dependency ratio

EU-25, EU-15 and national old age dependency ratio (pop.65+/pop.15-64; %) in 2004

Key	indica	itor 3	Old	l age	depe	nden	cy ra	tio, 2	004 (Popul	ation	ageo	65	and c	over a	is a	perc	enta	ge of	the v	workir	ng ag	e pop	oulati	on (1	5–64) on	1 Jan	uary	()	
EU- 25	EU- 15	Euro- zone	BE	cz	DK	DE	EE	EL	ES	FR	IE	п	СҮ	LV	LT	LU	HU	MT	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	HR	RO	TR
24.5	25.5	25.8	26.1	19.7	22.5	26.8	23.5	25.8	24.5	25.2	16.4	28.9	17.5	23.6	22.3	21.0	22.6	5 19.0	0 20.5	5 22.8	18.6	24.9	21.4	16.3	23.3	26.4	24.3	24.9	:	20.9	8.7
Notes: Source	1) FR: I Eurost	Data for at – Den	France lograp	refer to hic Stati	metro istics, 2	politan 004-ba	France. sed Eur	2) CY: ostat po	Govern	nment co n projec	ontrolle tions, t	d area. rend sce	3) HR: mario,	2003 d baseline	ata. Ə varian	nt.															_

EUROPEAN COMMISSION, The social situation in the European Union 2005-2006 – The Balance between Generations in an Ageing Europe, European Communities, 2007

³¹ EUROPEAN COMMISSION, *The social situation in the European Union 2005-2006 – The Balance between Generations in an Ageing Europe*, European Communities, 2007; SERGEI SCHERBOV, MARIJA MAMOLO, *Probabilistic Population Projections for the EU-25*, Institute of Demography of the Austrian Academy of Sciences, Wien, 2006

³² OECD, Maintaining prosperity in an ageing society, OECD Observer, www.oecd.org, 1998; JOHANSSON, M. & RAUHUT, D. : *ESPON Project 1.1.4: The Spatial Effects of Demographic Trends and Migration. Final Report.* Swedish Institute for Growth Policy Studies: Stockholm, 2005; DIAMONT INTERREG IIIB PROJECT, *Typology of the Alps based on social, economic and environmental aspects - Final Report DIAMONT Work Package 8: Specification and Test of Data for an Alpine Wide Information System*, March 2008; EUROPEAN COMMISSION, *The social situation in the European Union 2005-2006 – The Balance between Generations in an Ageing Europe*, European Communities, 2007; SERGEI SCHERBOV, MARIJA MAMOLO, *Probabilistic Population Projections for the EU-25*, Institute of Demography of the Austrian Academy of Sciences, Wien, 2006

Map 2.16 – European old age dependency ratio in 2008

European old age dependency ratio (pop.64+/pop.15-64; %) in 2008 on NUTS-2 level



Source: Eurostat, May 2010 - http://epp.eurostat.ec.europa.eu

Most developed Countries, as well as the Alpine space, experienced a strong and rapid decline in fertility rates and consequently in natural population growth (which is often stationary or even negative), now accompanied by a positive migratory balance mainly composed by working-age people. As a consequence the Alpine region shows a high old age dependency ratio (pop.65+/pop.15-64) and an even higher old to young-age dependency ratio (pop.65+/pop.0-15).

The old age dependency ratio (OADR) in the Alps is not equally distributed (see chart 2.15 and map 2.16) across Countries and roughly reflects the national tendencies: the national tendencies in 2008 show Italy (30,4% of OADR; over-65 rate 20,1% of the total population) and Germany (OADR 30,4%; over-65 rate 19,9%) as the two "oldest" Countries in Europe, medium values of ageing in Austria (OADR 25,4%; over-65 rate 17,2%), France (OADR 25,0%; over-65 rate 16,4%) and Switzerland (OADR 24,1%; over-65 rate 16,4%) and values sensibly lower than the EU-27 average (OADR 25,3%; over-65 rate 17,0%) in Slovenia (OADR 23,1%; over-65 rate 16,3%) and Liechtenstein (OADR 17,5%; over-65 rate 12,4%). The Principality of Monaco is a special case, since it attracts senior and wealthy citizens on account of its privileged setting (tax scheme, climate, leisure facilities)³³.

The subdivision of the OADR into 5 quantitative classes, as represented in map 2.16, shows for the year 2008 (but only on NUTS-2 level) very heterogeneous tendencies, going from the ratio of 20 to 25% in Rhône-Alpes (FR), Switzerland excepted for Mittelland, the Länder of Vorarlberg, Tirol and Salzburg (AT), and Slovenia, to the higher value of more than 30 over-64 per 100 adults (15-64) to be found in the Italian regions of Liguria, Piemonte, Valle d'Aosta and Friuli-Venezia Giulia.

³³ EUROSTAT, Europe in figures – Eurostat yearbook 2010, European Union, 2010



Map 2.17 – Alpine old to young age dependency ratio in 2002 Alpine old to young age dependency ratio (pop.≥65/pop.0-15) in 2002 on NUTS-4 level

Sources of elaboration: DIAMONT INTERREG IIIB PROJECT, Typology of the Alps based on social, economic and environmental aspects - Final Report DIAMONT Work Package 8: Specification and Test of Data for an Alpine Wide Information System, March 2008; TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Another indicator we can consider is the old to young age dependency ratio (the so-called "ageing population index", see map 2.17), which consist in comparing quantitatively the elderly population with the young generations (pop.≥65/pop.0-15), thus taking into account the "population turnover" and emphasizing the situations of lower fertility rates as well as the effects of age-selective exodus of young adults of procreating age³⁴.

The lower values of the indicator are to be found in the central and northern sectors of the Alpine ridge – in particular in Savoie (FR), Zentralschweiz (CH), Vorarlberg (AT), Tirol (AT) and Salzburg (AT) - whereas the quite heavy weight of elderly people in the populations of Bayern (DE) and Südtirol (IT) is at least partly counterbalanced by relatively high fertility rates. The indicator shows high values (generally more than 1.5 elderly per young people) in a wide part of the Italian Alpine Sector, in Provence-Alpes-Côte d'Azur (FR) and in Ticino (CH)³⁵.

Bevölkerungsstruktur 2001 Verhältnis der 15- bis 64-Jährigen zu den über 64-Jährigen unter 3.8 3,8 bis unter 4,4 4,4 bis unter 4,9 4,9 bis unter 5,6 5,6 und mehr Müncher Clagenfur Bozen H.Fassmann & K.Voraue ng: K.Vorauer-Mischer ndlage: Statistik Austria 100 Km

Map 2.18 – Old-age dependency ratio in Austria

Residents aged 15-64 to residents aged 64+ (see also map A. in the Annex)

Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Focussing on Italy, the highest values (often higher than 1.8) are to be found in the provinces of Savona, Imperia, Cuneo, Torino, Biella, Vercelli, Novara, Verbano-Cusio-Ossola, Udine and Pordenone, namely the eastern and the western part of the Italian Alpine arc, which are also the areas most affected by population decrease in the last decades. Due to the age-selective exodus of young adults of procreating age, the depopulation of these mountain areas led also to low fertility rates and ,as a consequence, to the lowest natural population growth in the Alps (change in population due to births and deaths \leq 99,7%)³⁶.

A similar situation, but slightly less pronounced, affects the provinces of Belluno, the Primiero area (between the provinces of Trento and Belluno), the higher parts of Orobie (Bergamasque Alps), Val

³⁴ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

³⁵ DIAMONT INTERREG IIIB PROJECT, Typology of the Alps based on social, economic and environmental aspects - Final Report DIAMONT Work Package 8: Specification and Test of Data for an Alpine Wide Information System, March 2008

³⁶ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -

Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Camonica and the middle Valtellina. Quite high values of the old to young age dependency ratio can be detected also on the main lakesides, probably due to the favourable location which has attract aged part of population.

A particular situation is presented by Alto Adige/Südtirol, which shows the lowest old to young age dependency ratios, the highest fertility rates (generally more than 50 births per 1000 females of childbearing age in 2001) and the highest natural population growth (generally more than +0,3%) in the Italian Alpine arc^{37} .

Taking into account the differences in mean life expectancy at birth between men and women –in favour of women-, the age-selective exodus of young adults of procreating age as well as of students is confirmed by the female population rate, which in certain municipalities of the Ligurian Alps, Piemonte, Friuli-Venezia Giulia and the province of Belluno reach or even exceed 52%³⁸.

Also in Slovenia population has been ageing. For the population's social and economic development, its age structure is more important than its size. At the beginning of a demographic transition a rejuvenation of the population was observed, while towards the end and after a demographic transition, the population is ageing. Measured by the average age of the population, the ageing of the population in Slovenia started in the middle of the 20th century: in 1921, the average population age in Slovenia was 29 years, in 1961 it was 32 years and in 2004 it was 40 years. In the past two decades there has been a constant decrease in the share of children aged 0-14 and an increase in the population aged 65 or more. At the end of 2006 the population consisted of 14.0% persons aged below 15 years and 15.9% persons aged 65 or more (chart 2.19). The ageing index of men was 85.2 and of women 143.9.

Age range	1950	1990	2000	2006	Age range	2010	2020	2030	2040	2050
0-4		6,1	4,5	4,5	0-2	2,6	2,6	2,3	2,4	2,5
5-9		6,9	5,0	4,5	3-6	3,5	3,7	3,2	3,1	3,4
10-14		7,6	6,1	4,9	7-14	7,4	7,2	7,3	6,6	6,9
15-19		7,3	6,9	5,9	1 5-19	5,2	4,6	4,9	4,7	4,4
20-24		7,4	7,6	6,8	20-24	6,4	4,8	4,8	5,2	4,7
25-29		7,8	7,4	7,6	25-29	7,3	5,4	4,9	5,5	5,3
30-34		7,9	7,4	7,5	30-34	7,7	6,6	5,1	5,3	5,8
35-39		8,3	7,8	7,3	35-39	7,3	7,4	5,7	5,3	6,0
40-44		7,2	7,8	7,8	40-44	7,6	7,9	6,8	5,4	5,7
45-49		5,8	8,0	7,7	45-49	7,7	7,3	7,6	5,9	5,6
50-54		5,9	6,7	7,9	50-54	7,7	7,5	7,9	6,9	5,6
55-59		5,7	5,3	6,7	55-59	7,5	7,5	7,2	7,6	6,0
60-64		5,2	5,2	5,0	<u>60-64</u>	5,6	7,2	7,2	7,7	6,9
65-69		4,1	4,8	4,8	65-69	4,9	6,8	7,0	6,9	7,4
70-74		2,1	4,1	4,3	70-74	4,2	4,7	6,4	6,6	7,2
75-79		2,3	2,9	3,4	75-79	3,5	3,8	5,5	5,8	6,0
Over					Over					
80		2,3	2,4	3,4	<u>80</u>	3,8	5,1	6,3	9,1	10,6

SOURCE: Eurostat, EUROPOP 2004

According to the projections by Statistical Office of the European Communities, in the 2004 - 2050 period in Slovenia, the size of individual age groups of the population will change differently under these assumptions. The number of the population older than 65 years will almost double and at the same time the number of the population aged 14 and younger and those aged 15-64 old will decline. The changed number of the population by individual age groups will result in changes in the age structure of the

³⁷ Ut supra

³⁸ MAURO VAROTTO, Montagna senza abitanti, abitanti senza montagna: le recenti tendenze demografiche e insediative nell'arco alpino italiano, Università di Padova, Dipartimento di Geografia, 2002

population. The shares of the population aged 65 years or over will increase from the current 15% to 31%, whereas the share of those aged 15-64 will decrease from 70% to 56%³⁹.

With regard to the Swiss situation, since the 1990s male life expectancy has undergone a stronger increase, partly due to a higher female lung cancer mortality rate⁴⁰. Furthermore, life expectancy is forecasted to continue increasing by around 8.3 (for women) respectively 9.4 years (for men) by 2060, partly explaining the ageing process expected⁴¹.

Map 2.20 – Aged population in Switzerland in 1999

Ratio of the more than 65 years old persons as to total population (see maps A.26 and A.27 in the Annex A)



SOURCE:

http://www.bfs.admin.ch/bfs/portal/de/index/regionen/thematische_karten/maps/bevoelkerung/bevoelkerungsstand/bevoelkerungsstruktur/altersstruktur.parsys.0001.PhotogalleryDownloadFile3.tmp/k01.54s.pdf

Between 1970 and 2000 Swiss age pyramid has become more harmonised between the rural and urban areas. Ageing has been particularly significant in peripheral rural areas, where the share of older men in the active population is especially high. The ratio of the above 65 years old with regard to total population is especially high in the cantons of Bern, Ticino, Glaris and Uri (see figure 2.20 and maps A.26 and A.27 in the Annex A). Both the youth ratio (except for the Ticino) and the old age dependency ratio show their highest values in rural cantons such as the Alpine cantons and around the Gotthard Pass. Peripheral rural municipalities in the Grisons and the Ticino with an already high old age dependency ratio partly managed

³⁹ Eurostat, EUROPOP 2004

⁴⁰ Bundesamt für Statistik BFS. 2009. Die Zukunft der Langlebigkeit in der Schweiz.

http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.119755.pdf

⁴¹ http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/06/blank/key/04/04.Document.67149.xls

to slow down this evolution, whereas comparable municipalities in the Valais with a still lower value "have been catching up".⁴²

In 2030 in Switzerland the share of the age class of the more than 65 years old persons is expected to be above 20%, a value today observed only in the urban canton of Basel-City. Furthermore nearly all Cantons (except for Fribourg, Vaud, Appenzell Inner Rhoden, Geneva) are expected to have shares of population aged 0-19 lesser than 20%, mainly due to a decrease of birth rates. Only few -often peri-urban- Cantons are expected to have a positive migration balance in 2030. Also internal and international migration of young people to urban areas and migration of older persons to rural areas are expected⁴³.

Finally, rather urban cantons will likely show a tendency to a more smooth development of age structure, whereas a sharp increase of the older age classes and a decrease of the younger age classes are expected particularly in rural and thus Alpine areas⁴⁴.

Not unlike demographic reduction, population ageing is particularly evident in small municipalities and big urban centres, which generally have old-age indexes higher than 100. With regard to the smallest settlements, in many of them there are not enough people to keep convenience stores, pharmacies, post offices and associations open. Also public transport services are cut to a minimum, since operation costs are too high for the local government's budget. As a result citizens have to rely on private cars, and for those who cannot drive (the elderly for instance) the access to basic services can become rather difficult. The disappearance of basic services triggers a vicious cycle because the declining quality of life encourages residents to move to less peripheral areas, where access to services is better, while at the same time preventing the arrival of new dwellers⁴⁵.

⁴² Bundesamt für Raumentwicklung ARE. 2005. Monitoring Ländlicher Raum, Themenkreis U3: Sozio-demographische Struktur der Bevölkerung. http://www.are.admin.ch/themen/laendlich/00792/index.html?lang=de&download=NHzLpZeg7t,lnp6l0NTU042l2Z6ln1acy4Zn4Z2qZpnO2Yuq2Z6gp JCDd4J8fGym162epYbg2c_JjKbNoKSn6A--

⁴³ Bundesamt für Statistik BFS. 2007. Szenarien zur Bevölkerungsentwicklung der Kantone 2005–2030.

http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.96354.pdf 44 Ut supra

⁴⁵ ALPINE CONVENTION, Third Report on the State of the Alps – Rural development and Innovation, to be approved in 2011

Migratory fluxes and population movements

Total population change has two components: natural population change and net migration. In the course of the years, in Europe and also in the Alpine region, the effects of natural population change on the total population change have decreased, whereas the weight of "migratory component" has grown considerably⁴⁶. In particular, in the Alpine region from the period 1970-1980 to the period 1980-1990 the rate of net migration on the total population change increased from 57 to 80%⁴⁷. In 2003 this proportion reached 88% in EU-15 and 91% in EU-25 (see chart 2.21)⁴⁸.

This predominance of the "migratory component" is due both to the strengthening of the migratory fluxes and to the reduction of the fertility rates (the mortality can be considered quite stationary). The total fertility rate –despite a very slight growth in the last years- remains in all the European Country sensibly below the generational turnover value of 2.1 children per woman, amounting in 2007 to 1.55 in EU-27, 1.37 in Italy (1.25 in 2001) and in Germany (1.35 in 2001), 1.38 in Slovenia (1.21 in 2001) and Austria (1.33⁴⁹ in 2001), 1.46 in Switzerland (1.38 in 2001), 1.52 in Liechtenstein (1.42 in 2001), 1.98 in France (2nd highest in EU-27; 1.89 in 2001)⁵⁰.

This recent growth could also be linked with migration flows: in fact, in 2010 the immigrant population in Europe was made up for more than 50% by young people in childbearing age (15-39) and for about another 25% by people aged 40-64; the strengthening of migratory phenomena in the last decade and the higher rate of fertility of migrants, combined with the age-structure of the migrant population, resulted in this – however slight- increase in total fertility rate⁵¹.



Chart 2.21 – European population change, 2003-2008

European net migration (including corrections) and natural population change (average annual changes, %), national level, 2003-2008

(¹) Break in series, 2008

Source: EUROSTAT, Europe in figures – Eurostat yearbook 2010, European Union, 2010

⁴⁶ DIAMONT INTERREG IIIB PROJECT, Typology of the Alps based on social, economic and environmental aspects - Final Report DIAMONT Work Package 8: Specification and Test of Data for an Alpine Wide Information System, March 2008

⁴⁷ ALPINE CONVENTION, Indicatori demografici della regione Alpina – Risultati di uno studio effettuato nell'ambito della Convenzione Alpina, System of Observation and Information of the Alps (SOIA), 1999

⁴⁸ EUROPEAN COMMISSION, The social situation in the European Union 2005-2006 – The Balance between Generations in an Ageing Europe, European Communities, 2007

⁴⁹ With of course considerable differences within the country: the lowest fertility we notice in South-Eastern Austrian Alps (e.g. Styria); see map A. and A. in the Annex.

⁵⁰ EUROSTAT, Europe in figures – Eurostat yearbook 2010, European Union, 2010

⁵¹ EUROSTAT, Europe in figures – Eurostat yearbook 2010, European Union, 2010

In this respect the Alpine situation is similar to the national scenarios. Notwithstanding a certain variability on local level, the Alpine region showed in 2002 values between less than 30 births to more than 60 births per 1000 females in childbearing age, with a concentration of the highest levels in particular in Alto Adige/Südtirol, Tirol and Vorarlberg, central Switzerland and Savoie, and the lowest ones particularly concentrated in central Austria, Liguria and Piemonte⁵².

As a consequence, natural population growth is extremely weak or even negative. In 2003, at national levels, the rate was: Germany -1.8‰; Slovenia -1.1%; Italy -0.7‰; Austria +0.0‰; France +3.5‰.

In particular, in the Alpine region's municipalities (see map 2.22) natural population growth ranged in 2002 between values from less than -3‰ to values higher than +6‰. In particular, according to the data presented in the map above, in more than two thirds of the Alpine municipalities the death rate exceeds the birth rate. The main valley floors in particular are attracting the younger population, which is reflected in a higher population growth. Remote valleys and regions at higher altitudes are characterized by a low birth rate because young people are leaving the area⁵³.

Between 2004 and 2009 the average annual population change was +0.4% in the German Alps, in Bavaria +0.3% (see map 2.10). On the contrary, in the years 2005 to 2009 the natural balance (see map 2.23) was negative at -1.7 per 1,000 inhabitants per year (Bavaria -1.1, Germany -1.6). The birth rate at 8.3 was below that of Bavaria (8.5), but above that of Germany (8.2), so was the mortality rate: 10.0 Alps, Bavaria 9.6, Germany 10.2. In the German Alpine region the number of deaths exceeds that of births since 2001, and in 2006 and 2008 the population decreased respectively by approximately 1,800 and 1,000 inhabitants.

⁵² TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

⁵³ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Map 2.22 – Natural population growth

Natural population growth in 2002 on NUTS-4 level



Source: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008



Focusing on the Italian Alps, the lower values of population growth are observed in Friuli and in the western part of the Alpine arc, with a general natural decrease of population that can be as high as 40‰ is some municipalities. This means that young families are moving to more attractive Alpine locations and the leaving-areas are facing both low birth rates and high mortality rates due to the changes in the structure of population, which displays increasingly higher percentages of elderly⁵⁴.

The main exceptions to this general natural decrease in the Italian Alpine space are represented by Alto Adige/Südtirol, which boasts some of the highest values in the Alpine space (+3.3‰ per year from 2006 to 2009), Trentino, which is substantially stationary (+1.3‰ per year 2006-2009), as well as Lombardia (+1.0‰ the whole Region, -0.7 Sondrio which is the only completely Alpine province; 2006-2009) and Valle d'Aosta (+0.1‰ over the same period), which exhibit very heterogeneous trends (see maps 2.22, 2.25, A.17 in the Annex A, and charts 2.24 and A.16 in the Annex A).

By analysing the data in particular on a NUTS-3 level (see the above mentioned tables and maps), it can be noticed that the lower birth rates in the Italian Alpine space are recorded in Liguria (7.6‰ per year in 2006-2009), Udine and Gorizia (8.3‰ and 8.0‰), Belluno (which is the only entirely Alpine province in Veneto and the only one in the Region with birth rates lower than the national average), Sondrio (the same as Belluno within the Region Lombardia) and Verbano-Cusio-Ossola (completely Alpine), Vercelli and Biella in Piemonte. These low birth rates are accompanied by mortality rates that are higher than the regional and national averages, with the highest values in Liguria as well as in the provinces of Vercelli and Biella. The reason of this situation is particularly evident if compared with the ageing of the population of these areas, which is reflecting in both the high mortality rates and the low birth rates.

The great exception of Alto Adige / Südtirol is justified by one of the highest birth rates (10,9‰ per year in 2006-2009) coupled with one of the lowest mortality rates (7.6‰ over the same period), which are reflecting in the lowest mean age, the lowest old age dependency ratio and the lowest old-to-young age

⁵⁴ Ut supra

dependency ratio in the Italian Alpine panorama (with a NUTS-2 analysis) both for the years 2007 and 2010 (see chart 2.27 and chart A.18 in the annex).

While the mean annual natural population growth in the Italian Alpine provinces from 2006 to 2009 is ranging between values of -5.6‰ and values of +3.3‰ (with an average in the northern part of Italy of -0.5‰), the net migratory balance over the same period is always positive (+3.7‰<x<+10.8‰; northern part of Italy's average +8.7‰), driving to a general population growth.

Chart 2.24 - Birthrate, mortality rate, natural po	opulation growth, migratory balance	e, total population
growth		

Mean annual birthrate, mortality rate, natural population growth, migratory balance, total population growth in the Italian Alpine provinces (NUTS-3) and Regions (NUTS-2) from 2006 to 2009 - (see chart A.16 in the Annex A and maps 2.25, 2.26 and A.17 in the Annex A)

Provinces (NUTS-3) and	Birthrate (‰)	Mortality rate (‰)	Natural pop. growth (‰)	Net migratory balance (%)	Total pop. growth (‰)
Regions (NOT 5-2)	2006-2009	2006-2009	2006-2009	2006-2009	2006-2009
Torino	9,1	1 <mark>0,0</mark>	-0,9	6,9	6 <mark>,0</mark>
Vercelli	7,9	12,9	-5,0	8,9	3,9
Biella	7,7	12,6	-4,9	3,7	-1,2
Verbano-Cusio-Ossola	7,9	11,4	-3,5	5,9	2,4
Novara	9,3	10,5	-1,2	10,5	9,3
Cuneo	9,4	11, <mark>4</mark>	-2,0	9,7	7,7
Piemonte	8,8	11, <mark>0</mark>	-2,2	8,2	6 <mark>,0</mark>
Valle d'Aosta	1 <mark>0,1</mark>	1 <mark>0,0</mark>	0,1	7,7	7,7
Varese	9,7	9,2	0,5	7,6	8,1
Como	9,9	9,0	0,9	9,0	10,0
Lecco	1 <mark>0,1</mark>	8,7	1,3	8,4	9,7
Sondrio	9,0	9,7	-0,7	4,8	4,0
Bergamo	11, <mark>0</mark>	8,3	2,7	9,8	12,6
Brescia	11, <mark>1</mark>	8,3	2,7	9,7	12,5
Lombardia	1 <mark>0,1</mark>	9,1	1,0	8,1	9,1
Bolzano	10 <mark>,9</mark>	7,6	<mark>3,</mark> 3	7,3	10,6
Trento	1 <mark>0,3</mark>	9,0	1,3	9,5	10,9
Trentino-Alto Adige	10 <mark>,6</mark>	8,3	2,3	8,4	10,7
Verona	10,4	8,8	1,6	10,8	12,4
Vicenza	10 <mark>,5</mark>	8,4	2,2	5,9	8,1
Belluno	8,2	11,7	-3,5	5,4	2,0
Treviso	10 <mark>,7</mark>	8,3	2,3	7,6	9,9
Veneto	<mark>9,9</mark>	9,1	0,8	8,2	9,0
Pordenone	1 <mark>0,1</mark>	9,7	0,4	10,7	11,1
Udine	8,3	11, <mark>0</mark>	-2,7	7,9	<mark>5,2</mark>
Gorizia	8,0	11,7	-3,7	6,3	2,5
Friuli-Venezia Giulia	8,6	11,4	-2,9	8,2	<mark>5,3</mark>
Imperia	7,6	13,0	-5,4	10,8	5 <mark>,5</mark>
Savona	7,5	13,1	-5,6	9,7	4,2
Liguria	7,6	13,3	-5,7	6,6	0,9
ITALY	9,5	9,7	-0,1	6,8	6,7
North	9,6	1 <mark>0,0</mark>	-0,5	8,7	8,3

Data: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg (mainly estimates) - Elaboration: Italian delegation - Date of extraction: 23 December 2010

Label: Sondrio = completely Alpine territorial levels

Torino = Province (NUTS 3)

Piemonte = Region (NUTS 2) and supra-regional areas

ITALY = National or Supranational level



Maps 2.25 and 2.26 – Natural population growth and net migratory balance in the Italian Alps

Mean annual natural population growth (‰) and net migratory balance (‰) 2006-2009 by NUTS-3 level

SOURCE:

Data: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg (mainly estimates) Elaboration: Italian delegation

Map: Eurac Research, Institute of Regional Development and Location Management

Bata on ist sandary	Jeans Eor		0 (300 011					
		20	07			20	010	
Regions (NUTS-2)	Structural dependency ratio (pop.0- 14 + pop.>65 to pop.15- 64)%	Old age dependency ratio (pop.>65 to pop.15-64)%	Old-to- young age dependency ratio (pop.>65 to pop.0-14)%	Mean population age	Structural dependency ratio (pop.0- 14 +pop.>65 to pop.15- 64)%	Old age dependency ratio (pop.>65 to pop.15-64)%	Old-to- young age dependency ratio (pop.>65 to pop.0-14)%	Mean population age
Piemonte	54	35	181	45	55	35	178	45
Valle d'Aosta	51	31	153	44	53	32	150	44
Lombardia	50	30	143	43	52	30	142	43
Trentino-Alto Adige	52	27	111	41	53	28	116	42
Bolzano-Bozen	51	26	100	40	53	27	108	41
Trento	52	29	123	42	53	29	26	43
Veneto	50	29	139	43	52	30	140	43
Friuli-Venezia Giulia	54	35	188	45	56	37	187	46
Liguria	61	43	239	47	62	43	235	48
ITALY	52	30	142	43	52	31	144	43
North	52	32	159	44	54	33	157	44
North-west	52	32	162	44	54	33	159	44
North-east	52	32	155	44	54	32	153	44

Chart 2.27 – Indicators on population structure in the Italian Alpine Regions (NUTS-2)
Data on 1st January – years 2007 and 2010 - (see chart A 18 in the annex A)

Source: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg

Date of extraction: 23 December 2010

Label: highest values; lowest values

In the 20th century the population of Slovenia increased slowly; at first due to a significant negative net migration and later due to an increasing decline in the natural increase. The population increase was the fastest in the 1970s when the natural increase was quite high and the net migration was the highest seen so far. After 1996, the population of Slovenia has only been growing due to immigration. In 1993, the natural increase was negative for the first time, in the following three years it was a zero increase and since 1996 the negative increase experienced has been more intensive every year. The negative natural increase results from the long-term decline in the birth rate and the prolongation of life. But, in 2006, for the first time after 1996 population growth was not only a result of positive net migration but also a result of natural increase (in 2006 there were 752 live births more than deaths in Slovenia).

For more than 100 years Slovenia has been facing the decrease in fertility, which has been especially strong after 1980. At the end of the 1970s about 30,000 children were born every year, in 2003 the number of births fell to the lowest level ever. After that year the number has gradually increased. 2.1 is the value that would assure simple replacement of the population of Slovenia. In that way, Slovenia, as most European countries, is the county with the fertility below the replacement rate. Even more, Slovenia has one of the lowest fertility rates in Europe.

Chart 2.28 -	Population	balance in	Slovenia

Natural population growth and migratory balance in Slovenia from 1954 to 2006

		1954	1960	1970	1980	1990	2000	2006	2010	2020	2030	2050
Natural	n. of units	16931	12680	10079	11082	3813	-408	752	1	1	1	1
balance (births minus deaths	Per 1000 population	11,1	8,0	5,8	5,8	1,9	-0,2	0,4	/	1	1	/
Migratory	n. of units	-2606	1662	1503	5273	2167	2615	6267	/	1	1	1
balance (immigr. minus emigr.)	Per 1000 population	-1,7	1,1	0,9	2,8	1,1	1,3	3,1	/	/	/	/

With regard to the Swiss situation a constant decrease of total fertility rates has been observed since the beginning of industrialization, with values below the replacement level between the two world wars and since the 1970s. In the last 10 years a general increase of birth rates could be observed, with considerable regional differences, but it is too early to assess of a trend reversal⁵⁵.

Coming back to the Alpine framework, the general trend has been for migration from less favoured regions to more favoured ones: this applies both to international migration and to local movements of population. This trend has been strongest among young and middle-aged people that are most mobile, thus also affecting the age structure of the resident population⁵⁶.

Immigration and emigration to and from a municipality can in the first instance be interpreted as an indicator for a change in the residential attractiveness of the place. Attractiveness is in particular the result of the number and quality of jobs within reasonable commuting distance, the available housing and the quality of the residential environment (infrastructure, the culture on offer, proximity to natural landscapes, etc. In this sense the economy and the housing market greatly influence the net migration balance. In the Alps some regions benefit from immigration while others are affected by higher emigration⁵⁷.

In the last 35 years or so, the whole Alpine region registered a positive migration balance⁵⁸. Since the 1980s the migration process has mainly been concentrated on the larger towns and their surroundings. This process affects both the cities within the Alpine arc and the large urban areas at the fringe of the Alps (e.g. Milano, München, Wien, Lyon)⁵⁹.

As a consequence of the economic disparities between urban and rural areas and of the improvement of infrastructure services in the last decades, a rising internal migration within the Alps, comparable to non-mountainous regions, was recorded. Peri-urbanisation and the development of commuter cities are restricted to favourable locations situated close to rural or urban centres. Generally, the rural areas located close to the large peri-Alpine towns have the highest positive migration balance. These locations are very attractive for working people (commuters)⁶⁰. The more dynamic peri-urban areas influencing the Alpine municipalities are the surroundings of: Vienna, Salzburg, Innsbruck, Klagenfurt, Villach, Graz; Ljubljana, Maribor; Grenoble, Annecy, Nice; Geneve, Luzern, Zurich, Chur; München; Cuneo, Torino, Brescia, Trento, Bolzano, Verona, Vicenza, Pordenone⁶¹.

Moreover some typical Alpine landscapes (e.g. Tirol, Oberbayern and the surroundings of Alpine lakes) attract older people, who choose these locations for their retirement. In contrast to these attractive areas, certain peripheral Alpine regions close to the main Alpine chain with low population density and far from the large valleys suffer from emigration.

⁵⁵ http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/06/blank/key/02/05.html

⁵⁶ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps*, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁵⁷ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

⁵⁸ Bătzing, W. (2003): Bevölkerungs- und Siedlungsentwicklung im Alpenraum zwischen 1870 und 2000, in: Akademie für Raumforschung und Landesplanung (ed.): Raumordnung im Alpenraum – Tagung der LAG Bayern zum Jahr der Berge; ARL-Arbeitsmaterial Nr. 294, Hannover: 1- 15; BIRKENHAUER, J. (2002): Alpen 2002 – Eine Bestandsaufnahme, in: Geographische Rundschau 54, Heft 5: 51-55; EUROSTAT, Europe in figures – Eurostat yearbook 2010, European Union, 2010

⁵⁹ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁶⁰ Ut supra

⁶¹ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008
Map 2.29 – Average annual net migration balance

Mean annual change in population due to migration in the last decade of 20th century in the Alpine municipalities (NUTS-4)



Source: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

The development of migration in the 1990s shows a relatively heterogeneous structure (map 2.29). A more negative migratory balance can be observed in the internal areas, while the areas near the borders have registered a positive migration rate. The French Alps are dominated by municipalities with a clearly positive relative net migration balance but, in absolute terms, there were only small changes in comparison with other Alpine regions due to the small size of the majority of the municipalities. While almost all municipalities in the upper Bavarian Alps and their foothills show a high positive migration balance, many Austrian municipalities in most of the federal states (in particular in Östtirol, Steiermark, Kärtern and the southern part of Niederösterreich) suffer from population decrease, as well as a great part of the Swiss Alpine area⁶².

In Austria, interestingly, the regions with high in-migration rates also have quite high out-migration rates even with a positive migratory balance. This shows that in these regions population exchange due to migration is even much higher than the balances indicate (see maps 2.30 and 2.31).

In Italy, in particular, great disparities occur on a small spatial scale. Analysing the NUTS-4 data for the 1990s, the municipalities in Trentino and on the Alpine rim in Friuli, Veneto and Piemonte showed a positive net migration balance⁶³. Anyway, the Italian Alpine migratory framework in 1990' was extremely complex to appraise, due to a variable equilibrium between local and international migrations.

Due to a strong increase in international migrations since the year 2000, both in Italy and in the Alpine Countries as a whole, the situation has strongly changed in the last 10 years⁶⁴.

Going back to chart 2.24, a very high net migration balance is detectable in Italy in the last years (2006-2009): +6.8‰ per year at national level (+10.4‰ in 2003⁶⁵), +8.7‰ per year the northern part of the Country. The highest values in the period 2006-2009 have been reached in Friuli-Venezia Giulia (+8.2‰ per year), Veneto (+8.2‰), Trentino-Alto Adige / Südtirol (+8.4‰), Lombardia (+8.1‰) and Piemonte (+8.2‰), whereas the lowest one has been recorded in Liguria (+6.6‰). Nevertheless, all Regions experience high levels of population growth due to migrations. Getting into the provincial detail, greater differences can be noticed: values higher than +10‰ have been registered in the provinces of Imperia, Pordenone, Verona and Novara, whereas the lowest values come from the provinces of Biella (+3.7‰), Verbano-Cusio-Ossola (+5.9‰), Sondrio (+4.8‰), Vicenza (+5.9‰) and Belluno (+5.4‰). However, it should be noted that the totally Alpine provinces of Belluno, Sondrio and Verbano-Cusio-Ossola -but also Biella, which is to a large extent Alpine- rank among the lowest values, always lower than the regional and national averages. Thus it could be concluded that the attractiveness of the completely Alpine provinces –so probably of the whole Italian Alpine space- remains lower than the average attractiveness of the northern part of Italy and, in particular, of the peri-alpine belts which are the most dynamic areas and are statistically included in the data of the Alpine Regions and provinces (e.g. Torino, Bergamo, Brescia, Verona, Vicenza).

The German Alps (see map 2.32), from 2005 to 2009 experienced a migration balance at +2.8 per 1,000 inhabitants per year, while Bavaria has shown a ratio of +2,2‰ and the whole Germany +0,2‰. The largest migration loss of German nationals from Bavaria in 2009 was with Switzerland (-2,024) and Austria (-1,433). So far, the losses from emigration have been numerically compensated by the immigration from other parts of Germany – albeit with a downward trend. For 2009 Bavaria's migration balance was as follows: emigration abroad of 6,978 German nationals against immigration of 14,073 German nationals from the rest of Germany.

 ⁶² ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007; TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008
⁶³ Ut supra

⁶⁴ EUROPEAN COMMISSION, The social situation in the European Union 2005-2006 – The Balance between Generations in an Ageing Europe, European Communities, 2007; EUROSTAT, Europe in figures – Eurostat yearbook 2010, European Union, 2010

⁶⁵ EUROPEAN COMMISSION, The social situation in the European Union 2005-2006 – The Balance between Generations in an Ageing Europe, European Communities, 2007

Maps 2.30 and 2.31 – Migratory fluxes in Austria

In-migration (annual average in % of inhabitants) 1997-2001 vs out-migration (annual average in % of inhabitants) 1997-2001





Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005



In the second half of the 20th century, Slovenia changed from a predominantly emigrating to a predominantly immigrating region. The net migration had been negative until the end of the 1950s. Since then, it has been positive every year according to official data. The only exceptions were in 1991 and 1992 when more people left Slovenia than returned to Slovenia for political reasons, and in 1998, probably due to difficulties encountered with the collection of data. The level of net migration changed in line with the economic development and/or employment possibilities. The largest positive net migration was noted in the 1970s. It accounted, on average, for 7,700 people per year in the 1975-1979 period. Moreover, it was the only decade when women predominated numerically in the Slovenian migration increase. The immigrants came particularly from Croatia, Bosnia and Herzegovina and Serbia. It was there where most of the population also emigrated. These migrations had the nature of internal migrations until the end of 1991. In 2006 the most intensive migration changes since 1994 were recorded in Slovenia. 20,016 people immigrated to the country and 13,749 people emigrated abroad. Net migration in 2006 was 6,267 persons. In 2006, among immigrated foreigners 80.7% were men and 19.3% were women.

The migration balance is currently positive also for most areas in Switzerland, with an increasing trend in recent years. International migrations are the main factor of the migration balance, with net positive values everywhere since the end of the 1980s and peaks at the beginning of the 1990s and recently growing positive values⁶⁶. International migrations have become the most important factor in population development in the last 30 years (accounting for 90% of population growth in 2009). An even higher contribution of international migration is expected in the coming years⁶⁷.

Whereas big rural cantons can only expect a moderate growth of population till 2030⁶⁸, peri-urban and tax efficient cantons in central Switzerland and in "latine Switzerland" are expected to grow significantly, some of them still showing birth surpluses. In rural cantons of central and eastern Switzerland and in Bern even a

⁶⁶ http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/07/blank/data/01.Document.88343.xls,

http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/06/blank/data/02.Document.67501.xls

⁶⁷ http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/06/blank/key/01.html

⁶⁸ http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/03/blank/key_kant/04/02.Document.106062.xls

decrease of population is possible. For cantons around the main chain of the Alps negative inter-cantonal migration rates are expected for the period 2005-2030, whereas small, peri-urban and southern alpine cantons will likely attract population. But only in touristic cantons international migration will continue playing a crucial role for population size.⁶⁹

Growing (bidirectional) internal migratory flows and a high share of internal migrants can be made out in Switzerland, still with a net positive migratory flow to rural areas. Every second out-migrant of rural areas goes to an urban centre and every second in-migrant in rural areas comes from urban centres. The internal migration balance shows rather positive balances in the Lower Valais, the southern Ticino and central Switzerland and increasingly negative balance in the upper Valais/ Berner Oberland and Gotthard/ Grison areas. International migratory flows contribute most to the demographic balance (much more than internal migration) and are also the most variable component, strongly influencing mainly the urban centres.

Again in Switzerland, urban centres and peripheral rural areas are comparable by their negative internal migration balances, but else than urban centres peripheral rural areas cannot compensate by international migration. In fact, with a negative migration balance and a negative birth surplus the demographic situation in peripheral rural areas is especially difficult. Remote valleys are rather experiencing a contraction (especially in mountainous areas of the Valais, the Grisons and the Ticino) whereas some "strong" areas in the same geographical areas (in central Switzerland, in the lower Valais and around Lugano) are experiencing a demographic growth by migration.

Especially in remote rural areas the share of in-migrants of the upper age classes is high, whereas tourism regions show a high percentage of young adults (often searching for temporary occupation in tourism). Differences between urban and rural areas in terms of age tend to become smaller as an expression of a "metropolisation" of space. A slightly negative migration balance for the middle socio-professional categories can be observed in rural areas in general. Within these areas the only difference in the profiles of migrants can be made out for tourism regions, where lower socio-professional classes have a higher share (as for education). Qualitatively spoken, urban areas are rather the winners of internal migration, whereas quantitatively spoken, rural areas profit especially from a net positive balance of freelancers, workers and intermediary professions. Furthermore, a study of the Swiss Federal Statistical Office shows that the main destinations of students from alpine cantons are urban cantons outside the Alpine Convention perimeter⁷⁰. Differences in education levels outweigh differences in age classes and profession with regard to migration comportment. Persons with a higher education level are more mobile and tend to migrate to centres (see chapter n.5). Despite the high percentages of migrants with a higher level of education even to rural areas, their share in total working population there is low. In tourism regions the share of migrants without higher education is high, partly explicable by young migrants often migrating to these regions for professional training.

Due to the relatively high volume of (international) migratory fluxes, the foreign residents in the Alpine Countries are a very significant and heterogeneous mix dominated by people originating from eastern and southern Europe, as well as from Africa⁷¹. In socio-demographic terms, "foreign resident" is associated mainly with low educational standards, low income and consequently low social status, particularly if applied to foreign workers of the first generations. Contrary to this perception, however, foreign residents are increasingly found in highly qualified jobs, as entrepreneurs, investors and as "amenity migrants"⁷².

⁶⁹ Bundesamt für Statistik BFS. 2007A. Szenarien zur Bevölkerungsentwicklung der Kantone 2005–2030.

http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.96354.pdf

⁷⁰ Bundesamt für Statistik BFS. 2007. Regionale Abwanderung von jungen Hochqualifizierten in der Schweiz. Empirische Analyse der Hochschulabsolventenjahrgänge 1998 bis 2004

⁷¹ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008; http://demo.istat.it/altridati/indicatori/index.html#tabreg

⁷² TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Map 2.33 – Foreign residents in 2001

Percentage of foreign residents in the Alpine municipalities (NUTS-4) in 2001



Source: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

In 2001 (see map 2.33), high rates of foreign residents (typically more than 4% of the total population) could be founded in the Swiss and –partially- Austrian Alps (in particular in Tirol, Vorarlberg and in the areas around Salzburg, Vienna and Villach-Klagenfurt). High rates of foreign residents are also found near to Geneva and Annecy, at the southern side of the Provence and Ligurian Alps and along the peri-Alpine sectors of Lombardia and Veneto. At first glance, this seems to reaffirm the contrast between northern and southern (or Germanic and Roman) Alps. However, the situation in Ticino mirrors the general Swiss framework, and South Tyrol that of the rest of the Italian Alps. This draws attention not just to socio-economic reasons, but also to the labour market and the related informal networks, as well as to political reasons.

Switzerland had in 2005 the largest proportion of foreign residents (20.7%)⁷³; it is here that immigration started as early as the 1880s alongside an economic boom and reached the towns first; nowadays, very few foreign residents obtain Swiss nationality compared with other European countries. In Austria, where the proportion of foreign residents is rather small in the eastern provinces, one can see the continuing impact of the labour market on immigration more clearly: in Salzburg and Tyrol, foreign residents often work in the tourist service sector, in Vorarlberg they also in the textile industry⁷⁴.

In 2003, the Austrian foreign residents amounted to 8.84% of the total population. A similar value could be found in 2003 in Germany (8.32%), whereas the foreign population ratio was lower in France (5.56%), Italy (2.34%) and Slovenia $(2.27\%)^{75}$.

The 2003 data are, however, particularly out of date due to the strengthening of the international migratory fluxes experienced in the last years, which has led the Italian foreign population to reach the value of 5.8% in 2008 (see the map 2.34 and, more specifically, chart A.19 in the Annex A).

If we consider the 2008 data concerning the northern part of Italy, the reinforcement of migratory dynamics appears even stronger, the population being composed for about 8% by foreign citizens.

These data are closely mirroring those on the net migratory balance of the last years, thus highlighting the lower percentage of foreign residents in the totally Alpine provinces. Especially striking are the low values of foreign citizens in the provinces of Biella (5.0%) and Verbano-Cusio-Ossola (4.5%) if compared to the Regional average of 7.1%, the 3.4% of foreign population of Sondrio compared with the 8.8% of the Region Lombardia, the 5.4% of Belluno versus the 8.4% of the Region Veneto as well as the fairly modest values of Valle d'Aosta (5.2%) and Trentino-Alto Adige / Südtirol (7.0%). More heterogeneous pictures are offered by the Regions Friuli-Venezia Giulia and Liguria.

It must be emphasized, however, that similarly to the general Italian situation, the foreign population of the Alpine provinces is especially concentrated in the provincial capitals: of all the provincial capitals, only in four cases (Cuneo, Belluno, Treviso, Imperia) the statistical weight of the capital's population is as high as the percentage of the foreign population living in the capital itself, whereas in all the other cases the foreign population resident in the capital sensibly exceeds the percentage of the total population living in the capital, with the clearest examples in Bolzano/Bozen (20.6% of the total provincial population; 30.2% of the foreign provincial population), Udine (18.4% vs 33.5%) and Torino (39.5% vs 62.5%)⁷⁶.

⁷³ http://www.bfs.admin.ch/bfs/portal/en/index/themen/01.html

⁷⁴ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -

Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

⁷⁵ EUROPEAN COMMISSION, *The social situation in the European Union 2005-2006 – The Balance between Generations in an Ageing Europe*, European Communities, 2007

⁷⁶ Statistical elaboration from ISTAT data by the Italian Delegation of the Alpine Convention; data on foreign residents updated on 1st January 2008 (http://demo.istat.it/altridati/indicatori/index.html#tabreg); population data updated on 1st January 2010 (http://demo.istat.it/)

Chart 2.34 – Foreign citizens resident in the Italian Alps in 2008 Data: 1st January 2008, NUTS-3 level



SOURCE: Data: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg (mainly estimates) Elaboration: Italian delegation - Date of extraction: 23 December 2010 Map: Eurac Research, Institute of Regional Development and Location Management

Finally, an analysis of the provenance of international migrants (chart A.20 in the Annex A) reveals that the situation of the Italian Alpine provinces is generally mirroring the national situation with a strong preponderance of foreign residents coming from Romania, Albania (2nd Country of provenance if we consider the whole of Italy, 3rd one in the Alpine provinces) and Morocco (3rd provenance nationally, 2nd in the Alpine provinces). Differently from the national framework, in the Alpine provinces a higher percentage of population coming from Serbia and Montenegro, India, Senegal, Macedonia, Ghana, Moldova, Pakistan, Bosnia and Herzegovina can be found, whereas the percentage of migrants from Philippines, Poland, Ecuador and Bulgaria is lower.

Next to the main groups of foreign citizens (Romanians, Albanians, Moroccans, Chinese, etc.) which are widely present in all the Italian Alpine area, in the provincial perspective it is particularly evident how migrants tend to aggregate themselves into wide and specific groups which are particularly represented in certain provinces but almost absent in other ones; in this sense, one could mention in particular communities such as the Ukrainian one in Verbano-Cusio-Ossola, the Turkish one in the provinces of Imperia and Como, the migrants from western Africa in the provinces of Lecco, Brescia and Bergamo, the Indian and Bengali ones in the provinces of Brescia and Vicenza, the German and Austrian ones in Alto Adige/Südtirol, as well as the people from ex-Yugoslavia in the provinces of Gorizia, Treviso, Udine and Bolzano/Bozen.

Concluding, for the Italian side, Alpine population is particularly concentrated along the foothills and prealpine belts and in the main intra-alpine valleys -that are generally also the best equipped ones in terms of infrastructures- as well as near to the main Alpine and extra-Alpine urban agglomerations. The ongoing tendency is the further development and densification of the main valleys and along the foothills and the further marginalization of the more isolated valleys and of the higher lands. This redistribution of the population is accompanied by a quite strong increase of the population size itself (about 7.5‰ annually), thanks in particular to immigration, which is sensibly strengthening in the last decade. Nowadays, foreign residents in the Italian Alpine provinces are ranging between the 3.4% of Sondrio and the 11.1% of Brescia, with an average value for the northern part of Italy of about 8%.

However, the population in the Italian Alps is now extremely diversified culturally (more and more foreign citizens, and coming from all over the world) and, with the exception of Alto Adige/Südtirol and partly of Trentino, is extremely aged; this situation will soon impose a reconsideration of the public services and the welfare system, also because the localities that are most affected by ageing are the smallest and least connected with the main road network. To conclude, it can be stated that in the Alps, and in particular in the Italian sector of the mountain system, the gap between concentration/polarisation and marginalization is widening.

3. Economic framework: regional development and labour market

Orography has always influenced the economic structure of the region.

As a result, a higher accessibility generally ensured a more vital economy and attracted more investments. Consistently, economic degradation and depopulation tend to be found in weaker and less accessible areas. On the contrary, most accessible areas – usually located along a national road network in a valley – and their bordering regions often enjoy both demographic and economic growth. Though, improving accessibility does not assure economic success of a mountain region – a much more complex concomitance of factors and conditions is interpreted as able to trigger local development⁷⁷.

Among other characteristics, the Alps share with the rest of Europe an increasing functional and spatial division of labor. According to mainstream economic theory, this is likely to provide higher productivity rates, more efficient production and access to external markets⁷⁸.

The territory within the scope of the Alpine Convention benefits from the policies and measures delivered in the framework of the EU.

Economic sectors and employment in the Alps

The Alpine economy, traditionally based on agriculture and livestock farming, brought about a strong and widespread anthropisation of the territory. The industrial development of the Alps was initiated rather late in comparison to other areas in Europe. Notwithstanding the historical role of agriculture, until the late 1970s, industry was the dominant sector in the Alps, with the highest share of employees. Today, the available figures show the predominance of services on the total amount of jobs in the Alps.

In the Alps, the share of employees in the primary sector is generally higher than the national average⁷⁹. Land-cover is to a large extent represented by fields (agriculture) and forests, and the primary sector is still considered of particular importance, also from political and socio-economical points of view (e.g. preservation of the cultural landscape, safeguard of the hydro-geologic equilibrium)⁸⁰.

However the structure of agriculture has largely changed over the last decades: the number of farms with part-time farming (40% in the year 2000) and the average farm size have both increased, as it has happened outside the Alps too. Though, a comparison with the whole EU shows that part-time farming in the Alps is considerably less than in the EU (76% on average, in the year 2000), a result that has been partly explained by the incidence of stable jobs and good accessibility to rural areas as incentives to part-time farming. Often agriculture is combined with other forms of economic activities and seems dependent on the features and performance of the wider regional economy, as it is the case with more than 63% of the total entrepreneurs in the Austrian Alps, Western Slovenia, and Valais (CH)⁸¹. Instead, very low values (almost always lesser than 30% and often lesser than 14%) are to be found in the Italian Alps (Piemonte, Valle d'Aosta, Lombardia, Friuli Venezia-Giulia) as well as in certain areas of Provence-Alpes-Côte d'Azur⁸².

⁷⁷ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁷⁸ Ut supra

⁷⁹ Excepted from France

⁸⁰ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps*, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁸¹ High rates are also found in the German Alps, Uri (CH), Ticino (CH), Savoie (F), southern part of Provence – Alpes – Cote d'Azur (F)

⁸² TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -

Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008



The change in farms between 1990 and 2000 shows regions with a relatively stable or moderate agricultural change such as Alto Adige / Südtirol, Central Switzerland and the German Alps, and other experiencing a strong decrease (-40%), especially in the Italian Alps⁸³.

Land use changed with a clear trend towards agriculture intensification in favourable areas and extensification or even abandonment in disadvantaged areas, which may have undesirable environmental and social consequences.

Nowadays the rate of jobs in the primary sector is rather low. Nevertheless, seasonal and part-time jobs are common and employment in agriculture is still important where substantial labour force is needed (e.g. in orchards) or in sectors where more activities are jointly generated or additional farm activities exist (e.g. agro-tourism). The value of the primary sector/other jobs ratio are higher outside the labour market regions (and, within the same region, outside the major cities). Locally, often a high share of primary sector jobs goes hand in hand with a low level of secondary sector jobs⁸⁴.

Agriculture in the German Alpine region is of greater importance than in the rest of Bavaria. In 2007 the German Alps had 13 agricultural enterprises per 1000 inhabitants (Bavaria 9.7) (see map A.12 in the Annex A). The decline in the number of enterprises compared to 2003 was at 7.2% below average, even though the average farm size was at 22.3 ha significantly smaller than the Bavarian average (26.5 ha).

⁸³ ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007. For a further treatment on the agricultural sector see: ALPINE CONVENTION, Third Report on the State of the Alps – Rural development and Innovation, to be approved in 2011

⁸⁴ Ut supra

In Austria, interestingly, the number of agricultural enterprises is less decreasing within the Alps than in the lowlands (see map A.9 in the annex A). This is probably, due the subsidies especially for mountain farming - a situation not comparable to e.g. Italy and France⁸⁵.

However, the highest decrease of people working in agriculture was recorded in the western Tyrolean Alps. In this region the enterprises have been very small due to the special type of inheritance, the divisible inheritance like in the Roman Alps (see map 3.2).

Map 3.2 – Development of agrarian population in Austria

Variation % of people living from agriculture 1971-2001



Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

The share of employed people in the industrial sector is decreasing while in the service sector it has been rising since the 1980s. However, in the early 2000s industry accounted for about 36% of the jobs, with some regional variations. In some regions, especially in the Italian Alps, industry has rates of employees higher than the national average. In the other NUTS-3 units the share is generally lower, even though industry still holds a relevant position. An easily accessible location seemingly is a success factor for alpine industrial sites: most of their production concentrates in low altitude areas and lower valleys, often located at the fringes of the mountain range, where more accessible and economically developed centers lie. These sites are likely to benefit from the sustainable competitive advantage deriving to business clusters on other locations, e.g. by increasing the productivity, driving innovation, stimulating new business in the field. Generally they also enjoy a better access to raw materials and external markets, and result more competitive. Though, some individual industrial plants are occasionally located in remote Alpine sites.

Higher employment rates in industry are to be found at lower altitudes and valleys, but local variations are often pronounced and have been attributed to the variety of the locations, site-specific features, need of land for plants. Focusing on the local level, industrial plants tend to move from the city centers to the

⁸⁵ BENDER, O. (2010): *Entstehung, Entwicklung und Ende der alpinen Bergbauernkultur*. In: Heller, H. (Hg.): Über das Entstehen und die Endlichkeit physischer Prozesse, biologischer Arten und menschlicher Kulturen. (= Matreier Gespräche zur Kulturethologie 2009. Schriftenreihe der Otto-Koenig-Gesellschaft, Wien). Wien, Berlin: LIT, S. 113–137.

surrounding municipalities (e.g. along major transport axes, in business parks), in search for accessibility and land availability as crucial location factors. This may result in an increasing distance between home and work for employees, higher commuting rates, accrued competition for land use.

Currently, the majority of jobs in the Alps are found in services (market & non-market), as it happens also in the other European regions. The development of the tertiary sector in the Alps is comparable with the trend that can be found in the rest of Europe.

However, the importance of the tertiary sector varies from one region to another: in 40% of Alpine municipalities the share of jobs in services does not exceed 50%, e.g. in Liguria and Alto Adige/Südtirol (I), and in Provence-Alpes-Côte d'Azur (F); in other regions about 75% of the active population works in services - e.g. in Oberösterreich, Burgenland, Steiermark (A), Veneto and Lombardia (I), and Slovenia.



SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Econol - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Local variations are to some extent linked to the differences between rural tourist areas and urban centers, where tertiary sector accounts for more than 60% of local jobs, and industrial and non-tourist rural areas, where either agriculture or industry are relevant sources of employment, with lower rates in services (see map 3.4). The highest values of employed persons in services tends to be found in the core-cities of the Alps.

The location of third sector's activities along the Alpine range depends on different features, such as: the density and diversity of economic activities for business services, the presence and number of inhabitants for services to individuals, the level of performed administrative functions & duties for public administration services (which are preset in all municipalities but more developed in major urban centers), the presence of cultural or natural amenities for tourist services.

Jobs in the tourist sector represent about 10 to 12% of the total jobs in the region.

Today in the Alps there are between 4.7 to 6.6 million of beds (holiday homes included). Around 60 million of tourists every year spend their holidays in the Alps (for a total amount of about 370 million of overnight stays).

Tourism has, though, rather a localized nature: 45.9% of the beds are concentrated in the 5% of municipalities, the economy of 10% of the municipalities (accounting for 8% of the whole Alpine population) is based on tourism. 40% of municipalities have a negligible tourist worthiness (less than 0.1 beds per inhabitant), and other 40% have a modest tourist worthiness (0.1-0.5 beds per inhabitant). Larger tourist areas are concentrated in the central part of the Alps (e.g. Alto Adige/Südtirol, Salzburg, Tirol, Vorarlberg and Bavaria; in other areas, tourism is just appearing in a few locations (Bätzing, 2005).



SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Ecoi - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Tourism plays a central role as a source of income especially for the inhabitants of some high valleys (above 1000 meters a.s.l.), as for instance the higher Valais where, in the year 2000, tourism was responsible for 35.4% of GDP.

Considering the number of employees, the transport sector is another important branch in the Alps. The highest percentages were recorded along the European North-South axis in Tirol, Salzburg and Verona; this also applies to the western Alpine provinces of Torino, Aosta, Verbania-Cusio-Ossola.

In particular, in the Italian Alps have been registered about 580.000 beds (including hotels, camping, apartments, hostels, bed & breakfast, holiday homes, etc.), of which almost 45% in the provinces of Trento and Bolzano / Bozen, over 16% in Veneto and 10% in Piemonte; in 2005 (not considering the holiday homes) have been exceeded the 8 million of arrivals (about 60% of which are Italian tourists, the 40%

international ones), for a total amount of more than 43 million of overnight stays (of which more than 29 million was recorded in Trentino- Alto Adige / Südtirol). This volume of arrivals and overnight stays spent represents a rate of about 9.3 to 12.2% of the national tourist added value. In general, the Alps collect around the 10 to 12% of the global tourist presences. In Italy, about 250,000 people work in the satellite-industries of the cableways and ropeways for the winter sports.

Tourism is a premier business sector in German Alps. It has the second highest tourism intensity in Germany after the German Baltic Sea coast. At 15.9 overnight stays per inhabitant in 2009 this indicator was more than twice the Bavarian average of 6.2 (Germany 2008: 4.5) (see map A.13 in the Annex A).

Whilst the supply of holiday beds declined by 3.3% over the 2004-2009 period, the number of visitors rose by 19.9%. This led to a rise in occupancy rates to 37.2%. Tourism in the Bavarian Alps is more oriented towards the summer season, approx. 66% of all overnight stays were registered during the summer.

Within the Austrian Alps, tourism is concentrated quite strongly in the western part (Bregenzerwald in Vorarlberg, Tirol and Salzburg, western part of Karnten, small parts in the West of Steiermark and Oberösterreich). Here we find the highest tourist intensities (see map A.13 in the annex A) due to a high proportion of international guests and a clear concentration on winter tourism.

In Italy (NUTS-2 data in chart A.21 in the Annex A, from 1995 to 2009) it is possible to identify a general increase of employees –in absolute terms- in secondary and tertiary sector. Differently, despite a general increase of the active population, the employees in primary sector always decreased excepted for Lombardia and Piemonte; anyway –despite the weak increases in these two regions- primary sector has everywhere lost shares of employees on the total active population. Nowadays, in the Italian Alpine Regions, the employees in primary sector range between values of 5.79% in Alto Adige / Südtirol and 1.69% in Lombardia.

Also the secondary sector has generally slightly decreased in relative terms: this light turndown is caused by severe reductions of the industrial sector tout court (particularly in Piemonte: from 31.36% in1995 to 22.07% in 2009) –often confirmed in absolute terms- and increases in building sector (excepted for Friuli-Venezia Giulia, but with a particularly strong growth in Valle d'Aosta: from 11.30% in 1995 to 15.66% in 2009). As for the general European and Italian tendency, also the Italian Alpine Regions, in the last 14 years have shown a strong increase, both in absolute and in relative terms of the tertiary sector, with values that in 2009 ranged between the 77.81% of Liguria and the 59.89% of Veneto.

With regard to the Swiss situation, a general decline of the agricultural and the industrial sector could be observed in the last years. Still, in many remote rural areas the localization index shows an over-representativeness for agriculture. And in touristic areas services and agriculture are over-represented. Figure 3.6 shows a typology of mountainous regions as defined in former investment aid legislation: regions with more than 10% of the employees in agriculture (green colour) are more and more an exception, whereas regions with more than 50% of the employees in the industrial sector (beige colour) are still quite widely spread (especially in central and eastern Switzerland) and so-called tourism regions with more than 50% of the employees (pink colour) cover the largest part of the Swiss Alps. The remaining regions are combined agrarian-touristic regions (yellow) are found in the Gotthard region.

The localisation index for different types of rural areas is another measure to show the distribution of different sectors: in Swiss remote rural areas it shows an over-representativeness for agriculture and in touristic areas for services and agriculture – in both cases, the employees are also living in the same area type. On the other hand, free professions and entrepreneurial services are underrepresented in all rural areas compared with urban areas. When looking at the domicile of different categories, the high valor for managers living in urban areas and working in remote rural areas stands out. Most of the conclusions also hold for a sectoral approach, showing that the the agricultural and energy sector and, increasingly, the

construction sector are overrepresented especially in remote rural areas. Hotel and restaurant "industry" as well as the transports sector show high values in tourism regions.⁸⁶





ARE 2007. Bericht zur Motion der Kommission für Umwelt, Raumplanung und Energie des Ständerates vom 25. Mai 2004 Alpenkonvention und Berggebiet (04.3260). Thomas (SAB) and Parvex, François (SEREC). Also available Egger. on http://www.are.admin.ch% 2 F themen% 2 Fraumplanung% 2 F00228% 2 F00290% 2 Findex.html% 3 Flang% 3 Dde% 2 6 download% 3 DNHz LpZ eg7 t% 2 Clnp6 10 Findex.html% 3 Flang% 3 Dde% 2 Fo0290% 2 Findex.html% 3 Flang% 3 Dde% 2 Findex.html% 3 Flang% 3 Dde% 2 Findex.html% 3 Flang% 3 Dde% 2 Findex.html% 3 Findex.html% 3 Flang% 3 Dde% 2 Findex.html% 3 Findex.html%NTU042l2Z6ln1acy4Zn4Z2qZpnO2Yuq2Z6gpJCDflB7gmym162epYbg2c JjKbNoKSn6A--&ei=4DdMTcPVMM-UOs3uoSE&usg=AFQjCNF8STlkXCY9wJ22HkE1iJaO_TT7Mg

Concluding, as how for demographic development, the economic development in the Alpine area is extremely heterogeneous and polarized. The symbiosis of tourism and services, industry, electric power generation, agriculture, transport and mobility, is the basis of sound economic development. Nowadays there are several modern poly-structured economic centres in which about 70% of the Alpine population

⁸⁶ BUNDESAMT FÜR RAUMENTWICKLUNG ARE. 2006, Monitoring Ländlicher Raum, Themenkreis V2. Pendeln zwischen Stadt und Land.

http://www.are.admin.ch/themen/laendlich/00792/index.html?lang=de&download=NHzLpZeg7t,lnp6I0NTU042I2Z6In1acy4Zn4Z2qZpnO2Yuq2Z6gp JCEdHt gGym162epYbg2c JjKbNoKSn6A--

are concentrated. Territories like e.g. Alto Adige / Südtirol, benefit from their diversified economic structure and thus they are able to attain high regional GDPs. Furthermore, also "soft" factors (e.g. quality of life, leisure, culture and environment, services) tend to become more important than the traditional "hard" factors (payment, infrastructures) when considering the site conditions for setting up new enterprises with a high-quality labour force⁸⁷.

The economic development: GDP, employment/unemployment and the current situation

Traditionally, the economic growth of a given area is measured in terms of Gross Domestic Product (GPD), which is by far the most common growth indicator. In the case in point, the analysis could not be extended to the municipalities of the Alpine Convention alone, since data are available at NUTS 3 level (province). Such administrative units include territories that do not belong to the Alpine Convention; it follows that GDP data take into account also the incomes produced in some non-Alpine areas e.g. the foothills of Lombardia and Veneto and cities like Bern, Torino, Brescia and Verona⁸⁸.



Fig. 4: GDP per capita in the Alpine Convention area.

France (Eurostat, 2000); Liechtenstein (Landesverwaltung Liechtenstein 2001, http://www.llv.li/pdf-llv-avw-statistik-Source: fliz-07-2005-national_economy); Slovenia (Eurostat, 2002); Austria (Eurostat, 2003); Germany (Eurostat, 2003); Italy (Eurostat, 2003); Switzerland (Swiss Federal Statistical Office, 2003), Monaco (Central Intelligence Agency, 2006, https://www.cia.gov/cia/publications/factbook/index.html). For Switzerland national income has been used as proxy of GDP. Data licensed from European National Mapping Agencies, ©EuroGeographics. Croatia and Bosnia & Herzegovina country boundaries, water, DCW, 1999; cities, ArcWorld Supplement, 1999).

SOURCE: ZANOLLA G., RUFFINI F., STREIFENEDER T. (INSTITUTE FOR REGIONAL DEVELOPMENT AND LOCATION MANAGEMENT, EUROPEAN ACADEMY OF BOLZANO, ITALY), Demographic dynamics in the Alpine arch: trends and future developments with special focus on Italy, International Conference on Regional and Urban Modelling, Brussels, 2007

⁸⁷ ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

ZANOLLA G., RUFFINI F., STREIFENEDER T. (INSTITUTE FOR REGIONAL DEVELOPMENT AND LOCATION MANAGEMENT, EUROPEAN ACADEMY OF BOLZANO, ITALY), Demographic dynamics in the Alpine arch: trends and future developments with special focus on Italy, International Conference on Regional and Urban Modelling, Brussels, 2007

Per-capita GDP in the Alpine region is highly variable at local level; usually it is slightly higher than the European average but, excepted for Italy and Slovenia, it is generally lower than the respective National averages (see chart 3.8). However, the distribution of the per-capita GDP in the Alpine arc on NUTS-3 level (see map 3.7) depicts significant disparities between the central parts (higher values) and the eastern and western foothills of the Alpine arc (lowest values) and also within the same country⁸⁹.

Chart 3.8 – Highest GDPs in the Alpine Convention area

The ten NUTS-3 areas with the highest GDPs in absolute values (left column) and the ten NUTS-3 areas with the highest per-capita values (right column), in the Alpine space in 2000

NUTS-3	Share of region within AC area (%)	GDP for the whole NUTS-3 level area (Mio EUR)	NUTS-3	Share of region within AC area (%)	GDP/capita for the whole NUTS-3 level area (EUR)
Torino (IT)	61	59,811	Liechtenstein	100	83,610
Brescia (IT)	59	31,474	Glarus (CH)	100	43,556
Bern (CH)	53	27,957	Nidwalden (CH)	100	41,941
lsère (FR)	67	27,812	Kempten (Allgäu), Kreisfreie Stadt (DE)	100	38,580
Alpes-Maritimes (FR)	90	26,859	Rosenheim, Kreisfreie Stadt (DE)	100	35,533
Bergamo (IT)	70	26,380	Waadt (CH)	22	34,762
Waadt (CH)	22	22,543	Salzburg und Umgebung (AT)	78	33,798
Verona (IT)	29	22,202	Graz (AT)	57	33,085
Vicenza (IT)	54	21,895	Schwyz (CH)	100	31,622
Varese (IT)	38	21,097	Wiener Umland/Südteil (AT)	28	31,475

Tab. B2-2: The ten regions with the highest Gross Domestic Product (GDP) in the Alpine Convention area. [Source: France (Eurostat, 2000); Liechtenstein (Landesverwaltung Liechtenstein 2001, <u>http://www.llv.li/pdf-llv-avw-statistik-fliz-07-2005-national economy</u>); Slovenia (Eurostat, 2002); Austria (Eurostat, 2003); Germany (Eurostat, 2003); Italy (Eurostat, 2003); Switzerland (BFS, Volkswirtschaftliche Gesamtrechnung und die Volkswirtschaft, 2003), Monaco (Central Intelligence Agency, 2006, <u>https://www.cia.gov/cia/publications/factbook/index.html</u>). For Switzerland national income has been used as proxy of GDP.]

SOURCE: ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

Southern foothills in Italy are generally characterised by a quite high per-capita GDP. Considering the aforementioned, these NUTS-3 areas that only partly cover the perimeter of the Alpine Convention territory attain one of the highest values of GDP. A similar phenomenon can be observed at the northern Alpine fringes (Germany, Switzerland). The respective regions of Oberbayern and the cantons of Glarus, Nidwalden as well as Salzburg and Liechtenstein was attaining in 2000 per-capita GDPs always higher than $30,000 \in 9^{90}$.

Chart 3.8 shows that six out of the 10 provinces with the highest GDP (absolute values) in 2000 were in Italy and these territories are only partly included in the Alpine Convention (these are usually provinces of the highly industrialized regions of Lombardia and Veneto). When per-capita GDP is considered, with over 80,000 € per person in 2000 Liechtenstein was (and still is) Europe's richest region and one of the richest Countries in the world as well⁹¹.

⁸⁹ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁹⁰ Ut supra

⁹¹ ZANOLLA G., RUFFINI F., STREIFENEDER T. (INSTITUTE FOR REGIONAL DEVELOPMENT AND LOCATION MANAGEMENT, EUROPEAN ACADEMY OF BOLZANO, ITALY), Demographic dynamics in the Alpine arch: trends and future developments with special focus on Italy, International Conference on Regional and Urban Modelling, Brussels, 2007

Chart 3.9 - Per-capita GDPs in the Alpine Convention area Per-capita GDPs in some NUTS-3 areas in the Alpine space as well as National and European values, in 2000 45 - Average Alpine Convetion ··· Average EU-27 40 35 30 Thousand EUR 25 20 15 10 5 Osrednjeslovenska EU-15 Savoie Verbano-Cusio-Ossola Alpes-de-Haute-Provence Italy Notranjsko-Kraska Glarus EU-27 Austria Salzburg + surrounding France (within AC) Germany (within AC) Slovenia Switzerland Switzerland (within AC) EU-13 (EUR area) Alpine Convention (AC) Austria (within AC) Sudburgenland France Germany (within AC) Kempten (Allgåu) Oberaligàu Bolzano / Bozen Slovenia (within AC) Obwalden Fig. B2-3: Per capita Gross Domestic Product (GDP) of selected regions in the Alpine Convention area (Source: See Map B2 -1; Liechtenstein was not included in the graph as with its per-capita GDP of 83,610 EUR it constitutes an outlier). SOURCE: ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

A high per-capita GDP was recorded also in the districts of Rosenheim and Kempten⁹² in Germany's Upper Bavaria (Oberbayern), and in the Swiss cantons of Glarus, Nidwalden and Waadt, as well as in the Austrian Salzburg and Graz⁹³; most of these areas have shown in 2000 higher GDPs than the national averages⁹⁴. Significant disparities in per-capita GDP levels were appearing in 2000 also within the same country (chart 3.9): e.g the per capita GDP of the Autonomous Province of Bolzano / Bozen (34,395 \in) was significantly higher than that of Verbano-Cusio-Ossola (around 22,000 \in); the same phenomena could be observed in the case of Salzburg and surroundings (33,972 \in) in comparison with the per-capita GDP of Südburgenland (16,271 \in) and the one of Kempten (38,580 \in) in comparison with the one of Oberallgäu (20,854 \in)⁹⁵.

⁹² Kempten and Rosenheim are so-called "kreisfreie Städte", which means a district formed only by one municipality which is a city (a German particularity) - and in cities - compared to the rural area - the GDP is usually higher.

⁹³ ZANOLLA G., RUFFINI F., STREIFENEDER T. (INSTITUTE FOR REGIONAL DEVELOPMENT AND LOCATION MANAGEMENT, EUROPEAN ACADEMY OF BOLZANO, ITALY), Demographic dynamics in the Alpine arch: trends and future developments with special focus on Italy, International Conference on Regional and Urban Modelling, Brussels, 2007

⁹⁴ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

⁹⁵ Ut supra

Chart 3.10 - Lowest GDPs in the Alpine Convention area

The ten NUTS-3 areas with the lowest GDPs in absolute values (left column) and the ten NUTS-3 areas with the lowest per-capita values (right column), in the Alpine space in 2000

NUTS-3	Share of region within AC area (%)	GDP for the whole NUTS-3 area (Mio EUR)	NUTS-3	Share of region within AC area (%)	GDP/ capita for the whole NUTS-3 area (EUR)
Appenzell I.Rh. (CH)	100	423.9	Notranjsko-kraska (SI)	10	<mark>9</mark> ,515
Lungau (AT)	100	452.3	Koroska (SI)	100	9,708
Notranjsko-kraska (SI)	10	483.9	Podravska (SI)	26	10,366
Mittelburgenland (AT)	23	702.4	Gorenjska (SI)	88	10,826
Koroska (SI)	100	717.4	Savinjska (SI)	30	11,072
Obwalden (CH)	100	790.3	Goriska (SI)	89	11,870
Außerfern (AT)	100	920.2	Südburgenland (AT)	14	16,150
Osttirol (AT)	100	978.0	Oststeiermark (AT)	41	17,809
Uri (CH)	100	1,073.3	Osrednjeslovenska (SI)	17	17,928
Kaufbeuren, Kreisfreie Stadt (DE)	100	1,194.4	Mittelburgenland	23	18,049

Tab. B2-3: The ten regions with the lowest Gross Domestic Product (GDP) in the Alpine Convention area. [Source: France (Eurostat 2000); Liechtenstein (Landesverwaltung Liechtenstein 2001, <u>http://www.llv.li/pdf-llv-avw-statistik-fliz-07-2005-national_economy</u>); Slovenia (Eurostat 2002); Austria (Eurostat 2003); Germany (Eurostat 2003); Italy (Eurostat 2003); Switzerland (Swiss Federal Statistical Office 2003), Monaco (Central Intelligence Agency 2006, <u>https://www.cia.gov/cia/publications/factbook/index.html</u>). For Switzerland national income has been used as proxy of GDP.]

SOURCE: ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

The chart 3.10 lists those regions with relatively low GDPs in absolute values and per-capita GDPs on NUTS-3 level, in 2000. The lowest Alpine-wide GDP (in absolute values) was displayed by the scattered populated cantons of Appenzell (CH). Analysing the per-capita values, seven of the ten regions of the Alpine arc with the lowest per-capita GDP was located in Slovenia⁹⁶.

The gross domestic product at market prices (GDP) grew between 1998 and 2008 in the German area of the Alpine Convention by 33.7%. GDP growth was the same as in Bavaria at large but significantly higher than in Germany (+27.0%). The German Alpine area generated a GDP of € 43 233 million in 2008, about 1.7% of the total German GDP.

In 2008, GDP per-capita was in the German Alps \notin 29,108. It was significantly lower than in Bavaria (\notin 35,526) and slightly lower than in Germany at \notin 30,392. Regional variations were very minor (see map 3.12). Between 1998 and 2008, the increase in per capita income amounted to 27.8% in the area of the Alpine Convention. In Bavaria, the per capita income rose by +28.9% compared to +26.8% in Germany.

For 2010, GfK Nuremberg calculated for the area of the Alpine Convention a purchasing power of \notin 19,773 per capita. This value is lower than for Bavaria (\notin 20,505), but above Germany (\notin 18,904).

⁹⁶ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007





Focusing on Italian Alps (see maps 3.13 and 3.14 and, more specifically, chart A.22 in the Annex A), it can be noticed that per-capita GDP values (at market prices) by NUTS-2 units have continued to rise until 2008, with values always higher than the national average, even if showing a significant regional variability. The highest peak-values in 2008 have been recorded in the Province of Bolzano / Bozen (34,956 \in per-capita at market prices) and in Lombardia (33,425 \in) – central Alps; the lowest ones in Piemonte (28,666 \in) and Liguria (27,348 \in) – western Alps.

Unfortunately the effects of the world-wide economic crisis have impinged also on the Alpine economy, thus changing the growing trends of GDPs.

In the Italian case (maps 3.13 and 3.14 - more in detail in the chart A.22 in the Annex A) it can be observed that from 1995 to 2008 the mean annual growth of Regional GDPs ranged between the values of +3,15% recorded in Valle d'Aosta and +5,03% experienced in Liguria, substantially in line with the national average of +4,40%. However, the economic crisis has reversed the tendency in all the Italian Alpine Regions, with the greatest decreases between 2008 and 2009 (the 2010 data are not available, yet) shown by Lombardia (-5,03%), Veneto (-4,91%), Piemonte (-4,59%) and Valle d'Aosta (-4,01%), and the lowest ones in Liguria (-1,79%) and Trentino – Alto Adige / Südtirol (-1,82%). Values comparable with the National average (-3,69%) are recorded in Friuli – Venezia Giulia. Lower decreases affected the GDP at market prices per unit of work. The detected economic trends was also reflected significantly in the labour market⁹⁷, with values of the units of work decreasing at the same time with GDP values (excepted e.g. the labour markets of Trentino – Alto Adige / Südtirol and Valle d'Aosta, in the Italian Alps, which substantially seem to face positively the world economic crisis).

⁹⁷ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps,* Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

Maps 3.13 and 3.14 – Per-capita GDP at market prices in Italian Alpine Regions

Mean annual variation in per-capita GDP at market prices in the periods 1995-2008 (map 3.13) and 2008-2009 (map 3.14) in the Italian Alpine Regions (NUTS-2)– see chart A.22 in the Annex A



SOURCE: ISTAT databases Elaboration: Italian delegation Map: Eurac Research, Institute of Regional Development and Location Management

Map 3.15 – Employment rates in the Alpine space in 2000

Employment rates (employees to residents aged 15-64) in the Alpine NUTS-4 in 2000 divided into 5 classes



SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society -Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

The employment rate is the proportion of employed residents among those of working age (15 to 64 years). A high employment rate often guarantees social stability of a Country and, since employment is the main source of revenue for the majority of people, economic wellbeing of the families⁹⁸.

In the year 2000, the employment rate in most Alpine municipalities was above 61%; otherwise, map 3.15 reveals regional contrasts as well as slight variations between nearby municipalities. Employment rates are high in regions on the northern side of the Alps and in some high mountain tourist areas; conversely, employment rates are lower on the southern part of the Alps (e.g. Provence-Alpes-Côte d'Azur, most Italian regions, Slovenia). In particular, highest values in 2000 are registered in all Swiss Alps, in Lichtenstein, in Allgäu, in Maurienne valley and some other areas in Savoie, in Alto Adige / Südtirol and in the surroundings of Innsbruck, Salzburg, Graz and Wien; the lowest values are particularly affecting the southern Provence-Alpes-Côte d'Azur, the Italian Regions of Liguria, Piemonte, Lombardia, Friuli – Venezia Giulia and Slovenia. The main factors which explain these differences are difficulties in finding employment – low employment rates go hand in hand with high unemployment - and differentials in employment of different groups of workers⁹⁹.

In fact, looking at the female employment rate it can be observed that the highest values are detectable in the areas with the highest total employment rates, whereas the lowest ones are affecting the areas with lowest values of the total employment rate. Similar tendencies are observed regarding the older (55+) employment rate. Thus it could be assumed that female employment rate and older employment rate, in 2000, were making the differences in total employment rates, with smaller regional differences regarding the 15 to 45 aged male employment rate¹⁰⁰.

During the 1990s there has been an important increase in the employment rates in the Alps (as well as in the whole Europe). In that period the average Alpine employment rate (excluding Germany) rose from 60% to 66%. However, this increase was not uniform across the Alps. In southern Alpine regions, except in Slovenia (which has shown a general decrease), employment rates went up in most municipalities. In eastern and western Alpine regions the rates differed strongly from one municipality to another, for instance in Switzerland, Lombardia and Piemonte, or there were more decreases than increases, as in Provence-Alpes-Côte d'Azur. Obviously, increases in employment rates are seen as beneficial for economic development, while decreases reveal structural weaknesses of the economy, i.e. a low capacity for providing new jobs or economic difficulties which can result in job cuts. In Alpine regions increases can be ascribed mainly to increases in female employment rates: major increases occurred in regions where female employment rates were low in 1990. Decreases in employment rate in Slovenia are linked to the economic restructuring of this country in the 1990s following independence, but decreases that affected other Alpine regions result from a variety of factors in different combinations from one place to another¹⁰¹.

Strictly linked with the employment rate, the unemployment rate conveys the % ratio between people in search of a job and the total amount of labour forces. In the Alpine arc the average value of this indicator amounted to almost 6% in 2003 and was lower than the EU-15 average in the same year (around 8%). It was regionally varying between 14.2% in Podravska/Slovenia (an area whose industry suffered a major crisis in the 90s when market economy replaced centrally planned economy) and 1.2% in the Swiss Canton of Uri.¹⁰²

⁹⁸ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

⁹⁹ Ut supra ¹⁰⁰ Ut supra

¹⁰¹ Ut supra

¹⁰² TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008 – and- ALPINE CONVENTION, Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

Map 3.16 – Unemployment rates in the Alpine space in 2003

Unemployment rates (% ratio between people in search of a job and the total amount of labour forces) in the Alpine NUTS-3 in 2003 divided into 6 classes



Also unemployment rates were confirming that the job situation is more critical in the eastern and westernmost Alpine regions, whereas central areas experience more favourable conditions (see map 3.16). Unemployment was high not only in some Slovenian provinces, but also in some eastern Austrian and French provinces. The high unemployment rate in Austria's Burgenland was due to the traditional migration of workers from this region to Vienna, where the job market offers more chances. Such flow of workers contributes to increasing the unemployment statistics of this area at Austria's eastern border. As for the French regions, unemployment is primarily due to the decline of traditional industry. In particular, in 2003, 13 NUTS-3 areas out of 99 was attaining an unemployment rate below the 3% threshold: eight Swiss cantons, Liechtenstein and four Italian provinces (Cuneo, Bolzano, Lecco, Belluno).¹⁰³

Thus, the expected relationship between economically weak regions with a low GDP and regions facing high unemployment have been proved; the distribution of the unemployment rates confirms a concentration of economic welfare close to the well-developed and easily accessible intra-Alpine areas¹⁰⁴.

¹⁰³ Ut supra

¹⁰⁴ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps*, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

Chart 3.17 – Relationships between demographic change and per-capita GDPs in Italian Alpine provinces

Relationships between demographic change in the 1990-2000 decade and per-capita GDPs in 1995 in Italian Alps by NUTS-3 level



SOURCE: ZANOLLA G., RUFFINI F., STREIFENEDER T. (INSTITUTE FOR REGIONAL DEVELOPMENT AND LOCATION MANAGEMENT, EUROPEAN ACADEMY OF BOLZANO, ITALY), Demographic dynamics in the Alpine arch: trends and future developments with special focus on Italy, International Conference on Regional and Urban Modelling, Brussels, 2007

By comparing maps 3.7 and 3.16 – concerning GDP distribution and unemployment rates – with figure 2.6 – regarding demographic change-, a positive correlation seems to emerge between economic wealth and demographic growth. In other terms, it seems that regions with higher per-capita GDP and lower unemployment have been less hit by demographic decline/stagnation. Such assumption is confirmed by the analysis of the relationships between demographic change in the 1990-2000 decade and per-capita GDP in 1995, considering only the Italian provinces (chart 3.17). Provinces with high per-capita GDP (such as, for instance, Bolzano-Bozen, Aosta, Vicenza and Trento) experienced population growth. By contrast, provinces like Imperia, Gorizia and Verbano-Cusio-Ossola experienced population decline¹⁰⁵.

As can be seen in chart 3.18 (and in the chart A.23 in the Annex A, as well as in the maps 3.19 and 3.20), the situation has changed in recent years due to the world economic crisis. In particular, with regard to the activity¹⁰⁶, employment¹⁰⁷ and unemployment¹⁰⁸ rates in the Italian Alpine Regions (NUTS-2), the general economic situation has slightly worsened.

¹⁰⁵ ZANOLLA G., RUFFINI F., STREIFENEDER T. (INSTITUTE FOR REGIONAL DEVELOPMENT AND LOCATION MANAGEMENT, EUROPEAN ACADEMY OF BOLZANO, ITALY), Demographic dynamics in the Alpine arch: trends and future developments with special focus on Italy, International Conference on Regional and Urban Modelling, Brussels, 2007

¹⁰⁶ Indicator similar to the "employment rate"; according to ISTAT, its definition is: % ratio between the total labour forces and the population 15>x>64

¹⁰⁷ ISTAT definition: % ratio between the total amount of workers and the population 15<x<64

¹⁰⁸ ISTAT definition: % ratio between people in search of a job and the total amount of labour forces

Chart 3.18 – Activity rates, employment rates and unemployment rates in the Italian Alpine Regions Activity rates, employment rates and unemployment rates in 2004, 2008 and 2010 in the Italian Alpine area by NUTS-2 levels – see chart A.23 in the Annex A

REGION (NUTS 2) / AREA	Year (III quarter)	Activity rate (% ratio between the total labour forces and the pop. 15 <x<64)< th=""><th>Employment rate (% ratio between the total amount of workers and the pop. 15<x<64)< th=""><th>Unemployment rate (% ratio between people in search of a job and the total amount of labour forces)</th></x<64)<></th></x<64)<>	Employment rate (% ratio between the total amount of workers and the pop. 15 <x<64)< th=""><th>Unemployment rate (% ratio between people in search of a job and the total amount of labour forces)</th></x<64)<>	Unemployment rate (% ratio between people in search of a job and the total amount of labour forces)		
PIEMONTE	2004	67,1	63,3	<u>5,6</u>		
	2008	<u>68,</u> 4	65,0	4,9		
	2010	67,7	63,2	6,6		
VALLE	2004	68,5	67,1	2,0		
D'AOSTA	2008	69,1	67,1	2,9		
DAOSIA	2010	70,6	67,4	4,5		
	2004	67,9	65,0	4,1		
LOMBARDIA	2008	69,7	67,4	3,2		
	2010	67,9	64,5	5,1		
TRENTINO-	2004	70,6	68,6	2,8		
ALTO ADIGE /	2008	71,5	70,0	2,0		
SÜDTIROL	2010	70,7	68,6	3,0		
PROVINCE OF	2004	68,9	66,7	3,2		
TRENTO	2008	69,6	68,0	2,3		
TRENTO	2010	<mark>68,</mark> 6	65,9	3,9		
PROVINCE OF	2004	72,4	70,6	2,5		
BOLZANO /	2008	73,4	72,1	1,8		
BOZEN	2010	73,0	71,3	2,2		
	2004	67,1	64,6	3,7		
VENETO	2008	<u>68,</u> 6	66,6	2,9		
	2010	67,6	64,1	5,2		
FRIULI -	2004	66,1	63,8	3,4		
VENEZIA	2008	68,2	65,3	4,3		
GIULIA	2010	66,5	63,0	5,2		
	2004	63,5	60,7	4,3		
LIGURIA	2008	67,1	64,2	4,3		
	2010	67,2	63,4	5,5		
IT ALV (mh-1-	2004	62,3	57,7	7,4		
Country)	2008	62,8	59,0	6,1		
Country)	2010	61,4	56,7	7,6		
	2004	67,8	65,0	4,1		
NORTH	2008	69,6	67,2	3,4		
	2010	68,4	64,8	5,2		
OURCE: ISTAT databases - ELABORATION: Italian delegation - DATA EXTRACTION: 07-01-2011						

In fact, according to the data reported in the chart 3.18 and in the maps 3.19 and 3.20 (and more in detail in the chart A.23 in the Annex A), after constant increases activity rates have reached highest levels between 2007 and 2008, showing a decrease between 0.7% in Piemonte and 1.8% in Lombardia in the following 2 years. A particular case in this sense is represented by Valle d'Aosta which, notwithstanding the economic crisis, has shown the highest values ever in 2010 (+1.5 compared to 2008). Anyway, the values of activity rate in the Italian Alpine Regions are always higher than the national average with 2010 values variable between the 66.5% of Friuli – Venezia Giulia and the 73% in the Province of Bolzano / Bozen (National average in the same year: 61.4%).

Similar trends, but with greater percentage decreases in the last 2 years, are detectable with regard to the employment rates, which in any case show values higher than the national average (56.7% in 2010) ranging from the 63.0% of Friuli – Venezia Giulia (2010) to the 71.3% of the Province of Bolzano / Bozen (2010).

Naturally, in parallel with decreasing amounts of employees, the unemployment rate has risen up from values ranging in 2007-2008 from 1.8% (Province of Bolzano / Bozen, 2008) to 4.9% (Piemonte, 2008) (5.6% in 2007 at National level) to values in 2010 within the

2.2% of Alto Adige / Südtirol and the 6.6% of Piemonte (7.6% at National level). In general, unemployment rates in the Italian Alpine Regions are always lower than the National average but the economic crisis has marked the economic development of the whole Italian Alpine area (always considering NUTS-2 parameters), perhaps excepted for Trentino - Alto Adige / Südtirol which substantially seems to be able to deal with the crisis without significant diseases.

In mid-2009 the German area of the Alpine Convention had 452,025 employees subject to social insurance contributions. The region's employment density was 305 persons work per 1,000 inhabitants. This was below the Bavarian and German averages of 361 and 334 respectively.

Over a longer term period (1999/2009) the number employees increased in the Bavarian Alps by +5.5% (5.8% Bavaria, Germany -0.4%). The absolute increase was +23,613 employees.

In the medium-term (2003/2009), the number of employees in the German Alpine Area rose by +3.5% (+4.0% Bavaria, Germany +1.6%). In absolute terms, the increase amounted to 15,080 employees.

Maps 3.19 and 3.20 – Unemployment rates in the Italian Alpine Regions

Unemployment rates in 2008 (map 3.19) and 2010 (map 3.20) in the Italian Alpine area by NUTS-2 levels – see chart 3.18 and A.23 in the Annex A



SOURCE: ISTAT databases Elaboration: Italian delegation Map: Eurac Research, Institute of Regional Development and Location Management



In the short-term (2007/2009) the number of employees in German Alps increased by +2.2% (+2.1% Bavaria, Germany +2.0%). In absolute terms employment grew by 9,690. The employment situation in the Alpine region is highly positive, especially in the most recent period. Less favorable values apply to the districts of Lindau, Miesbach and Traunstein in the wake of the economic crisis (2008/2009) (see map 3.22). In November 2010, the unemployment rate in the German area of the Alpine Convention stood at 3.4%. It was lower than the Bavarian average (3.8%) and less than half that of Germany (7.0%) (see map A.14 in the Annex A). In October 2010 the unemployment rate stood at 3.1%. In November 2010, 26,040 people were reported unemployed in the region. The number of unemployed in the Bavarian Alps in November 2010 decreased compared to the same month last year by -4,785 people. The relative change was less than in Bavaria with -16.4% (-14.2%) and Germany (-8.8%).

Compared with October, the unemployment rate fell in the area of the Alpine Convention by -939 people. This development was in Bavarian Alps with -3.8% worse than in Bavaria (-4.7%), but better than in Germany (-2.8%). In 2009 the average unemployment rate in the German territory of the Alpine Convention was 4.1%. It was lower than in the Bavarian average (4.8%). The unemployment rate was well below that of Germany (8.2%).

In 2009, in the territory of the Alpine Convention 19 040 new companies were registered, of which 14 904 were start-ups, 137 conversions, 2,567 inward investments and 1,432 takeovers. The rate of company formation was 100.5 per 10,000 inhabitants (Bavaria 98.4). 14 963 companies were deregistered, of which 10,926 were full closures, 130 conversions, 2481 relocations outside the region and 1426 transfers. 433 companies went bankrupt, putting the insolvency rate at 3.9 per 1,000 companies (Bavaria 5.3). The balance of business registrations and de-registrations was plus 4077, a rate of 21.5 per 10,000 inhabitants (Bavaria 26.3).



Labour Market Regions and commuting

Alpine cities have close economic interrelationships with adjacent peri-Alpine metropolises (e.g. München, Milano, Torino) as well as with their surrounding areas. In this context the aspect of "commuters" becomes relevant. Particularly, the regions along Italy's Alpine foothills such as Verona, Bergamo, Brescia, Torino, and Udine as well as the areas close to Wien, Graz, Linz, Bern, Maribor, Ljubljana, and München are facing wide fluxes of workers and students. The dynamic development outside the Alpine fringe (where cities become increasingly important for labour and commercial opportunities) accentuates the gap with the peripheral regions within the Alpine fringe, where conditions for economic development are less favourable¹⁰⁹.

Many commuters, who work outside the Alpine arc at a nearby agglomeration centre, live in these bordering municipalities or in the broad and easily accessible Alpine valleys. In these valleys, municipalities with high population densities are found along the main Alpine ridge (valleys of Rhine, Etsch, Inn and Aosta)¹¹⁰.



In order to study the commuters phenomena another indicator supplements the employment rate, the "job density" indicator which compares the number of jobs in a municipality with its resident population of working age (15 to 64 years). In fact even when most persons are employed, their jobs are not necessarily located in the same municipality. Values in the year 2000 shows a spatial distribution where local

¹⁰⁹ ALPINE CONVENTION, *Report on the State of the Alps; Alpine Signals: Special Edition 1; Transports and mobility in the Alps*, Innsbruck, Permanent Secretariat of the Alpine Convention, 2007

¹¹⁰ Ut supra

differences dominate over regional differences, resulting in a mosaic structure. However, the spatial pattern of the indicator is not completely independent of physical characteristics: job densities tend to be higher in high mountain areas and low at lower altitudes. Higher values can be observed also in Swiss Alps and Slovenia. Furthermore, most Alpine cities are employment hubs in their respective regions, they concentrate jobs, while suburban municipalities are often dormitory communities with a limited number of jobs relative to the resident population). In general, higher job densities can be observed in the internal areas, e.g. in the municipalities nearest to the Alpine Ridge that being very far from the main Labour Market and from the prosperous foothills, don't allow high rates of commuters¹¹¹.

Thus, in recent decades, the way people live and work in the Alps has changed dramatically as a result of the emergence of a service economy. The majority of people now live in or near an agglomeration that has developed around a core city with a strong economy. Economic activities and the majority of jobs are concentrated in such agglomerations. This makes them a strong magnet for commuters from outside. Many agglomerations have also grown very fast and are increasingly characterized by unstructured industrial and trading zones and shopping centres. These so-called Labour Market Regions (LMRs) are generally represented by rural or urban municipalities with over 10,000 inhabitants (or more than 5,000 jobs and a positive commuter balance) and their neighbouring municipalities (generally with a negative commuters balance). Generally Labour Market Centers are also attracting migratory fluxes¹¹².

According to the classification by DIAMONT there are 108 labour market centres located in the Alps, most of them in Austria (28), followed by Italy (24) and Switzerland (20). Many centres are located on the Alpine rim and along the major transport routes. Away from these parts, e.g. in the southern French Alps and Italian Alps, in the Dolomites or in the Rethic area, they are much rarer¹¹³.

¹¹¹ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

¹¹² Ut supra

¹¹³ Ut supra



According to the LMRs classification by DIAMONT, map 3.26 represents the travel to work time from individual Alpine municipalities to their nearest Labour Market Centre, i.e. the time expended by potential commuters. In the red areas, many inhabitants must face with high average travel to work times¹¹⁴.

Commuting is a common phenomenon in modern societies where means of transport, particularly private cars, no longer confine people to living near their place of work. Out-commuting may be understandable since it makes it possible to reconcile residential choices, such as living in the countryside, with professional occupations increasingly executed in cities. But commuting is likely to endanger the sustainable development and may lower the quality of life for those who are compelled to live far from their workplace because of high housing costs in cities. That is why public policies aim to mitigate the negative effects of commuting, e.g. by proposing public transport options or limiting, through spatial planning documents, imbalances between the locations of residences, workplaces, and services such as schools¹¹⁵.

¹¹⁴ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

¹¹⁵ Ut supra



Travel-to-work time to the nearest Labour Market Center in 2000 by NUTS-4 level



SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

The number of out-commuters in the year 2000 compared with employed residents reveals important contrasts within the Alps (see map 3.28). The indicator often returns lower values in central regions of the Alps, like Switzerland, Alto Adige / Südtirol, the areas around the Italian-French border (as well as in Slovenia) than in outer regions, like Trento and Lombardia and Savoie. High rates of out-commuters can be observed also in the main valley-floors (e.g. Inn, Drau, or Mur valleys in Austria, Val di Susa, Valle d'Aosta in Italy, etc.). However, in areas where industrial or tourist activities are developed, out-commuting will be more intense than in mainly agricultural areas¹¹⁶.

This indicator is substantially complementary to the job density indicator: where job density is higher the values of out-commuters are generally lower; on the contrary, where there is a scarce job density out-commuting is more intense.

Map 3.27 – "Problem-commuters" in Austria

Out-commuters with more than 60 min commuting time to the working place in % of inhabitants, in 2001



Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Conversely, the incoming commuters rate reveals more heterogeneous trends. Incoming flows in a municipality compared with the number of employed residents in that municipality, substantially reveals is a measure of its attractiveness in terms of jobs. Thus higher values are interesting the core-areas of LMRs but also isolated municipalities with a strong tourist vocation. When the indicator returns quite uniform and low values in an area, this area is likely to be mainly made up of municipalities that are independent of each other in terms of employment: this situation can be observed in certain areas of the central Alps which reveals high job densities and low out-commuters rates¹¹⁷.

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¹¹⁶ Ut supra ¹¹⁷ Ut supra
Map 3.28 – Out-commuters rates in the Alps

Out commuters per total employed persons (%) in 2000 by NUTS-4 level (number of people who work outside of the municipality to employees resident in the municipality)



N.B.: German data missing from DIAMONT Project. SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Premised that the difference between incoming and outgoing commuters expressed as a proportion of employed residents reveals the complexity of spatial relations in terms of employment within the Alps, the low values of commuting in the Alpine areas nearest to the main ridge are confirmed by the commuters balance. Even if Labour Market Centers seems to confirm a positive commuting balance despite the negative ones of their surrounding municipalities, has to be stated that commuting can develop as a complex system with reverse flows from centres and flows between non-central municipalities, which can be secondary poles of employment¹¹⁸.

Anyway, regional differences are masked by more salient local differences. Within the LMRs, even where the commuter balance easily distinguishes cores from other municipalities, there is no strict relation between the value of the indicator and the distance to the core. Outside LMRs, the indicator returns contrasting values in neighbouring municipalities, although they tend to be positive in rural tourist areas¹¹⁹. Finally, the change in commuters balance between 1990 and 2000 reveals in particular the increased dependence of mountain municipalities with small populations, which points to difficulties in maintaining local jobs¹²⁰.

¹¹⁸ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

¹¹⁹ Ut supra

¹²⁰ Ut supra

Map 3.29 - Commuters-balance in the Alps

Incoming commuters minus out-commuters to total employed persons (%) in 2000 by NUTS-4 level



N.B.: German data missing from DIAMONT Project.

SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Commuters balance within the Swiss Alpine area (see map 3.30) strongly varies even on a micro-scale and is especially high in little Alpine centres, often in touristic regions such as the Engadine valley in the Grisons. The high ratio is partly a result of the function as regional training centres and in general of a high share of services. This is also clearly visible by the high percentage of employees in the services in such municipalities¹²¹.

The report on commuting from ARE¹²² shows that an increasing number of habitants of rural areas (36%) work in urban areas, more than urban citizens do in rural areas (4%). The increase of commuting is especially considerable in periurban and peripheric rural areas. In terms of education much more commuter students live in rural areas (17% in 2000, confronted with 7% in 1970) areas than do in urban areas (1%). The increase of such commuting was the biggest in remote rural areas and tourist regions. Two thirds of the commuters working in urban areas travel by private car, whereas the same share of commuter students rely on public transports. In general the preference for public transport increases with remoteness and the preferred public means of transport is the train.

Map 3.30 – Commuters-balance in Switzerland

Commuters-balance in Swiss municipalities (NUTS-4) in 2000



The Bavarian Alps region is largely an outbound commuter area for the city and region of Munich. From the German territory of the Alpine Convention almost 40,000 employees commuted into other regions in 2009; the commuter balance rate was -8.0% (+1.4% Bavaria). The cities within the Alpine region are inbound commuting centers with balance rates of 45.1% for Rosenheim, 42.3% for Kempten and 4.7% for Kaufbeuren (see map 3.31). The number of inbound commuters in the area rose compared to 2004 by 9.8%, that of outbound commuters by 9.1%.

¹²¹ http://www.bfs.admin.ch/bfs/portal/de/index/themen/06/22/publ.Document.125510.pdf

¹²² BUNDESAMT FÜR RAUMENTWICKLUNG ARE. 2006, Monitoring Ländlicher Raum, Themenkreis V2. Pendeln zwischen Stadt und Land.

http://www.are.admin.ch/themen/laendlich/00792/index.html?lang=de&download=NHzLpZeg7t,lnp6I0NTU042I2Z6In1acy4Zn4Z2qZpnO2Yuq2Z6gp JCEdHt gGym162epYbg2c JjKbNoKSn6A--

Map 3.31 – Commuters-balance in Bavaria

Commuters-balance in Bavarian districts (Landkreise) in 2009



Source of data: LfStaD, GENESIS Map design: StMWIVT, Statistics, Analysis, Economic and Regional Monitoring

With regard to the Italian specific situation, ISTAT divided the Alpine region into 129 Local Labour Systems (see chart A.24 in the annex), based on the same assumptions of LMRs by DIAMONT.

These Local Labour Systems (LLSs) have been subdivided into different categories of main specialization. The 2007 (before the crises) unemployment rates in these LLSs are extremely heterogeneous and they don't seem to be variable about the main LLS specialization as well, but rather on their spatial collocation. In fact, i.e. the highest values of unemployment has been recorded in Liguria both in urban, tourist and chemical / oil systems (4.0%<x<5.2%; Italian Alpine average = 3.5%). Tourist systems as well has recorded some of the lowest values in the Italian Alpine region in Alto Adige / Südtirol (2.4%<x<2.9%), whereas a few kilometers far the Pejo Tourist system has experienced a 4.3% unemployment rate and even in Badia tourist system (Alto Adige / Südtirol as well) has been recorded a 4.4% rate, which overcome the second highest value in the Province of 1.5%.

Thus, a spatial reading of the data seems to be more realistic. The strongest LLSs (lower values of unemployment rate) in 2007 were belonging to the provinces of Cuneo, Bergamo, Lecco, Belluno (completely Alpine)¹²³ and Bolzano / Bozen (completely Alpine); the weakest ones were detectable in the provinces of Torino, Vercelli, Biella, Imperia, Savona and Sondrio (completely Alpine).

Anyway, the unemployment values in the Italian Alpine area's LLSs were always lower than the national average, as well as the values of the activity and employment rates were generally higher than the Italian ones.

¹²³ Conversely, the Province of Belluno experienced in 2007 quite scarce rates of activity and employment

4. Education and training

Education, vocational training and more generally lifelong learning play a vital role in both an economic and social context and in the development of human beings and modern societies¹²⁴. Training activities lasting through the entire span of life are more and more an essential requirement to remain integrated in the labour market and expenditures on education may help foster economic growth, enhance productivity, contribute to personal and social development, and reduce social inequalities. The Alpine area has a competitive edge to develop knowledge economy as it encompasses regions with a high level of education and has a dense network of universities and research centers. The combined level of expenditure and employment in R&TD is above European average in several regions of the Alpine territory and it is strong in many areas, such as Rhône-Alpes, Switzerland and Bayern. Metropolitan areas and Alpine cities concentrate research centers – e.g. Bolzano, Trento, Innsbruck, Chambéry, the technologic park of Sophia-Antipolis (Provence-Alpes-Côte d'Azur), etc. – even if some can be found in medium sized cities as well¹²⁵.

Lifelong Learning Programme (LLP) and women training are two phenomena on the rise at all national levels and in the Alpine area as well. Lifelong learning is defined as encompassing learning for personal, civic and social purposes, as well as for employment related purposes. Lifelong learning implies raising investment in people and knowledge; promoting the acquisition of basic skills, an equal and open access to high quality learning opportunities and promote mobility and exchange experiences, both in the field of study and work. Concerning women's situation, in the municipalities of the Alpine region the employment rate of women aged 25 to 45 averages to 71%: this value is generally rising up, despite regional differences due to diverse economic structures, educational systems, family role patterns and various work conditions¹²⁶.

Concerning the Italian situation, according to a specific indicator calculated by ISTAT, named "permanent training"¹²⁷, a general trend throughout the different Italian Regions can be detected. The Italian mean value (6%) is below the European one (9.2%) and lower than the average values of other Alpine Countries, except for France (6%). However, if we look at the various Italian Alpine Regions fairly significant differences can be spotted: a value (8.9%) close to the European average has been found only in the Autonomous Province of Trento, which is followed by the Autonomous Province of Bolzano/Bozen (7.7%), both territories completely included in the Alpine Convention area. On the other hand, it is another entirely Alpine Region which exhibits the lowest rate, namely Valle d'Aosta/Vallée d'Aoste with 4.4%. Around the general trend, higher values are displayed on the middle-eastern side of the Italian Alps (in addition to the high levels recorded in the Provinces of Trento e Bolzano/Bozen, a value of 7.1% has been estimated for Friuli-Venezia Giulia) and lower values on the western side (5.1% for Piemonte and 5.8% for Lombardia), except for Liguria which can boast a 7.4%.¹²⁸

¹²⁴ EUROSTAT, Europe in figures, Eurostat yearbook 2010, European Union, 2010.

¹²⁵ http://www.alpine-space.eu/uploads/media/Operational_Programme_ASP_01.pdf

¹²⁶ TAPPEINER U., A. BORSDORF & E.TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

¹²⁷ This indicator (*apprendimento permanente*) is calculated as the percentage of population aged 25-64 which has received some forms of instruction or training in the last four weeks before the interview. The collected data refer to regular (formal) instruction as well as to non formal training irrespective of the relevance of such formative activities for the current or future employment of the respondent. Informal training (e.g. self-study) is not counted.

¹²⁸ http://noi-italia.istat.it/index.php?id=7&user_100ind_pi1[id_pagina]=74&cHash=b1edd973efe99c02db841fe9ae8e8735

Map 4.1 – Residents with tertiary education

Residents with tertiary education to residents over 15 years old by NUTS-4 level



N.B.: German data missing from DIAMONT Project.

SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society -Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Differences in education levels outweigh differences in age classes and profession. Younger population is generally better qualified than older one and usually more mobile, more likely to locate towards peri-Alpine areas. In touristic valleys, e.g. in Switzerland, the amount of population with a lower education level is generally highlighted, due to the presence of young migrants coming from other zones for professional training.

Map 4.1 shows the rate of university graduates in relation to the total number of residents over 15 years for the municipalities of the six Alpine countries, excluding Germany¹²⁹. The Alpine area's general situation is very heterogeneous: on average, most regions in the Alps return values between 3% and 5%. There is a striking situation between a higher rate of graduates and the individual agglomerations with a surplus of high quality jobs (e.g. Chur, Innsbruck, Salzburg, Wien, Trento). Rural areas, however, match average National areas. The highest values are located in France (especially Savoie, Isère and Alpes de Haute Provence) and Slovenia as a whole, with graduates rates of about 10% and 7% respectively. As the map underlines, education policy may be strictly influenced by the education systems present in the various Alpine Countries, having as a result a spatial manifestation, clearly visible for France and Slovenia realities. Moreover, national education systems vary each other in length, social status or other characteristics, producing outcomes not fully comparable.

In 2009 in the Bavarian Alps there were 832 *Kindergartens* and similar child care facilities. These were 10,3% of all child care centers in Bavaria, looking after 24,1% of all children under 14 (Bavaria 27,5%). In view of a capacity utilisation of only 92.7% the low rate of care can be taken as an indicator of more traditional family structures (see map 5.2). In the Alpine region the care rate in the cities (up to 29.9%) is well above that of the districts (Traunstein, 21.1%; Berchtesgaden, 21.6%). The same applies to infant care



(under 3 years), where the rate stands at 9.4% in the Alps, whilst it is 14.1% in Bavaria.

Both in primary education and in secondary education vocational and training, there are no significant differences between the Alps and the Bavarian average. However, class sizes in the Alps are lower in all types of school.

The proportion of school leavers with higher education in the Alpine region (see map 4.3) is only slightly above that of Bavaria (22,3%) and

Germany (28,9%). Low numbers in the district (Upper Allgäu and Ostallgäu) are offset by higher numbers in the urban districts.

In 2009 the share of trainees in total employment in the Alpine region was at 6.7%, higher than in Bavaria (5.8%). The share of employees with university degree in the Alpine region at 7.0% was well below the

¹²⁹ Depending on the State, the data relate to census held between 1999 and 2002. For Switzerland, the rate of graduate relates to the number of residents aged 25 to 64 years.

10.4% average in Bavaria. Although the share of university graduates rose by 1.2 percentage points compared to 2004, the Bavarian average increased by 1.3 percentage points. So the gap to the rest of Bavaria has widened in spite of newly established technical colleges in Rosenheim and Kempten.



5. Brain drain and role of ICTs

The emigration of highly-skilled personnel towards other regions and Countries of the world –the so-called "Brain Drain" phenomenon-, has become a very relevant issue especially in recent years. Know-how, in our "knowledge-society", represents the primary source for the creation of well-being and the maintenance of competitiveness. Despite the importance that such an issue has acquired today, at a regional scale few analyses have been conducted.

Consequences of the emigration of such human resources are considerable, both in a financial and sociocultural perspective¹³⁰. For young graduate or talents eager to know, the main urban centers play a decisive role with their great attraction, as soon as they offer training places and more interesting workplaces, in addition to cultural events and greater individual freedom than rural areas. Considering the composite situation and the socio-economic diversities present in the Alps, such a brain drain phenomenon could affect in many different ways the Alpine area.

One of the rare studies on this subject has been promoted in 2003 in Switzerland, in order to quantify the amount of high-qualified personnel leaving the Alpine area. According to this report, concrete cases have revealed an exodus from the Swiss Alpine area which is much more sizeable (from 75% to 83%) than the one highlighted by official statistics (between 9% and 44%)¹³¹. However the survey underlines the presence of great differences at a regional scale. In central Switzerland the number of individuals who are leaving is particularly high in Uri and Valais Canton, much lower in Niedwalden Canton, thanks to a favorable taxation¹³².

Isolated valleys, characterized by a lack of workplaces, high level of education and other opportunities are more likely to lose a part of their younger population to other better and more favorable destinations. The targets could be located not only far away from the Alps but also situated in cities and peri-urban areas that are particularly dynamic and with greater opportunities than in the Alpine chain. Therefore, brain drain effects are probably at work through different paths across the Alps. However, further studies getting deeper into this crucial issue would be welcome and, indeed, badly needed.

Another Swiss study of the Federal Statistical Office shows that main destinations of students from Alpine cantons are urban cantons outside the Alpine Convention perimeter¹³³.

According to a study conducted by ARGE ALP, another phenomenon strictly related to "brain drain" is emerging. The report brings out the importance of "brain gain", which consists in a rise of wellbeing thanks to migratory movements (net migration). Moreover, by means of abroad experiences, employees' qualifications may be empowered and extended. The economy of the Country of origin can make profit by knowledge not only in case of comeback, but also any time there are structures and agencies which promote such exchange of know-how and contacts¹³⁴.

¹³⁰http://www.argealp.org/fileadmin/www.argealp.org/downloads/italiano/Sintesi_progetto_brain_drain_ita.pdf

¹³¹ THOMAS EGGER, UELI STALDER, ANITA WENGER, *Brain Drain in der Schweiz Die Berggebiete verlieren ihre*

hochqualifizierte Bevölkerung, Bern, July 2003.

¹³² Ut supra

¹³³ BUNDESAMT FÜR STATISTIK BFS. 2007B. Regionale Abwanderung von jungen Hochqualifizierten in der Schweiz. Empirische Analyse der Hochschulabsolventenjahrgänge 1998 bis 2004.

 $^{^{134} {\}rm http://www.argealp.org/fileadmin/www.argealp.org/downloads/italiano/Sintesi_progetto_brain_drain_ita.pdf$

Map 5.1 – Road distance to nearest university

Road distance in Alpine area by NUTS 3 level in 2004



SOURCE: TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society -Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Students are generally considered very mobile and reality bears this out. As map 5.1 points out, there is a statistical correlation between distance from the nearest university and proportion of the population with tertiary education: this proportion increases the closer you get to a university¹³⁵. Greatest cities and major urban areas, with the presence of a university at a short distance, experience undoubtedly the highest rates of tertiary education. Infrastructure networks and the presence of a good level of accessibility is another very important element that helps to rise up education levels¹³⁶, e.g. between Munich and Verona long the Brennero axis. The most suffering areas in western Alps are located in Aosta, Cuneo and Savona provinces for Italy, Alpes de Haute Provence, Hautes Alpes and Savoie departments for France. About the central-eastern side of the Alps, the most critical areas are located in Rethic Alps (in particular Valtellina, Vorarlberg and Schwaben), Belluno province (Italy) and Osttirol (Austria). Nevertheless, some improvements have been experienced within the Swiss Alpine area in the last years, especially with newly founded universities (e.g. Ticino) and other ones of applied sciences partly in the Alpine area (e.g. Western and Eastern Switzerland, Lucerne, etc.)¹³⁷.

This trend is comparable, in similar situations through the other Alpine Countries, with the emigration of skilled workers towards peri-urban areas located outside the Alpine area, such as Lyon, Wien, Ljubljana, major cities of the Po Valley.

Map 5.2 – Distance to nearest university in Switzerland

Travel-time by public transports to the nearest university seat in 1996 (before the University of Ticino and Technical Universities have been founded)



¹³⁵ TAPPEINER, U., A. BORSDORF & E. TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

¹³⁶ RIEDER STEFAN; MATTI DANIEL; LANDIS FLURINA; PETER COLETTE. 2005. *Human Capital in European peripherical regions: Brain-drain and Brain-gain.* Regionalbericht Zentralschweiz. Interface. Luzern.

¹³⁷http://www.bfs.admin.ch/bfs/portal/de/index/regionen/thematische_karten/maps/bildung_und_wissenschaft/hochschulen.parsys.0001.Photog alleryDownloadFile4.tmp/k15.02s.pdf

Map 5.3 - Numbers of students migrating to the Swiss University Cities

Representation based on 1998-2004 data (before the University of Ticino and Technical Universities have been founded)

Absolventenjahrgänge 1998 bis 2004:



http://www.bfs.admin.ch/bfs/portal/de/index/news/publikationen.Document.96354.pdf



Bavaria, for example, is affected by increasing emigration of German people (see map 5.4)

Emigration abroad of German nationals from the Alps amounted to 7.9‰ inhabitants in 2008, compared to 2.8 in Bavaria and only 2.4 in Germany overall. Since 2005, the emigration rate of Germans in Bavaria is higher than in Germany as a whole, but so is the immigration rate since 2006. The reasons for the higher

level of emigration abroad by German nationals from Bavaria are an above–average proportion of emigration–minded population (young, well educated, single) and the proximity to German–speaking Switzerland and Austria, two particularly favoured migration destinations.

Conversely, higher immigration to Bavaria is a consequence of above-average employment opportunities for highly qualified people.

The data of the German Federal Employment Agency allow to differentiate the inner-German migration of employees by qualification. High relative immigration gains of highly skilled workers were registered in particular for the surrounding districts of the major cities, such as München, Nüremberg, Augsburg, Regensburg and Ingolstadt. Regarding high skilled the districts in the Alpine area near München are also very attractive (see map 5.5).



Since the 1990s, "brain drain" is affecting Italy deeper and deeper. Awareness of this issue has been increasing in the last years, with local communities and Public Administrations involved in finding measures to face the problem. At a national scale, figures and data concerning brain drain show a constant rise in the last two decades of the number of young and graduated Italian people in search of new opportunities abroad. Even if the available data are far from being accurate and complete, the trend points in 2008 to an estimated number of about 65,000 emigrants from Italy under the age of 40; 70% of them is made up of newly graduated men and women, according to a research conducted by *Confimprese* in 2010. According to another study promoted by ISTAT, the rate of people who changed their residence in 2009 rose by nearly 20,000 units compared to the previous year, growing from about 60,000 to 80,597 people at a national level. Although this number comprises the total amount of emigrants, it can be safely assumed that it consists predominantly of young people¹³⁸.

A study realized specifically for Italy in 2003 outlines two general tendencies for the 1990s. One is the increasing overall migrations from the Northern Italy if compared to the Southern part of the country: the

¹³⁸ http://www.ilsole24ore.com/art/economia/2010-12-20/numeri-costi-nuova-emigrazione-173135.shtml

other is an increasing percentage of college graduates among emigrants both from North and the South. In 1999, 7% of the graduates from the North of Italy went abroad, compared to 2% from the southern part of the Country¹³⁹. During the 1990s, Italy lost "human capital" at a growing rate through its emigration flows. In particular it lost an increasing share of college graduates and their overall flow abroad is rather large when compared to the net flow of newly graduated people that the Italian university system has produced¹⁴⁰.

One may wonder how large a proportion of these young emigrants will remigrate. For Germany, a recent study reveals that 78% of the 122.000 Germans who had emigrated between 1996 and 2006 have already come back to Germany. This finding leads the authors to use the terms "brain circulation" or "brain exchange" instead of "brain drain"¹⁴¹. However, this circular process does not seem to be detectable for Italy which appears to suffer from a continuous loss of graduates which is not replaced by foreigners with a comparable level of studies.

In view of the complexity of the statistical task of ascertaining these population displacements and assessing their stability and persistence in the course of time, it is difficult to outline these trends with any degree of confidence. Furthermore, the fact that changes of residence very often fail to be communicated to local public administrations complicates the analysis. The lack of studies and surveys on this subject, especially at a local scale, does not permit an accurate analysis capable of bringing to light the presence of particular situations or regional constraints. As a result, as far as the Italian Alpine areas are concerned, the general picture is far from being well known and further researches are needed. On the basis of what we know about the general Italian situation, we can nevertheless assume that brain drain must be clearly present in the Alpine areas; but it should be noticed that immigration of highly skilled personnel can also be expected to occur and partly redress the balance.

Information and communication technology -usually called ICT- is often used as a synonym of information technology. ICT consists of all technical means used to handle information and aid communication, including both computer and network hardware as well as necessary software. Information and communication technologies (ICTs) are considered as critical for improving the competitiveness of European industry and, more generally, to meet the demands of its society and economy. ICTs affects many aspects of everyday lives, at both work and in the home¹⁴². As previous chapters have pointed out, the more internal and isolated valleys of the Alps are experiencing depopulation and ageing of the local communities. In order to deal with these phenomena, ICT technologies can provide an innovative and effective tool, able to create new job opportunities.

While ICTs have became available to a wider public, in terms of accessibility and cost, there remains a gap between users and non-users, often referred to as the "digital divide". This may be attributed to a number of factors, including: a lack of infrastructure (particularly in remote rural areas), or a lack of computer literacy/skills necessary to take in the information society, or a lack of awareness or interests in what the information society can offer; tracking this divide provides important policy insight¹⁴³.

Nowadays, in the ICTs context are emerging significant technologies and normative differences which oppose the diffusion of shared territorial informative systems in the involved areas. In order to bridge the gap and the incompatibilities between existing infrastructural networks in different realities and Countries, the attention will be focused on the creation of technological platforms able to spread and share telematic services and information to Public Administration, SMEs and general users in the Alpine transnational

¹³⁹ Sascha O. Becker, Andrea Ichino, Giovanni Peri, *How large is the brain drain in Italy?*, CESIFO Working Paper n° 89, Category 4: labour markets, January 2003

¹⁴⁰ Ut supra

¹⁴¹ http://www.spiegel.de/wirtschaft/soziales/0,1518,742639,00.html and http://www.forschung-und-lehre.de/wordpress/?p=6825

¹⁴² EUROSTAT, Europe in figures, Eurostat yearbook 2010, European Union, 2010.

¹⁴³ Ut supra.

territories. For example, Alpine Technological Platform (PTA) project, promoted by IREALP¹⁴⁴ is going into this direction, aiming at a social and economic sustainable development in the Alpine chain between Italy and northern Europe.

The implementation of ICTs may represent the occasion to invert territorial and geographical hierarchies, offering the opportunity to marginal areas to play a leading role in innovation processes. Thanks to projects aimed at invest in communication and knowledge sharing, benefits could be directly spread locally into the involved areas; one of the further advantages offered by this kind of technologies is the possibility to easily work at a distance and to be in contact with colleagues and other people. The integration of ICTs in daily life by local communities show how, by using them smartly and dapring them to local needs, it is possible to get over physical and psychological barriers. A concrete example is offered by Polo Poschiavo, a pool of expertise realized by the Swiss Institute of Pedagogy, aimed at professional training specialized in at-distance training in Swiss Poschiavo valley, next to the Italian border. Thanks to this project, transnational relations between Italian and Swiss regions have been empowered and strengthened at all scales.

¹⁴⁴ Istituto di Ricerca per l'Economia e l'Ecologia applicate alle Aree Alpine, an environmental and research Institute of Region Lombardia.

6. Welfare, health and disability services

Welfare conditions and perspectives are rapidly and generally involving the whole of Europe and the Alpine area as well. In particular demographic changes and new dynamics of population are generating great challenges for the programming and forecasting of adequate responses to the upcoming needs. It can be expected that in the future an increasing number of older people will be living alone so that informal care from other household members will not be available. Increased labour force participation of women will also reduce the supply of informal care. Thus, improving professional social care and support for independent living is rapidly becoming a priority. The future health status of the population will depend to a large extent on current health behaviour¹⁴⁵.

Social housing, homelessness and integration are questions which play an important role within the social policy plans. Adequate housing is a basic requirement of life and housing conditions impact not only on the physical health of people, but also in their mental wellbeing and family formation. Housing conditions reflect socio-economic status and household makeup¹⁴⁶.



Nowadays an important phenomenon plays a key role in determining high levels of welfare and acceptable social conditions: the ageing of the population, a spread phenomenon in all European Countries (see chapter 2, paragraph: "Ageing of the population"), which is particularly evident in the Core Alpine area. The

¹⁴⁵ EUROPEAN COMMISSION, The social situation in the European Union 2005-2006

¹⁴⁶ Ut Supra

"old to young age dependence ratio" (see map 2.17) reflects the presence of different realities through Alpine countries. The indicator relates the number of over 65s to that of the under 15s, showing how many persons of retirement age there are for every hundred children and adolescents. This specific indicator compares the two non-working sections of the population to each other, i.e. those definitely no longer working and the young people who will be working in the future. As a consequence, it shows clearly what kind of demographic trend a municipality is likely to experience and what kind of infrastructure (e.g. schools and facilities for the care of the elderly) will be needed there in the future.

As a rule, three population segments tend to form single households: single older persons, divorced or separated persons of the middle generation, and young singles, often establishing their first household at a place of work or training. Across the Alpine arc (see map 6.1), the rate of single person households mostly ranges between 20% and 35%. Regional differences are the result of traditions of social living as well as of different economic situations and the degree of urbanization. In Austria, for instance, the rate depends on the size of the municipality and the agricultural rate¹⁴⁷.



Migration behaviour is another demographic impact factor. The map therefore shows a significant difference between the western and the southern part of the Alpine arc (France – except for Western Savoie ,Italy, Switzerland) with single-person household rates above 25% and the East (Austria, Slovenia) with rates below 25%. A continuous zone with rates above 25% has emerged in the municipalities of the Italian Western Alps, which suffer from emigration. Outside this band, neighbouring municipalities often

¹⁴⁷ Statistik Austria 2007

differ by about 10% with respect to this rate. Within the agglomerations, Austrian Alpine towns have the highest rates of single-person households. Attractive tourist regions also exhibit an above average rate (Salzkammergut, Engadin, Berner Oberland).

If we consider the elderly age group, we see that a high percentage of older singles is often characteristic of areas with an age imbalance resulting from low birth rates and/or emigration of the younger population. A low rate of older persons among the single person households is therefore also a measure of economic prosperity. The average proportion throughout the entire Alpine arc is about 30%. With figures above 35%, the Italian Alps (with the exception of South Tyrol) often exceed the average significantly. This is due to a massive exodus of the younger population from this region. Comparatively high figures are also frequently found in the French Alps (except in Western Savoy) and in the Swiss Alps, here alongside municipalities with below average figures, as well as in small areas of Austria (Salzkammergut, Lower Austrian Alps, Klagenfurt basin). There high figures also indicate an urban lifestyle. In contrast, particularly low figures can be found in South Tyrol, in western Austria and in Slovenia. Slovenia has above average household sizes compared with the other Alpine countries which, in combination with the low rate of older single person households, implies that large multi-generation families are still more common there. The country also has one of the lowest divorce rates in Europe. Both the French and the southern Swiss Alpine areas are characterized by high diversity within a small area in terms of this indicator¹⁴⁸.



In the case of Germany, in line with low unemployment and good earning potential in the Alps, the rate of welfare recipients in the region was in 2009 at 4.6 per 10,000 inhabitants, with below average values (Bavaria 6.5). Comparatively high values occur in the cities, extremely low levels in the districts of Rosenheim and Berchtesgaden. In contrast, the number of housing benefit recipients was slightly higher

¹⁴⁸ TAPPEINER U., A. BORSDORF & E.TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

than the Bavarian average. This is a reflection of the region's tight housing market where price levels exceed in part that in northern German metropolitan regions.

The security situation in 2009 was better in the Alps than in Bavaria as a whole. The region recorded 4,700 crimes per 100,000 inhabitants, whilst in Bavaria it was 5,000. However, here too were significant differences between cities and counties. The district of Ostallgäu had the lowest rate with approx. 3500 crimes per 100,000 inhabitants, whilst the city of Rosenheim had the highest rate with approx. 9300 crimes.



The majority of the Slovenian population is guaranteed access to social welfare services in the Republic of Slovenia. Although accessibility is still limited by an inadequate network of services and programmes (insufficient capacities and uneven regional distribution), difficulties in financing and frequently the poor provision of information or even stigmatisation of potential system users, the network of services is expanding. The service network of social work centres, special social institutions for adults and institutions for training children with special needs has remained unchanged over the years. Networks of protection and work centres for adults with physical and mental developmental disorders and old people's homes have in the last 10 years undergone wide extensions both in terms of capacity and the number of units¹⁴⁹. There are also more systemic possibilities for homecare and more elderly day-care centres, and in some places sheltered housing for elderly people has begun to operate. In

comparison with the past, the network of services is primarily expanding by opening smaller units in places where there were no such facilities before, and therefore both the regional accessibility and the quality of dwellings improved. The providers of services are public institutions, private providers with concessions operating as part of the public network, private entities with work permits operating outside the public network, and non-governmental organisations. The supply of services began to expand through private undertakings and non-governmental organisations, particularly after 2000.

The demand for the care for elderly people in Slovenia is increasing. Although the access to long-term care has substantially improved, longer life expectancy, the increasing number of elderly people and the lower capacity (altered abilities and possibilities) of families to provide for care continue to increase the scope of services required rapidly. Usually, the previous development of long-term care was aimed primarily at setting up capacities of institutional care. In 2005, there were 4.4 places (5.3 if vacancies in special social welfare institutions are included) per 100 inhabitants aged 65 and over in Slovenia, which is close to the

¹⁴⁹ In 1995 there were 39 protection and work centres in Slovenia with a total capacity sufficing for 1,427 people in care, whereas in 2005 the number of such centres increased to 78 units, which included 2,695 people in care. There were 47 old people's homes in 1995 with a total capacity of 10,757 places, while in 2005 their number increased to 68 with a total capacity of 13,641 places.

figures recorded in the more developed European countries. However, Slovenia does lag behind according to the scope of home care and other non-institutional forms of assistance, which are provided to less than 2% of the population aged 65 and over.

Health is an important priority for European society, who expected to be protected against illness and disease – at home, in the workplace and in the spare time. The health status of a population is difficult to measure because it is hard to define among individuals, population, cultures, or even across time¹⁵⁰. Health indicators strictly relate to the concept of "quality of life".

Mountain areas suffer a great inequality concerning the offer of social and medical care. The mountain *milieu* is certainly marked by its geography, concerning the access to health care and social information. It would be hazardous not to distinguish between the health problems of the population in touristic and industrial valleys, with numerous communication facilities and relatively favoured in health care offer, and those of mountain population which are more agrarian and characterized by spread housing and isolated villages. In those different areas, social groups are also diversified. Farmers, workers, employers, shop-assistants and craftsmen experience very different conditions of work and living which trigger unequal risks for health. The social and economic contexts of Alpine areas do not allow people to benefit from the same health care system as the people living in cities or urban areas with the same social conditions, who work in a denser and more diversified professional background. In an area that is relatively poor in health practitioners, mountain populations experience some new difficulties to access specialized and technical health care. For emergencies, general practitioners and pharmacists could be the only available recourse which considerably enlarge responsibilities, compared to their urban colleagues¹⁵¹.

This diversity is due not only to geographical reasons but also to their various economic development and sociological composition.

One of the main trends visible today, both at European scale and referred to the Alpine area, concerns the decrease of hospital beds available for citizens. A considerable share of the observed reduction in hospital beds is likely to have been caused by the drop in the length of hospital stay (e.g. Italy has the highest rates for shortest stays and "day hospital" cases). Another reason are the financial constraints which arose during the 1990s and which have led to a rationalisation of healthcare services everywhere. The increased demand for healthcare for elderly people, many of whom are suffering from chronic disability and diseases, has in most cases been met by transferring beds for acute or psychiatric care to long-term care, while total numbers are still declining¹⁵². This phenomenon is particularly evident on the Italian part of the Alpine arc.

¹⁵⁰ EUROSTAT, Europe in figures, Eurostat yearbook 2010, European Union, 2010.

¹⁵¹ D. SMIROU, *La santé, un critère pertinent de définition?*, Revue de Géographie alpine, 1984, vol. 72, N° 72-2-4.

¹⁵² EUROSTAT, The social situation on the European Union 2005-2006, april 2006.

Map 6.6 – Road distance to nearest hospital

Road distance (km) to the nearest hospital by NUTS-4 level



SOURCE: TAPPEINER U., A. BORSDORF & E.TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy - Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008

Map 6.7 - Distance to the next medical cabinet in Switzerland



http://www.bfs.admin.ch/bfs/portal/de/index/regionen/03/dos/dienstleistungen_/08/14.parsys.0001.PhotogalleryDownloadFile1.tmp/k21.68s.pdf

Map 6.8 – Hospitals density in Switzerland

Hospitals per 10,000 inhab. and hospital complexes' location, in 2001



Spatial and temporal distance to the nearest hospital is an important indicator of medical provisions and of the recuperation situation of the patients. Distance is the most important criterion for patients when choosing a hospital¹⁵³. About 90% of all Alpine municipalities are situated within less than 25 min or 20 km of a hospital, but this is only a part of the picture. The distribution of ambulance stations, whether central or decentralized, the availability of an air ambulance or the technical equipment of the ambulance stations are further factors. Short access distances or times however remain the most important.

The shortest times to hospital are found in Liechtenstein, followed by Germany and Switzerland. Slovenia remains last, with ca. 20% of municipalities being situated more than 30 minutes away from the nearest hospital; other critical areas are located in south-western French Alps, Tirol and Osttirol. Across the entire Alpine area, over 97% of the population live within a 25 minutes radius of a hospital. In Switzerland, medical provision is on a generally high level: "96% of the population can reach the nearest hospital within less than 15 min"¹⁵⁴. Nevertheless, specifically the Gotthard region and the southern Valais show high distances to the next hospitals; and, with respect to the number of hospitals per 100'000 habitants, the Engadine valley shows an especially low value. And when the distance to the next medical cabinet is graphically represented (see figure 6.7) even northern perialpine areas show a low accessibility.

Information on availability of medical working force is relevant in order to plan regional and national health care assistance and to programme the academic courses' offer. The rate of number of doctors per inhabitants in 2009 reaches a quite high mean value for Italy, only lower than the Austrian one in the Alpine area. According to ISTAT, the number of general and specialized practitioners, who operate in public and private medical structures, is 412.5 per 100,000 inhabitants, at the national level. A more in-depth analysis reveals considerable variations between Regions within the entire Country. Even at a smaller scale, in the Alpine area, differences are present and clearly visible: the north-eastern part of Italy (which includes the Autonomous Provinces of Trento and Bolzano/Bozen, Belluno and the Alpine sector of Friuli - Venezia Giulia) is the one exhibiting the lowest Italian rates (between 260.9 and 343.8). The situation is better in the middle-western Alpine Regions, even if their rates are generally lower than the Italian average value (except for Liguria, which again can boast a remarkable value of 806 doctors per 100,000 inhabitants, the highest in Italy).¹⁵⁵

In Germany, the indicators show that the Alpine region has a more favorable situation than Bavaria as a whole in all areas of health care. In fact, with a population share of just under 12% of the Land Bavaria, the Bavarian Alps have about 20% of all Bavarian hospitals. With an average of 134 hospitals beds, these are rather small facilities. There is one doctor in the Bavarian Alps for only approx. 530 inhabitants; in Bavaria, however, it is 565 (see map 6.9). Not quite as favorable, but still well above average, is the situation with dentists and pharmacies, although with marked regional differences within the Alpine area: in Ostallgäu a doctor has to care for 719 inhabitants, in the district of Miesbach only for 440. The good health care situation in the German Alps has its origin in part in the numerous spas and health resorts with a wide range of doctors and rehab clinic.

A similar situation emerges for 2008 in the field of care by the elderly. Some 15% of all Bavarian old people homes are located in the Bavarian Alps. The provision of nursing homes in the Alps, however, is only average; here the number of available places per 100 inhabitants aged 80 and more is 20.0 (Bavaria 20.6). The occupancy rate of nursing homes at 82,7% is less favorable than in Bavaria (86.6%).

¹⁵³ TAPPEINER U., A. BORSDORF & E.TASSER, Alpenatlas - Atlas des Alpes - Atlante delle Alpi - Atlas Alp - Mapping the Alps. Society - Economy -Environment. Heidelberg: Spektrum Akademischer Verlag & Springer, 2008.

¹⁵⁴ DIAMONT –. Typology of the Alps based on social, economic and environmental aspects. Final Report DIAMONT Work Package 8: Specification and Test of Data for an Alpine Wide Information System, Interreg IIIB Alpine Space Project. 2010.

¹⁵⁵ http://noi-italia.istat.it/index.php?id=7&user_100ind_pi1[id_pagina]=86&cHash=c7b46ff14c3caa25b4f65ec6c3a1a399



Access to health care in Slovenia is mostly characterized by the high level of inclusion of almost the entire Slovenian population in the compulsory health insurance system. Compulsorily insured people have the right to select a personal physician, dentist and gynecologist at the primary level and, if they need hospital treatment, the right to choose a hospital or specialist outpatient facility. In terms of the number of practicing physicians per 100,000 inhabitants there is a growing gap between Slovenia and the EU average. In the 1995-2004 period, the number of physicians per inhabitant grew in Slovenia at an average annual rate of 0.9%, while in the EU25 the annual growth rate in 1995-2003 was 1.3%. In Slovenia there were 229.8 practicing physicians per 100,000 inhabitants and 59.7 practising dentists per 100,000 inhabitants in 2004, both values still ranked in the lower half of the EU average. In 2004, the number of nurses and nursing assistants per 100,000 inhabitants in Slovenia was 745, which ranks Slovenia in the upper half of EU countries. While in most EU countries nurses hold, as a rule, a higher or university degree, only one-quarter of nurses in Slovenia hold such an education. Personnel capacities at the primary level vary among statistical regions quite strongly. The data analyses show a shortage of physicians at the primary level in some parts of the Country, accompanied by an even bigger lack of specialists-pediatricians and dentists. The comparison of Slovenia with other Alpine countries as regards the number of hospital beds also indicates smaller capacities; in 2004 there were 479.9 hospital beds per 100,000 inhabitants in Slovenia, a lower number than the Swiss one (57 per 10.000 inhabitants), that of Bavaria, Austria and France, but higher than Italy¹⁵⁶. At the same time, the demand for beds earmarked for the long-term care of the elderly, the disabled or chronically ill in Slovenia is growing. In some hospitals, the problem is being dealt with by changing the intended use of hospital beds.

¹⁵⁶ WORLD HEALTH ORGANIZATION, World Health Statistics, 2007.

7. Preliminary conclusions

On the basis of a still preliminary but already rather substantial work of analysis and comparison of available evidence, this Report has revealed, first of all, that the Alpine region is currently experiencing a markedly heterogeneous demographic growth.

Differences in demographic growth are amenable, to variable extents, to accessibility, topography and altitude, socio-economic factors, position and role of the Alpine region in each Country. Areas with growing population stay side-by-side with demographic decrease areas, and similarly contrasting trends can be also be found, at lower scales, in the same regions or even provinces. In very general terms, it can be stated that population is growing in the central and in the northern part of the Alps and decreasing in the eastern Alps and in some sectors of the southern side of the crescent. All over the 20th century a pronounced difference existed between the Germanic Alps and the Italian and French Alps; today, smaller but more complex differences can be pinpointed.

According to recent data covering the years between 2001 and 2007, the on-going annual rate of population growth is high (7,5‰), thanks in particular to immigration, which has been gaining considerable strength in the last decade (in fact, total fertility rates remain sensibly below replacement).

However, a no less important finding is that the gap between concentration/polarization and marginalization is widening, with the further development and "densification" of the main valleys and along the foothill belts and the further marginalization of the more isolated valleys and of the higher lands.

Population density is generally higher in the peri-alpine areas and in the main valleys, compared to core Alpine areas. However, not even NUTS-4 classification can show us the micro-demographic differences between the slope around the valleys and the valley-floors, which are usually densely populated. Nowadays, more than half of the Alpine population lives in settlements with more than 5000 inhabitants. The rest of the population (about 45%) lives in settlements with less than 5000 inhabitants, that are often lacking in accessibility, employment and services.

Migratory fluxes also look highly heterogeneous but it can be at least noticed that they involve overall the peri-urban and the peri-alpine areas. Next to the international population movement which has become a marked social and demographic feature of the whole of Europe, the Alps also receive fluxes of older people who desire to live in a pleasant environment. Moving in the opposite direction, so to speak, young people leave in considerable numbers the highlands (and sometimes the Alpine perimeter) to search education and jobs that are more specific and qualified. Moreover, special attention deserve the existence of sizeable fluxes of commuters towards the towns and the bigger valley-floors, as well as the phenomenon of brain drain, even if the consequences of the latter are not clearly known at a local scale, due to a lack of accurate and detailed data. Micro-demographic studies show that there exist also contrary fluxes of "skilled" commuters.

Another key issue to emerge from this broad reconnaissance of main features, and predicaments, of Alpine demography is the ageing of the population, which imposes a reconsideration of the modes of provision of public services and of some specific but crucial aspects of the welfare system, not least because the localities that are most affected by ageing are the smallest and least connected with the main road network. In particular, ageing heightens the need to improve certain services (e.g. social services, hospitals, distribution of meals) and to create *ad hoc* structures. Both the decrease and the ageing of population cause the closure of services like primary schools: this entails changes in the patterns of cultural transmission and intergenerational relations, thereby affecting the whole community. Lastly, the evidence examined by the Report makes clear that in the Alpine Space there is a general dearth of secondary schools, universities and innovation centres, which contributes to generate the migration of students looking for higher education levels.

On the economic side, the effects of the world-wide economic crisis have impinged also on the Alpine economy and impacted badly on the previously growing trends of GDPs. Indeed, since 2008 GDP levels have decreased, and so have the occupational levels, going in parallel with increased unemployment rates. Unfortunately, the data are still too scanty and fragmentary to allow a clear assessment of this changed and changing situation.

All in all, it can be concluded that in the Alpine area economic development, like demographic evolution, is extremely heterogeneous and polarized. The symbiosis of tourism and services, industry, electric power generation, agriculture, transport and mobility, is the basis of sound economic development. Nowadays there are several modern poly-structured economic centres in which about 70% of the Alpine population are concentrated. Furthermore, also "soft" factors (e.g. quality of life, leisure, culture and environment, services) tend to become more important than the traditional "hard" factors (payment, infrastructures) when considering the site conditions for setting up new enterprises with a high-quality labour force.

As established by the X Alpine Conference (Evian, 2009), the main aim of the Working Group on Demography and Employment was to deliver a preliminary paper which would provide a broad picture of these issues in the Alps and to identify the main tasks for further research and analysis. The WG, in respect to the objectives previously agreed, realised this preliminary Report in order to bring out through as a straightforward and precise work as possible the several dynamics at work in the Alpine area. The support of well-known general studies, the empirical evidence yielded by extant surveys and researches, and the availability of accurate charts have all helped to give the Report what we reckon to be a satisfactory degree of authoritativeness. On the other hand, it has to be mentioned that it was not possible for all the Contracting Parties to participate in drafting the report with the same degree of efficiency and completeness. The difficulties found by some Parties to provide direct information on some relevant issues has resulted in a certain lack of homogeneity in the data set. Until now this hasn't allowed an adequate balancing of the contributions from different regions in the report, nor a detailed comparison of the figures. As a result, it was often not possible or more difficult than initially envisaged to apply a case-study approach. Thus, in the future, the highest priority should be granted to the task of filling the gaps and harmonizing the data, in order to proceed to the more balanced and wider analyses and comparisons that are needed in order to understand in greater depth current phenomena and trends.

It is also very important to notice that the incoming national censuses, to be carried this year (2011), will offer the opportunity to dispose for the whole Alpine area of a larger and more up-to-date amount of data, which will permit to outline a more precise demographic framework, to assess the extent and direction of the changes occurred in the past decade, and to lay a wider and sounder basis for demographic projections. Furthermore new and more detailed data on the economic situation and trends are expected to be issued.

The collection of good practices also needs to be extended with contributions from all the Countries and a specific focus on the "tailored" political actions that have been devised to deal with phenomena such as the brain drain and the marginalization of the areas which are more acutely suffering from the ageing of the population and its related processes.

The evidence collected and systematized by the WG also strongly suggests that behind the naked figures which measure the declining or growing number of inhabitants or even the structural ageing of the Alpine population hide compositional changes. An all-important issue is represented by the compositional changes many upland communities are experiencing in their ranks owing to the "immigration" of new inhabitants, generally younger than the majority of the local population, mostly coming from the lower reaches of the Alps or indeed from the cities in the plains, and quite often also from afar. Needless to say, these compositional changes must be especially pronounced in those areas where population is growing in spite

of a negative or at best stationary natural balance of births and deaths. But even in those municipalities where the number of inhabitants is falling there are such flows of immigration.

Although studies are still few and far between, there seems to be evidence that quite often these "new highlanders" are those who are most active in finding ways to revamp local economies. Somewhat paradoxically, these newcomers may also be those who are keenest to defend and revitalise local traditions and cultures and to promote a revival of local craftsmanship as part of a more general attempt to preserve the cultural heritage and strengthen local identities. Quite often they are, in a word, those who try to devise and promote "good practices" from below, possibly blending tradition and creativity. This largely novel socio-demographic phenomenon – a still largely unknown quantity which is nevertheless likely to play an important role in the future development in the Alpine region – must be better measured and understood through a collection and sifting of the available studies which requires a more delicate analysis than has been possible in the time span allowed to the WG.

For the above mentioned reasons, the WG considers that a prosecution of the research work will undoubtedly produce a further refinement of the assignment, aiming at obtaining more-in-depth and wider considerations and trends.

Annex A: Charts, tables and maps

Maps A.1 and A.2 – Total Fertility Rates in Austria

Average number of born alive per women in 1990 and 2000



Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Maps A.3 and A.4 – Mortality Rates in Austria

Standardised death rates per 100,000 inhabitants in 1969-1973 vs 1988-1994





Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Maps A.5 and A.6 – Projections of population development in Austria

Projections of population development 2001-2031 vs projections of of natural population growth in 2031





Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Map A.7 – Young-age dependency ratio in Austria

Residents aged 15-64 to residents aged <15 in 2001



Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Map A.8 – Commuters balance in Austria

Difference between in-commuters and out-commuters in % of inhabitants in 2001



Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Map A.9 – Primary sector in Austria



Development in the number of agrarian enterprises 1970-1999

Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Map A.10 – Tourism intensity in Austria

Overnight stays per inhabitant in 2000



Source: BORSDORF, A., Das neue Bild Österreichs. Strukturen und Entwicklungen im Alpenraum und den Vorländern, Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2005

Chart A.11 – Predicted population change by 2029

Population trend in Germany 1999-2009 and projections for 2009-2029





Map A.12 – Number of farms in Bavaria

Farms per 1000 inhabitants in Bavarian NUTS-3 in 2007



Source of data: LfStaD, GENESIS Map design: StMWIVT, Statistics, Analysis, Economic and Regional Monitoring

Map A.13 – Tourist intensity in German Alps



Map A.14 – Unemployment rates in Germany

Unemployed per 100 working people in 2008



Source: http://ims.destatis.de/indikatoren/Default.aspx

Chart A.15 – Population change in Italy 2001-2007-2010 by NUTS 3 and NUTS 2 levels

Total resident inhabitants in the Italian Alpine Area by NUTS 3 and NUTS 2 levels. Population taken at the 1st of January of each year

				Variation	Variation	Variation	On-going annual	On-going annual	On-going annual
				2001-2007	2007-2010	2001-2010	rate of pop. growth	rate of pop. growth	rate of pop. growth
TERRITORIAL LEVEL	2001	2007	2010	(%)	(%)	(%)	2001-7 (‰)	2007-10 (‰)	2001-10 (‰)
Torino	2.165.619	2.248.955	2.297.598	3,848	2,163	6,094	6,29324	7,13286	6,57311
Vercelli	176.829	176.705	179.798	-0,070	1,750	1,679	-0,11691	5,78411	1,85009
Biella	187.249	186.938	186.698	-0,166	-0,128	-0,294	-0,27705	-0,42822	-0,32744
Verbano-Cusio-Ossola	159.040	161.640	163.121	1,635	0,916	2,566	2,70265	3,04021	2,81517
Novara	343.040	357.688	368.864	4,270	3,125	7,528	6,96901	10,25564	8,06455
Cuneo	556.330	573.613	589.586	3,107	2,785	5,978	5,09888	9,15521	6,45099
Piemonte	4.214.677	4.352.828	4.446.230	3,278	2,146	5,494	5,37547	7,07693	5,94262
Varese	812.477	855.400	876.705	5,283	2,491	7,905	8,58026	8,20046	8,45366
Como	537.500	572.441	590.050	6,501	3,076	9,777	10,49682	10,09920	10,36428
Lecco	311.452	327.510	337.912	5,156	3,176	8,496	8,37889	10,42231	9,06003
Sondrio	176.856	180.429	182.709	2,020	1,264	3,309	3,33358	4,18579	3,61765
Bergamo	973.129	1.044.820	1.087.204	7,367	4,057	11,722	11,84721	13,25488	1 2, 31643
Brescia	1.108.776	1.195.777	1.242.923	7,847	3,943	12,099	12,58991	12,88989	12,68991
Lombardia	9.032.554	9.545.441	9.826.141	5,678	2,941	8,786	9,20475	9,66088	9,35679
Imperia	205.238	217.354	221.885	5,903	2,085	8,111	9,55951	6,87729	8,66544
Savona	272.528	283.218	287.315	3,923	1,447	5,426	6,41259	4,78742	5,87087
Liguria	1.571.783	1.607.878	1.615.986	2,296	0,504	2,812	3,78411	1,67667	3,08163
Bolzano - Bozen	462.999	487.673	503.434	5,329	3,232	8,733	8,65337	10,60251	9,30308
Trento	477.017	507.030	524.826	6,292	3,510	10,022	10,16967	11,49887	10,61274
Trentino-Alto Adige	940.016	994.703	1.028.260	5,818	3,374	9,387	9,42455	11,05971	9,96960
Verona	826.582	880.230	914.382	6,490	3,880	10,622	10,48069	12,68840	11,21659
Vicenza	794.317	844.111	866.398	6,269	2,640	9,075	10,13356	8,68679	9,65131
Belluno	209.550	212.365	213.876	1,343	0,712	2,064	2,22402	2,36331	2,27045
Treviso	795.264	857.359	883.840	7,808	3,089	11,138	12,53043	10,13977	11,73355
Veneto	4.527.694	4.773.554	4.912.438	5,430	2,909	8,498	8,81306	9,55975	9,06196
Pordenone	286.198	303.258	313.870	5,961	3,499	9,669	9,65001	11,46499	10,25500
Udine	518.840	531.603	541.036	2,460	1,774	4,278	4,05024	5,86295	4,65447
Gorizia	136.491	141.229	142.627	3,471	0,990	4,496	5,68733	3,28338	4,88602
Friuli-Venezia Giulia	1.183.764	1.212.602	1.234.079	2,436	1,771	4,250	4,01155	5,85216	4,62508
Valle d'Aosta	119.548	124.812	127.866	4,403	2,447	6,958	7,18177	8,05808	7,47388
It-Alpine Provinces (NUTS-3)	12.612.869	13.272.158	13.644.523	5,227	2,806	8,179	8,49180	9,22325	8,73562
It-Alpine Regions (NUTS-2)	21.590.036	22.611.818	23.191.000	4,733	2,561	7,415	7,70680	8,43053	7,94804
ITALY	56.995.744	59.131.287	60.340.328	3,747	2,045	5,868	6,13060	6,74683	6,33601
EU-15	308.667.715	319824773	324.150.225	3,615	1,352	5,016	5,91799	4,47793	5,43797
EU-27	483.797.218	495291925	501.090.520	2,376	1,171	3,574	3,91358	3,87981	3,90232

LABEL:

- Sondrio = completely Alpine territorial levels

- Torino = Province (NUTS 3)

- Piemonte = Region (NUTS 2)

- ITALY = National or Supranational level

- Italian data 2001, source ISTAT: http://dawinci.istat.it/MD/index.html (census)

- Italian data 2007 and 2010, source ISTAT: http://demo.istat.it/ (estimates)

- EU data 2001 and 2007, source EUROSTAT:

http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00001&plugin=1

EU data 2010, source EUROSTAT: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tps00001&plugin=1 (provisional values)

- Elaboration: Italian delgation

- Date of extraction: 20 Dec 2010

Chart A.16 - Birthrate, mortality rate, natural population growth, migratory balance, total population growth

Mean annual birthrate, mortality rate, natural population growth, migratory balance, total population growth in the Italian Alpine provinces (NUTS-3) and Regions (NUTS-2) from 2006 to 2009

Provinces (NUTS-3) and		Bi	thrate	(°%) é			Mortal	ty rate (%o)	Natui	al popt	lation	growth	(%o)	Net	nigrat	ory bala	ince (%)		Fotal p	opulat	ion gro	wth (‰	_
Regions (NUTS-2)	2006	2007	2008	2009 2	006-2009	2006 2	007 20	08 2005	2006-2009	2006	2007 2	008 2	009 200	6-2009 2	006 2	007 2(008 200	9 2006-2	009 20	06 20(07 200	8 2009	2006-2	600;
Torino	8,9	9,1	9,3	9,1	9,1	9,8	9,9	10,1 10,2	10,0	-0,9	-0,8	-0,8	-12	-0,9	3,5	13,5	6,7 4	t,0 6,9		2,6 1	2,7 5	,8	6, <mark>C</mark>	
Vercelli	7,8	8,3	7,7	7,7	7,9	12,7	12,5	13,1 13,	12,9	-4,9	-4,2	-5,4	-5,4	-5,0	3,1	7,9	20,8	8,7 8,9		-18	3,7 15	,4 -1	3,5	
Biella	7,8	7,7	7,8	7,5	7,7	12,7	12,3	12,5 13,	12,6	-4,9	-4,5	-4,8	-5,6	-4,9	11	7,5	3,8 2	2,3 3,7	×	3,8	3,0 -0	°	-1,5	0
Verbano-Cusio-Ossola	8,2	7,6	7,8	8,0	7,9	11,3	1,1	11,7 TIL	11,4	-3,1	-3,5	-3,9	-3,6	-3,5	3,5	7,7	6,6 5	5,9		0,4	4,3 2	7 2	1 2,4	
Novara	9,3	9,4	9,3	9,1	9,3	10,5	10,0	10,9 10,6	10,5	-12	-0,6	-1,6	-15	-1,2	7,8	12,3	14,1 7	,9 10,	2	6,6	11 12	.'e e,	9.3	
Cuneo	9,1	9,3	9,5	9,5	9,4	11,2	11,3	11,4 TI,ƙ	11,4	-2,1	-2,0	-1,9	-2,1	-2,0	5,3	14,0	11,3 8	8,1 9,7		3,2 1	2,0 8	,4 6	1 7,7	
Piemonte	8,7	8,8	9,0	8,8	8,8	10,9	10,8 1	1,2 11,2	11,0	-2,2	-2,0	- 2,2 -	2,4	-2,2	4,8	13,1	9,3 5,	5 8,2	2	,6 1	1,1 7	,1 3,	6 ,0	
Valle d'Aosta	10,0	9,9	10,2	10,3	10,1	10,0	10,2	0,9 10,0	10,0	0'0	-0,3	0,3	0,3	0,1	6,7	9,6	8,3 6,	0, 7,7	9	,7 9	,3 8	6 6,3	1,7	
Varese	9,7	9,6	9,7	9,7	9,7	9,0	9,1	9,4 9,2	9,2	0,7	0,5	0,3	0,6	0,5	7,2	8,5	9,3 5	5,5 7,6		2,9	3 0'6	,6 6,	0 8,1	
Como	9,8	9,8	6,6	10,1	9,9	8,8	8,8	9,3 9,0	9,0	10	10	0,6	11	0,9	8,7	8,9	10,7 7	7,9 9,0		9,7 1	0,0	13 9,	10,	0
Lecco	6'6	10,1	10,2	10,0	10,1	8,6	8,7	8,6 9,	1 8,7	13	1,4	1,7	6'0	1,3	6,2	11,1	9,8 é	3,5 8,4		7,5 1	2,4 1	1,4 7,	1,9.7	
Sondrio	9,3	8,8	92	8,6	9,0	9,3	9,8	0,0	9,7	0'0	-10	-0,8	-11	-0,7	3,6	6,0	4,9 4	1,5 4,8		3,6	5,0	4,1 3,	t 4,0	
Bergamo	10,9	10,8	11,2	11,2	11,0	8,2	8,2	8,4 8,5	8,3	2,7	2,6	2,8	2,9	2,7	7,8	11,5	12,2 7	7,9 9,8	•	0,5 1	4,0 1£	0,00	12.	9
Brescia	11,0	111	π1	11,0	11,1	8,2	8,2	8,4 8,6	8,3	2,8	2,9	2,7	2,4	2,7	8,4	10,3	12,4 7	7,9 9,7		11.2 1	3,2 15	,2 10,	3 12.	5
Lom bardia	10,0	10,0	10,2	10,1	10,1	8,9	8,9	3,3 9,2	9,1	1,1	1,1	0,9	0,9	1,0	6,3	9,0	9,4 7,	6 8,1	7	,4 10	0,1 10	3 8,5	9,1	
Bolzano	μn	11,2	11,0	10,4	10,9	7,6	7,5	7,8 7,6	2'6	3,5	3,7	3,2	2,8	3,3	6'9	9,1	6,7 é	3,3 7,3	1	0,4 1	2,8 10	6 0'	10,	9
Trento	10,3	10,1	10,5	10,3	10,3	9,0	9,0	9,0 8,1	9,0	13	11	1,4	15	1,3	7,6	11,2	11,0 6	3,2 9,5		8,9 1	2,3 12	5 9,	10.	0
Trentino-Alto Adige	10,7	10,7	10,7	10,3	10,6	8,4	8,3	1,4 8,2	8,3	2,3	2,4	2,3	2,1	2,3	7,4	10,1	8,9 7,	2 8,4	6	,7 12	,5 11	2 9,3	10,	7
Verona	10,3	10,4	10,6	10,3	10,4	8,6	8,7	8,8 8,5	8,8	17	16	1,8	14	1,6	6'6	16,5	11,7	5,1 10,8	. 8	116	18,1 15	,5 6,	5 12.	4
Vicenza	10,7	10,6	10,6	10,2	10,5	8,1	8,4	8,5 8,5	8,4	2,6	2,2	2,2	17	2,2	3,7	7,4	8,9	3,7 5,9		6,3	9,6	1,1 5,	1 8,1	
Belluno	8,3	7,9	8,5	8,1	8,2	11,6	11,6	2,0 11/	11,7	-3,3	-3,7	-3,5	-3,3	-3,5	4,2	9,5	5,4 2	2,6 5,4		0,9	5,9	()0,	7 2,C	
Treviso	10,8	10,9	10,7	10,3	10,7	8,1	8,4	8,5 8,5	8,3	2,7	2,5	2,2	2,0	2,3	6,6	11,6	9,1	3,1 7,6		9,3	14,1 1	13 5,	9,6	6
Veneto	9,9	9,9	10,0	9,7	6'6	8,9	9,1	,2 9,	9,1	1,0	0,8	0,8	0,6	0,8	6,4	11,4 1	10,2 4,	9 8,2	7	,4 12	,2 11	0 5,5	9,0	
Pordenone	10,0	10,3	10,01	10,1	10,1	9,5	9,4	9,9 9,9	9,7	0,5	6'0	0,1	0,2	0,4	9,6	13,5	15,0 4	10,7		10,1	4,4 1	5,1 4,	3 11,	-
Udine	8,3	8,4	8,3	8,3	8,3	10,9	10,8	11.2 11.	11,0	-2,6	-2,4	-2,9	-2,8	-2,7	6,0	10,6	9,9 5	5,2 7,9		3,4	8,2 6	,9 2,	t 5,2	
Gorizia	8,1	8,1	8,2	7,6	8,0	11,7	11,4	12,2 11 <u>k</u>	11,7	-3,6	-3,3	-4,0	-4,1	-3,7	3,8	8,4	7,6 5	5,2 6,3		0,2	5,1 3	,6 1.	2,5	10
Friuli-Venezia Giulia	8,6	8,7	8,6	8,5	8,6	11,3	11,2 1	1,7 11,5	11,4	-2,7	-2,5	-3,2 -	.3,0	-2,9	6,4	10,3 1	0,4 5,	6 8,2	3	7 7	,8 7	2 2,6	5,3	
Imperia	7,3	7,8	7,8	7,6	7,6	13,0	12,7	13,4 12,2	13,0	-5,7	-4,9	-5,6	-5,3	-5,4	7,0	14,2	11,6 10	0,6 10,8	8	13	9,3 6	,0 5,	5, <mark>5</mark>	
Savona	7,5	7,6	7,6	7,4	7,5	13,1	12,8	B,2 B,	13,1	-5,6	-5,2	-5,6	-5,8	-5,6	8,0	11,7	π1 ε	3,2 9,7		2,4	6,5 5	,5 2,	8 4,2	<u>.</u>
Liguria	7,5	7,6	7,7	7,6	7,6	13,1	13,1 1.	13,5	13,3	-5,6	-5,5	-5,7	5,9	-5,7	4,1	6,7	9,0 6,	4 6,6	-	,5 1	,2 3	3 0,5	0,9	
ITALY	9,5	9,5	9,6	9,5	9,5	9,5	9,6	3,8 9,6	9,7	0,0	-0,1	- 0,1	0,3	-0,1	6,2	8,4	7,3 5,	3 6,8	6	,2 8	,3 7	,1 5,0	6,7	
North	9,5	9,6	9,7	9,5	9,6	9,9	9,9 1	,2 10,:	10,0	-0,4	-0,3	- 0,5	0,6	-0,5	6,5	10,8 1	10,5 T,	0 8,7	•	6,1 10	,5 10	0 6,4	8,3	
North-west (Liguria, Valle d'Aosta, Piemonte, Lombardia)	9,4	9,4	9,6	9,5	9,5	9,9	9,9	1,2 10,2	10,1	-0,5	-0,5	- 0,6	0,7	0,6	5,7	6'6	9,3 6,	8 7,9	2	,2 9	.4	7 6,	7,4	
North-east (Veneto, Trentino- A.A., Friuli-V.G., Emilia R.)	9,6	9,7	9,8	9'6	9,7	9,8	9,9	0,1 10,0	10,0	-0,2	-0,2	-0,3	0,4	0,3	7,8	12,1	2,2 7,	,2 9,8	7	,6 11	11 (1	9 6,8	9'6	
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Data: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg (mainly estimates) - Elaboration: Italian delegation - Date of extraction: 23 December 2010

Label: Sondrio = completely Alpine territorial levels

Torino = Province (NUTS 3)

Piemonte = Region (NUTS 2) and supra-regional areas

ITALY = National or Supranational level
Maps A.17 – Total population growth in the Italian Alps

Mean annual total population growth (‰) 2006-2009 by NUTS-3 level



SOURCE:

Data: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg (mainly estimates) Elaboration: Italian delegation

Map: Eurac Research, Institute of Regional Development and Location Management

Chart A.18 – Indicators on population structure in the Italian Alpine Regions (NUTS-2)
Data on 1st January – years 2007-2010

	M ean population age	45	44	43	42	41	43	43	46	48	43	44	44	44
10	Old-to- young age dependency ratio (pop.>65 to pop.0-14)%	178	150	142	116	108	26	140	187	235	144	157	159	153
20	Old age dependency ratio (pop.>65 to pop.15-64)%	35	32	30	28	27	29	30	37	43	31	33	33	32
	Structural dependency ratio (pop.0- 14 + pop.265 to pop.15- 64)%	55	53	52	53	53	53	52	56	62	52	54	54	54
	Mean population age	45	44	43	42	41	43	43	46	48	43	44	44	44
60	Old-to- young age dependency ratio (pop.>65 to pop.0-14)%	179	151	142	115	<i>50</i> 2	52	139	181	236	143	157	1 60	53
20	Old age dependency ratio (pop.>65 to pop.15-64)%	35	32	30	28	27	29	30	36	43	31	33	33	32
	Structural dependency ratio (pop.0- 14 + pop.>65 to pop.15- 64)%	55	53	51	52	52	53	51	55	62	52	53	53	53
	M ean population age	45	44	43	42	41	42	43	46	47	43	44	44	44
8	Old-to- young age dependency ratio (pop.>65 to pop.0-14)%	180	152	143	113	102	24	139	188	239	14.3	15.8	161	155
200	Old age dependency ratio (pop.:65 to pop.15-64)%	35	31	30	28	26	29	29	36	43	30	32	33	32
	Structural dependency ratio (pop.0- 14 + pop.265 to pop.15- 64)%	55	52	51	52	51	52	51	55	61	52	53	53	53
	M ean population age	45	44	43	41	40	42	43	45	47	43	44	44	44
70	Old-to- young age dependency ratio (pop.>65 to pop.0-14)%	181	153	541	111	100	£3	139	188	239	142	159	162	155
20(Old age dependency ratio (pop.>65 to pop.15-64)%	35	31	30	27	26	29	29	35	43	30	32	32	32
	Structural dependency ratio (pop.0- 14 + pop.365 to pop.15- 64)%	54	51	50	52	51	52	50	54	61	52	52	52	52
	Regions (NUTS-2)	Piemonte	Valle d'Aosta	_ombardia	Trentino - Alto Adige	Bolzano-Bozen	Trento	Veneto	Friuli-Venezia Giulia	-iguria	TALY	North	No rth-west	No rth-east

Chart A.19 – Foreign citizens resident by sex and province (NUTS-3)

In blue the provinces where the	province's capital is within	the Alpine Convention	perimeter; data: 1 st	January 2008
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Provinces	Males (number of inhabitants)	Females (number of inhabitants)	Total (number of inhabitants)	% on the resident population	%of foreigners resident in the provincial capital(s) on the foreigners resident in the considered administrative level
Torino	80.134	84.458	164.592	7,2	62,5
Vercelli	5.445	5.505	10.950	6,2	34,8
Biella	4.325	5.016	9.341	5,0	32,2
Verbano-CO.	3.289	4.090	7.379	4,5	28,8
Novara	12.733	12.355	25.088	<mark>6,9</mark>	35,4
Cuneo	21.437	21.269	42.706	7 <mark>,4</mark>	8,9
Piemonte	152.350	158.193	310.543	7 <mark>,1</mark>	45,2
Valle d'Aosta	3.120	3.484	6.604	5,2	31,6
Varese	28.451	28.070	56.521	<mark>6,5</mark>	13,5
Como	18.138	17.935	36.073	<mark>6,2</mark>	22,6
Lecco	11.157	9.907	21.064	6,4	16,0
Sondrio	2.969	3.184	6.153	3,4	21,7
Bergamo	49.513	40.009	89.522	8,4	13,6
Brescia	73.939	60.041	133.980	11,1	21,7
Lombardia	425.849	389.486	815.335	8,5	31,7
Bolzano-Bozen	16.258	16.687	32.945	6,7	30,2
Trento	18.888	19.001	37.889	7 ,4	24,7
Trentino-A.A.	35.146	35.688	70.834	<mark>7,0</mark>	27,3
Verona	45.065	40.997	86.062	9,6	36,0
Vicenza	44.031	38.176	82.207	9,6	18,2
Belluno	5.427	6.197	11.624	5,4	17,8
Treviso	47.010	40.966	87.976	10,1	9,9
Veneto	210.364	193.621	403.985	8 ,4	25,2
Pordenone	14.764	14.017	28.781	9,4	24,0
Udine	15.510	15.803	31.313	5,8	33,5
Gorizia	4.748	3.612	8.360	5,9	31,2
Friuli-V.G.	42.643	40.663	83.306	6 <mark>,8</mark>	40,9
Imperia	7.497	7.950	15.447	<mark>7,0</mark>	20,5
Savona	7.963	8.395	16.358	5,7	25,1
Liguria	42.827	48.054	90.881	5,6	56,1
ITALY	1.701.817	1.730.834	3.432.651	5,8	36,6
North-west	624.146	599.217	1.223.363	7,8	36,9
North-east	473.162	450.650	923.812	8,1	24,7

Data: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg (mainly estimates)

Elaboration: Italian delegation - Date of extraction: 23 December 2010

Label: Sondrio = provinces where the province's capital is within the Alpine perimeter

Torino = Province (NUTS-3)

Piemonte = Region (NUTS-2) and supra-regional areas

ITALY = National or Supranational level

Chart A.20 - Foreign resident citizens by province (NUTS-3) and region (NUTS-2), subdivided for Countries

of provenance

Absolute values at 1st January 2008

Continents and countries of				PIEMONTE								I OMBARDIA				TDENTINO	TO A DICE	si'ntron
	Torino	Vorcolli	clicity	//orbano_/	Nover			VALLE VACETA	Varaco	Como	0000	Condrio	Dordomo	Brocoio			Tranto	
TOTAL	16.4.592	10 950	0 341	7 379	25.088	42 706	310 543	6604	56 531	36.073	21064	6 153	80 522	13.3 080	815 335	32 945	37 889	70.834
EUROPA	100.415	5.344	3.915	4.120	11.715	25.306	184.266	3.139	26.263	16.192	8.673	3.070	33.639	54.220	305.068	22.629	24.675	47.304
AFRICA	37.586	4.059	3.682	1.795	9.146	13.017	80.362	2.624	15.429	11.056	8.798	1.915	35.563	44.048	232.168	4.369	7.426	11.795
Romania	73.557	1.860	1.586	792	2.647	9.303	102.569	1232	4.740	3.824	2.262	790	10.620	15.172	95.698	1.228	5.969	7.197
ASIA	11.385	861	1.207	826	2.250	2.815	21.471	280	7.816	5.372	1.612	645	12.307	31.274	172.434	4.453	3.076	7.529
Albania	9.713	1.958	731	743	4.729	9.512	38.547	738	9.685	3231	2.580	521	10.649	16.967	82.170	4.387	5.727	10.114
Marocco	23.895	2.997	3.211	1128	4.721	8.834	53.461	1.853	8255	4.422	3.199	1.494	7 0.67	1.387	89.127 405 479	2.675	4.244	6.919
	15.131	084 404	232	032	1.938	1.003	40.470	900	0.948	3.421	1.16.1	01.C	186.1	4.384	300 30	1.460	2.700	4.160
Ulcraina Ulcraina	1011	332	202	101	1852	34	5 756	52	2.120	155	367	294	2.00	4.691	24.2.48	748	1583	2 331
Filippine	2.748	86	385	25	101	287	3.901	22	654	1399	142	1	593	1448	38.873	67	164	231
Tunisia	1.948	235	123	120	980	692	4.961	491	2.301	2.165	531	70	1885	3.614	19.7.17	850	1.583	2.433
Polonia	1209	138	601	65	268	326	2.800	142	735	463	239	136	924	1262	7.495	847	1.240	2.087
Macedonia	461	31	55	110	60	2.272	6.360	49	321	243	330	322	1.842	2.531	8.552	1.909	2.724	4.633
India	551	95	53	43	308	512	1.990	75	432	184	390	147	5.566	10.252	30.994	645	293	938
Ecuador	1.534	76	29	165	439	66	4.054	10	2.167	859	563	45	1.383	413	33,365	71	396	467
Peru'	7.500	198	173	119	504	224	9.164	86	1.611	615	610	60	799	538	30.875	633	221	854
Egitto	3242	48	53	45	259	131	3.997	41	786	723	620	64	1.923	4.347	49.059	89	84	173
Moldova	3.808	131	73	88	233	400	5.613	134	328	392	409	138	608	2.990	9.746	474	1.346	1.820
Serbia e Montenegro	641	58	38	74	33	240	1.250	33	503	291	850	85	1.407	3.400	9.727	2.503	2.160	4.663
Senegal	1.519	274	42	347	1.327	730	4.706	20	1.115	810	1.646	110	7.922	6.346	24.218	229	202	431
Sri Lanka	163	65	363	62	341	59	1.198	9	1227	1.148	242	22	333	2.124	20.575	29	51	80
Bangladesh	437	2		43	208	62	764	1	1240	156	230	10	789	2.226	11.668	062	219	1.009
Pakistan	194	35	73	-	291	5	702	9	2.021	608	65	33	2.164	9.700	21639	1.987	1.336	3.323
Nigeria	2.807	125	63	24	495	223	3.952	16	321	358	123	21	1.004	1.846	6.629	46	128	174
Germania	950	50	63	291	238	285	2.155	41	1473	653	150	54	394	845	1357	4.269	615	4.884
Ghana	524	33	22	đ	563	124	1.296	ł	537	12.13	175	80	1.592	5272	026:01	146	68	214
Brasile	2.524	73	93	96	386	363	3.900	131	774	367	152	85	837	066	10.570	151	592	743
Bulgaria	359	143	93	57	153	315	1.580	8	352	192	140	69	542	407	7.519	78	231	309
Francia	2.056	62	151	121	207	654	3.541	262	883	353	139	23	390	393	7.617	77	133	210
Bosnia Erzegovina	931	59	328	4	26	312	1.942	24	190	246	114	40	1.083	1.745	4.531	764	789	1.553
Regno Unito	1.072	31	49	06	141	197	1.884	83	781	439	137	38	245	282	5.251	118	181	299
Algeria	364	64	46	34	#1	114	866	113	236	268	198	35	267	1.162	4.319	206	694	906
Russa, Fed.	727	63	57	51	131	144	1.640	35	356	281	109	101	344	564	4239	127	166	293
Cro azia	377	227	34	3	59	88	907	30	164	135	97	45	376	869	3.182	499	566	1.065
Rep. Dominicana	365	173	50	69	160	180	1.241	152	483	385	152	63	314	261	4.518	103	217	320
Colombia	575	44	32	23	57	92	1.050	4	269	193	95	93	296	717	4.047	185	395	580
Spagna	1.055	56	33	40	115	104	1.573	19	453	220	59	37	304	281	4.584	54	115	169
Costa d'Avorio	714	92	8	29	305	852	2.154	27	179	130	867	9	1.396	1.142	6.831	6	50	69
Stati Uniti	403	ξΩ	4	8	38	73	670	32	188	149	41	19	94	127	2.291	36	64	100
Cuba	741	31	42	55 25	85	157	1.281	49	269	181	107	53	417	449	3.514	131	196	327
1 urcma	-123 EE3	0 2	ξ1 c	<u>0</u> 4	333	8	1450	5	241	2.504	0'S 94	94	18	3FC	60/·G	6/1	140	239
	000 46F	5 6	50 7	07 (¢	45 CC	2002	2011	-1 1	573 E1	₹ ¢	6	500	202	0.0	0.040	\$	PF Q	10
Svitzera	505	2 ¢	đ	01 74:0	27 87	346	1487	33	009	547 C	5 K	5 02	187	00 90	2.834	476	₽ 2	01
Maurizio	145		2 00	2	24	9	103		161	06	8 8	4	Ę ₽	97	2620		8 ,	-
Burkina Faso	57	-	4		00	226	308		Ħ	113	594		888	1203	3.267	9	57	63
PaesiBassi	249	4	22	46	55	61	555	16	575	175	43	10	121	233	2.070	109	139	248
Slovacchia	120	4	4	18	41	22	272	8	62	64	31	9	140	105	956	1.498	201	1.699
Etiopia	132	9	9	10	9	6	189		29	52	50	8	195	014	1372	7	40	47
Grecia	273	4	3	1	25	42	336	2	133	21	7	8	38	83	1.181	30	30	60
Giappo ne	250	32	14	13	41	35	439	4	55	67	38	2	54	57	2.731	27	20	47
Camerun	405	10	2	4	67	106	606	8	92	4	42	5	56	201	1320	7	42	49
Iran	390	5	4	9	20	16	482	6	58	21	4	12	59	95	1258	77	38	115
Austria	107	7	9	đ	30	24	224	-	106	67	29	σ	69	121	977	1.492	96	1.588
OCEANIA	55		5	. J	14	13	115	e d	34	24	10	7	20	27	376	7 20	6	16
Stateless Ather Countries	1906	1 226	363	975	000	46.42	10	200	2603	2026	12.14	120	0	17	03765	12.14	C 14 AF	2006
	2225	222	222	2.4	344	5	100	200	2222	2002	2	222	1000	>>>>	20114	200	***	2000

Continents and countries of			VENETO			H	-RIULI - VENE	ZIA GIULIA			LIGURIA		ALPINE AREA (whole	adminstrative levels)	AREA		ПАЦ
provenance	Verona	Vicenza	Belluno	Treviso	VENETO	Pordenone	Udine	Gorizia	FRIULI - V.G	Imperia	Savona	LIGURIA	PROVINCES	REGIONS	North-west N	orth-east	
TOTAL	86.062	82.207	11.624	87.976	403.985	28.781	31.313	8.360	83.306	15.447	16.358	90.881	1.048.935	1.781.488	1.223.363	923.812	3.432.651
EUROPA	41.574	41.696	7.223	49.942	222.636	17.959	22.142	6.032	58.143	10.170	9.683	40.254	549.736	860.810	532.727	497.952	1.785.870
AFRICA	25.157 40 EA7	21.620 9 541	2.340	22.232	98.527 76 861	6.734 6.23	5.606 5.486	625 657	13.747	2.989	3.514	16.591 7 870	291.330	455.814	331.745	240.949	797.997
ASIA	13.856	16.089	1.340	11.875	64.928	2.777	1.826	1.412	7.397	810	1.018	7.434	137.182	281.473	201.619	141.874	551.985
Albania	5.620	6.209	1.4.16	9.846	37.798	5.830	4.699	358	11.728	2.662	5.082	15.898	123.593	196.993	137.353	107.717	401949
Marocco	13.478	8.134	1.768	11.351	49.653	1266	1.488	233	3.106	1777	2.200	9.760	47.173	2/3/379	154.201	116.588	365.908
AMERICA	5.440	2.754	715	3.875	17.660	1.287	1.670	285	3.894	1.460	2.133	26.526	70.058	182.272	156.558	42.499	293.550
Cina, Rep. Pop.	2.700	1887	1.052	6.604	21.558	4/4	40/	712	2.2.14	346	3/1	2.497	35.041	/3.280	48.294	42.638	106.519 04.7.7.40
UCraina Filipping	907 40F	1.343	963	2.334	10.380	6/6	1.6/U	248	3.198	323	292	2.248	27.804	48.224	32.31b	32.547	132./18 40E 67E
Tunisia	425 7081	830	04 06	079	4.453 5 888	326	264 602	31	450	8/ 723	745	820 1946	10.949 10.371	96777 36477	43.010 27.115	707 202	6/9.6U
Polonia	1264	521	238	1012	4.906	439	597	147	1359	223	274	1460	12.848	20.249	11.897	18.077	90.248
Macedonia	1364	2.997	870	7.456	16.551	947	1262	705	3.139	50	146	285	29.057	39.569	15.246	32.025	78.090
India	2.989	4.973	125	1638	10.725	1.135	312	5	1495	44	174	806	30.958	47.023	33.865	24.115	77.432
Ecuador	100	248	62	409	1253	45	53	7	123	609	1086	17.246	10.858	56.518	54.675	5.068	73235
Peru'	571	315	61	139	1497	57	112	15	226	370	324	3.218	15.855	45.920	43.343	5.096	70.755
Egitto	117	68	18	60	676	50	107	10	191	175	685	1.239	13.745	55.376	54.336	4.127	69.572
M oldova	3.700	2.608	395	2.021	19.407	514	460	100	1275	180	145	679	21.675	38.674	16.172	35.317	68.591
Serbia e M ontenegro	2.211	12.260	531	5.324	23.655	358	2.302	857	8.837	16	37	392	36.212	48.557	11.402	41.692	68.542
Senegal	1.094	1.825	58	2.914	7.490	230	192	112	741	96	120	1.439	29.280	39.045	30.383	16.102	62.620
Sri Lanka	6.380	815	3	654	9.102	37	36	e	81	27	123	1.325	14.323	32.367	23.104	13.356	61064
Bangladesh	333	6.078	9	1.978	13.659	669	206	1.068	2.050	153	137	811	17.071	29.962	13.244	21477	55.242
Pakistan	314	1.075	23	176	1.987	170	9	+	195	26	4	237	20.338	28.089	22.584	16.715	49.344
Nigeria	2.884	1322	85	1450	10.135	226	523	4	808	27	38	675	14.172	22.389	11.272	17.860	40.641
Germania	1.087	247	123	327	2.724	148	338	79	716	962	359	1.876	14.041	19.753 55 255	11.429	10.158	40.163
Ghana	3.528	5.020	44	1933	11.143	2.906	1251	, 10, 14	4.160	- 22	7 1.04	41	24.980	97.87.7	12.308	23.765	38.400
Didolle	2.303	C20	202	100	0.100	111	10 10 10	04 00	203	121	12	202	0.200 A AGE	4642	N110	10:401 E 7.67	040.10
Erancia	242	764	С 1	002	16.41	0,00	220	00	556	1001	181 181	201	707.g		13 AE1	0077	
Prisibia Bosnia Erzedovina	1130	3.528	282	1831	R 525	538	1421	929	3 409	1621 C	98	231	0.121 16.375	20.245	6728	15,872	27.356
Reano Unito	441	229	41	311	1642	103	163	66	491	340	126	1024	5.694	10.674	8.242	4.160	26.448
Alaeria	535	925	87	824	2.865	113	633	86	913	104	138	437	7.369	10.413	5.735	7.264	22.672
Russa, Fed.	338	208	89	234	1522	138	242	49	556	154	133	706	4.841	8.991	6.620	5.021	21523
Croazia	1.002	1238	642	1793	6.487	649	1.583	918	4.694	43	29	228	11.476	16.593	4.347	13.911	21308
Rep. Dominicana	447	389	85	565	1.883	185	258	29	516	32	68	2.306	5.185	10.936	8.277	4.260	18.591
Colombia	639	219	62	490	2.001	291	523	38	1.028	31	163	789	5.536	9.509	5.900	5.021	17.890
Spagna	258	162	40	163	1.172	74	107	30	299	112	81	557	3.972	8.373	6.733	2.918	17.354
Costa d'Avorio	551	692	4	806	2.243	188	114	2	306	e	7	31	8.802	11.661	9.043	4.787	17.132
Stati Uniti	200	308	4	191	1.120	245	69	24	431	62	32	365	2.471	5.009	3.358	2.350	15.036
Cuba	286	225	52	140	1171	55	119	39	269	88	78	410	4.045	7.021	5.254	3.339	14.581
I urchia	14	49	0,	64	683	48	44	Q :	255	1.1/4	2 2	1240	5.570	8.729	7.552	4.636	14.562
A rgentina	661	RQ.	42	2/8	944	/0,	1/3	41	389	88	00 1	268	3.31/	/LG.G	4.001	2,665	12.492
Errirea Stimmer	10	10	4 00		1000	Ð Ý	33	¢	80	40E	Q Ç	406	924	5,033	3.432	1020	0200
SVIZZEIA Micritic	00	00	0	41	000	0 C	PC Q	× 1	B é	ŝ	2 *	400	007.0	407 G	040.4	1.103	9.1.90
Ivi aui izio Burkina Faso	78	1061	0 -	705	0.370	540	2 1	t (1	550	ת י	- ~	о б	022 6 732	3. L9 6 585	3 503	1031	8 060
Date Bacei	246	45	- 74	193	E.12.3	940	41	ο α	113	260	400	530	2.731	4.62	3.480	1535	8.465
Slovacchia	253	178	73	85	1024	82	143	25	286	26	34	128	3.339	4.373	1.364	3.748	7,463
Etiopia	47	64	21	28	225	35	101	đ	161	e	ξ	92	987	2.086	1.653	1250	7.331
Grecia	06	37	11	50	462	35	39	7	203	13	10	155	962	2.399	1674	1585	7.063
Giappo ne	80	50	4	49	392	9	4	7	43	16	13	84	964	3.748	3.266	857	7.060
Camerun	84	38	91	440	1212	49	111 1	2	267	5	з	88	1.897	3.550	2.022	2.792	6.940
Iran	95	56	ε	41	539	ξΩ :	£Ο	4 !	105	æ	£ 1	238	1.125	2.746	1.987	1467	6.913
Austria	178	49	61	72	611	49	281	71	504	53	90 90	155	2.962	4.060	1357	3.053	6.609
Statelers	27	9 ²	، د	40 5	1:11	υę	33	n 7	64	12	10	56 20	387	781	1550	319	2.527
Other Countries	2847	2386	274	2243	12.555	1476	1767	809	5121	684	544	4231	42.795	77.566	56804	34537	160365
																1	

Data: ISTAT - http://demo.istat.it/altridati/indicatori/index.html#tabreg (mainly estimates) Elaboration: Italian delegation - Date of extraction: 23 December 2010

				1											_						
REGION (NUTS-2) / AREA →	_		-	- PIEA	IONTE	1			F	-	VALLE	D'AOSTA	1		-		5-		;		-
ECONOMIC SECTOR / ACTIVITY ↓	199	10	2000	2005	2009	ar. % Se 1995- r	atio in r	atio in	1995	2000	2005	2009	AR. % >e0	tio in rat	o in 19	95 2000	2005	2009	Var. % 1995-	ratio in	sectorial ratio in
	_					2009	1995	2009					2009	1995 2	600	_			2009	1995	2009
PRIMARY SECTOR Agriculture and breeding, forestry, hunting	75	+ :	67,8 67,6	77,1	75,3	0,3%	4,20%	3,73%	3,7	2,8 2,8	3,0 3,0	2,7	-27,0%	6,97% 4	55% 7	2,7 73,2	2 76,4 7 76,3	78,3	7,7%	1,81%	1,69%
Fishing, fish farming and related services			0,2	0,1						0'0	0'0	-					5 0,1				
SECONDARY SECTOR Industry in a narrow sense	569 560	999	567,3	622,3	581,1 ·	13,2%	37,46% 31 36%	28,75%	13,3	13,5	16,5 7.6	15,8 6.5	-11.0% 2	3 75% 26	60% 1.60 04% 1.33	7 0 1.525/	5 1.642,7 5 1.316.8	1.580,6	-1,3%	39,97%	34,21% 26.84%
Mineral processing	5		2,5	2,3			0/00 ¹ 0		2 :	0,1	0,1	5 :				7.	7 9,6			R'otion	0/ LOIO4
Manufacturing industry	-		534,3	484,9						6,2	6'9					1.218,	3 1.282,9				
Food, drink and tobacco industries Textile and clothing industries	:		40,4 64 1	39,5 52,3		T				0,9	1,0					73,8	3 76,7	1			
Tannery, leather, hide and similare industries			2,9	2,2	: :				: :	0'0	0'0	: :				18,5	5 15,0	: :			
Paper and papery products industries; printing and publishing industries	:		27,6	25,7						0,1	0,2					5'22	9 80,7				
Coal and oil treatment plants; chemical and pharmaceutical indus tries	-		18,6	15,3 13.6						0,1	0,1					88,5	34,0				
Metal production and manifacturing of metal-bearing products			92,6	90,2	1					2,0	2,0	: :				248,8	3 270,8	: :			
Production of machines and mechanical, electrical and optical devices;																					
means of transport Mood ruthbar and destin industrias: othar manifacturing industrias			98,2	182,2				T		2,0	2,3					345,5	387,8 7 162.8				
Production and distribution of electric energy, das, vapour and water			12.2	10.2				ſ		0.7	0.6						5 24.3				
Building sector	109	0	118,3	124,9	135,0	23,9%	6,10%	6,68%	6,0	6,5	8,9	9,3	55,0% 1	1,30% 15	66% 26	3,1 275,	1 325,9	340,6	29,5%	6,57%	7,37%
SERVICE SECT OR	1.043,	1.1	143,6	.282,1	1.365,0	30,9%	58,34%	67,53%	36,1	39,7	38,6	40,9	13,3% 6	7,98% 68	86% 2.33	2,2 2.607;	2 2.823,4	2.961,7	27,0%	58,22%	64,10%
Trade, mending, hotels and restaurants, transports and communications	418	4	135.1	476.7	1				15.6	15.4	14.1	1			8	5.4 1.012.	3 1.043.8	1			
Bulk and retail trade; cars, motorcycles and personal/home goods repair			. 1000	-10-1-				T	o io.	10	f	1			5			I			
		:	272,7	297,1						7,3	6,4	:				642,4	655,1	1			
Hotels and restaurants Transports Ibroistics and communications	-		66,3 06.1	82,0 97.6		+				5,4	5,4	1				157,3	9 176,1 6 212.6	1			
Monetary and financial brokerage; real estate and entrepreneuris		-	- '00	0'76		T			:	212	0'7	-					0,212	1		l	
activities	194,	1	258,1	310,7	-			_	5,0	6,2	6,3	!			49	2,5 647;	7 757,7	I			
Monetary and financial brokerage	-		53,2	54,8	-				-	1,2	1,0					136,	137,3	1			
Real estate activities, renting, informatics, research, other professional ai entreoreneurial activities			04.9	255.9						5.0	5.3					511.	7 620.4	:			
Other activities and services	430	. 4	150,4	494.7	1				15,5	18,1	18,2				68	4.3 947.	2 1.021,9				
Public administration and defence; social mandatory insurance			81,3	76,9						5,8	5,6					130,	0 126,7				
Education	-	:	104,5	109,0					-	3,5	3,8					209,	219,8				
Public health and other social services	-	:	74.0	132,6	-					3,9	4,2					258,	0 2/4/6	1			
Other public services, personal and social Domestic services for families		: :	76.1	95.7						1.6	3.0	1				196,	4 233.1				
TOTAL	1.787,	7 1.8	378,7	1.981,5	2.021,4	13,1% 10	00,00% 1	00,00%	53,1	56,0	58,1	59,4	11,9% 10	0,00% 100	00% 4.00	5,9 4.206,	0 4.542,5	4.620,6	15,3%	100,00%	100,00%
REGION / AREA → TRENTINO - ALTO	ADIGE / SÜD	TIROL				PROVI	NCE OF TR	ENTO		F		PR OV INCE	OF BOLZAN	O / BOZEN				VENE	0		
	var.	% Secto	orial Sect	orial				var. % S	sectorial Ser	storial				var. % Set	tonal Sector	ial			var. 9	6 Sectorial	Sectorial
ACTIVITY 4 1995 2000 2005	2009 199	5- rati	o in rat	io in 19	95 2000	2005	2009	1995- 2009	ratio in R	atio in 1	995 20	2005	2009	1995- ra	Itio in ratio	in 1995	2000	2005 2(009 1995 200	F ratio in	ratio in 2009
PRIMARY SECT OR 33,2 28,6 27,1	25,0 -24,7	. 8	01% 4	98%	7,0 14,7	11,3	9'6	-42,4%	8,55%	4,08%	16,2 10	15,1	15,2	-6,2%	7,51% 5,7	94,8	84,0	64,2	9,6 -26,6	6 4,85%	3,03%
Agriculture and breeding, for estry, 28,5 27,1					14,6	11,3						i,9 15,4				1	77,1	58,0			
Els ning, its harming and reased 0,1 0,0 SECONDARY SECTOR 111.4 113.9 126.2	127.9 14.8	% 26.	86% 25	45%	8.2 58.2	0,0	64.0	10.0%	29.26%	6.67%	53.2 51	10 0.0	63.9	20.1%	4.65% 24.3	787.4	6,9 825.3	6,2 855,8 85	3.2 8.4	6 40.28%	37.09%
Industry in a narrow sense 75,4 78,8 83,6	84,6 12,2	% 18,	18% 16	84% 4	0,7 41,1	45,6	44,1	8,4%	20,46%	8,38%	34,7 3	7 38,	40,5	16,7%	6,08% 15,4;	3% 659,0	681,6	668,7 66	9,9 1,7	6 33,71%	29,12%
Mineral processing 2,1 2,0 Manufacturing industry 73,7 78,3	1	+			1,6	42.4	1			-		15 0.0	1		+		2,3	2,2			
Food, drink and tobacco industries 10,4 10,7					4,7	4,9	-					7 5,6					45,9	45,4			
Textile and clothing industries 4,0 4,0 Texamor Lookee Materianian		_	+			33	1					9.0	1		+		99,7	84,5	-		
Paper and papery products industries; 5,8 6,3					3,6	4,3						0 2.0					29,8	29,4			
Coal and oil treatment plants: chemical 2,3 2,0 Devolution and monufacturing of page						1,4	1					8 0,6	1			1	19,6 22.6	20,5 27.8	1		
Metal production and manifacturing of m 11,6 13,0						6,2						3 6.6					104,4	113,2			
Production of machines and mechanical, electrical and optical 16,7 19,4	1					10,7	1					7 8.7				1	166,6	176.0			
Wood, rub ber and plastic industries; 18, 1 18, 3 						8,4						0 9.7					125,5	119,6			
Production and distribution of electric 3,0 3,3 Building sector 36,0 35,1 42,6	43,3 20,3	% 8,	68% 8	62%	7,5 17,1	19,6	19,9	13,7%	8,80%	8,29%	18,5 11	1,0 23,0	23,4	26,5%	8,57% 8,9	1% 128,4	143,7	187,1 18	3,3 42,8	6,57%	7,97%
SERVICE SECTOR 270,1 306,8 323,7	349,6 29,4	% 65,	13% 69	57% 12	3,7 144,4	152,5	166,2	34,4%	62,19% (9,25% 1	46,4 16;	171.	183,4	25,3% (7,84% 69,87	7% 1.072,6	1.205,0	1.317,3 1.37	7,8 28,5	6 54,87%	59,89%
Trade, mending, hotels and restaurants, transports and 125,0 133.4 132,6	1			40	1.2 56.5	55.6	1				73.8	0.77				471.9	511.6	550.0			
Bulk and retail trade; cars, motorcycles																					
and personal/home goods repair 66,2 64,6 Hehels and restaurants 46,0 47,6		+			29,2	29,5	-					35, 32,	1		+		306,6	329,9	-		
Transports, logistics and 21,2 20,4	1				11,7	10,9						15 9,1					102,8	100,9	1		
Monetary and financial brokerage;						0.00					45.4	1 26				167.0	6 266	1 12			
Ireal estate and entrepreneurial 31,6 45,8 54,8 Monetary and financial brokerage 11,7 12,6	1				5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,	6,1	1				Z	,4 Z5,4	1			0'/9L	48,2	49,9	1		
Real estate activities, renting, informatives research other 34.1 42.2					18.0	b <i>CC</i>			-		1	C 10.			-		179.0	224 F			
Other activities and services 113,5 127,6 136,3	1			4	6,0 63,5	61,9	1				57,5 6-	11 68 [,]				433,7	466,2	492,9	1		
Public administration and defence; social 38,7 34,9					19,9	18,7						16,2					84,3	77,2			
Public health and other social services 31,0 36,7	1 1				11,8	13,7 19,4	1					12,1	1			1	110,8	113,6	1 1		
Other public services, personal and 15,6 16,8						8,0						15 8,					71,4	80,9			
Domestic services for tamiles 14, 10, 10, 2 TOTTAI 449.3 477.0	E02.5 21.2	1007	nrex, 100	n%, 19	8 q 217.3	229.0	2.40.0	20.7%	100.00% 10	2 %00 u	45.8 23	,6 δ, n 248.	262.5	21.6% 10	n n n% 100.0	1.954.8	2.114.3	89,6	17.7	4 100.00%	1 nn.00%
101 AL 11/11 11/11 11/11 11/11	e'70c	1001	n0.00		····	26 UIV	~ ~ ~	5 NI 1 10		- nn'n	10,01	10-12 D	~ 70.7	0/0/17		121-00-1 0/LD	012117	····	···· 10'0	a/an/na1 0	1 00,001

Chart A.21 – Employees in the different economic sectors and areas from 1995 to 2009

Absolute values (for the years 1995, 2000, 2005 and 2009) and ratios (1995 and 2009) at Regional level (NUTS-2) and variation ratios (1995 to 2009)

	actorial	ratio in	2009	2,81%			32,10%	24,80%													1000	0/.67.1	65,09%																100,00%
	actorial S	ratio in	1995	3,91%			37,00%	30,47%											T		10010	0,25%	59,10%																%00'00
Ì	ar % Sr	1995-	2009	-16,8%			0,3%	-5,9%											T		101 401	29,1%	27,3%															_	15,6% 1
RN ITALY	-	2009		363,2	-	1	147,0	204,5											1	:		34Z,5	410,7	1					1										920,9
NORTHE		2005		356,0	341,5	14,5	253,5 4.	337,6 3.	19,4	253,0	266,1	356,2	63,7	174,4	154,2	144,3	520,6		11,0	1 20	7'00	910,9	949,4 8.	054,1		835,1	611,9	607,1	876.4	344,4		532,0	018,9	489,7	644,0	803,6	491,1	590,5	558,9 12.
		0000		381,1	363,8	17,3	129,8 4.	353,9 3.	18,0	265,3 3.	266,2	\$01,3	79,2	175,9	154,3	142,6	593,8		400,4 I.	0 02	10,0	6,611	340,2 7.	932,5 3.		775,9 1.	542,5	614,1	584.9	336,9		248,0 1.	822,8 3.	526,3	612,5	738,7	453,1	492,2	851,1 12.
		305		136,7		1	135,1 4.	405,3 3.											:			29,82	305,0 7.	761,6 2.		1.			191.3			1.	552,1 2.						176,8 11.
	Drial	, in c	600	94%			72% 4.	98% 3.4														12%	34% 6.0	2					÷				2.(00% 11.
	rial Secto	o in rati	995 2	3% 3,			32% 27,	4% 19													-	1 0/2	5% 68																00% 100
	% Secto	25- ratic	09 19	6% 6,0			0% 30,9	9% 24,1					_						+		10	0%0	3% 63,0																7% 100,0
Country)	lar.	191	20	9,0 -25,			6,1 2,	2,0 -5,		1									1	:		4,1 30,	3,5 23,	1					1										8,6 13,
-Y (whole		05 20		3,5 97	1,8	8,7	9,2 6.88	2,8 4.96	1,7	0,1	8,1	8,3	8'0	0'0	5,2	0'1	1,8		0'0		0,1	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	3,1 16.97	5,5		1,2	5,1	9,2	0.6	3,2		0,8	2,6	9,1	4,0	1,4	2,0	3,1	5,8 24.83
ITAI		00		310.1	-'2 96.	4 56	,4 7.029	5.162	2	.7 4.990	7 475	0 605	5 180	7 270	7 236	9 261	864		747	2 4	0 13	,9 1.80t	,8 16.348	.7 5.916		.9 3.571	.0 1.126	.8 1.219	.8 3.475	5 608		.3 2.870	.3 6.952	.1 1.389	.9 1.60	4 1.57	0 1.022	.9 1.366	,1 24.395
		5 20C		2 1.102	1.044	: 28	6 6.743	1 5.189	41	5.004	475	661	218	272	239	255	814	0000	720		: -	500-1 C	4 15.083	4 5.631		3.441	965	1.224	6 2.949	591		2.358	4 6.502	1.463	1.561	1.449		1.091	2 22.930
		199		6 1.316,			6.753,	6 5.273,	:		:		:	:	:	:			-	:		% 1.48U,	6 13.771,	5.300,			:		2.271.				6.199,		-				6 21.841,
	Sectoria	ratio ir	2000	2,64%			19,55%	12,15%														6141	77,81%																100,00%
	Sectoria	ratio in	1995	2,99%			21,52%	14,85%													1000 0	0'00%	75,49%																100,00%
	var %	1995-	2009	-3,8%			-0,9%	-10,8%													04 001	21,2%	12,4%																9,1%
LIGURIA		2009		17,7			131,2	81,5		1												1,84	522,1	1						-							100		671,0
		2005		16,6	14,3	2,3	126,9	76,1	0,8	71,8	10,1	2,3	0,2	3.5	4,1	4,0	11,9		7.6	201	0.0	8'NC	500,5	196,9		101,9	44,6	50,4	96.4	20,3		76,1	207,2	48,9	38,8	52,7	28,2	38,6	644,0
		2000		17,2	14,9	2,3	128,4	87,0	0,8	81,5	11,0	2,8	0,2	4,3	5,1	4,4	14,4		5,05	0,0	4.1	41,4	491,0	197,3		104,6	41,3	51,4	6'06	22,0		68,9	202,8	57,3	36,9	49,2	26,6	32,8	636,6
Ì		1995		18,4		1	132,4	91,4														41,0	464,5	195,1					74.3				195,1				-		615,3
	tectorial	ratio in	2009	3,28%			27,62%	22,39%													100	0,74%	69,10%																100,00%
	ectorial S	ratio in	1995	4,69%			32,10%	26,12%													1 0001	0,44%	63,20%															_	100,00%
ULIA	var % S	1995-	2009	-21,3%			-2,9%	-3,3%												Ī	1 001	-1,3%	23,3%																12,8%
NEZA GI		2009		18,9		1	159,3	129,1	-	1							-					30,2	398,5	-					7	-				-	1				576,7
RIULI - VE		2005		19,0	16,8	2,2	164,6	134,1	0,7	130,6	8,9	4,4	1,0	6,1	2,1	6,4	26,6		38,1	100	2,0	C'US	379,2	141,7		81,4	30,7	29,6	84.4	16,6		67,8	153,1	41,2	31,9	38,9	22,1	19,0	562,8
ι.	-	2000		19,8	16,8	3,0	173,8	141,5	0,7	137,6	9,6	5,7	1,4	6,8	2,3	6,2	25,6	000	20,00	41.1	3,5	32,3	356,8	135,4		78,3	27,5	29,6	0.69	15,0		54,0	152,4	48,7	30,3	35,6	20,7	17,1	550,4
		1995		24,0			164,1	133,5												:		30,6	323,1	129,7					53.5	. :			139,9						511,2
REGION / AREA →		ECONOMIC SECTOR /	ACTIVITY \downarrow	PRIMARY SECTOR	Agriculture and breeding, forestry,	Fishing, fish farming and related	SECONDARY SECTOR	Industry in a narrow sense	Mneral processing	Manufacturing industry	Food, drink and tobacco industries	Textile and clothing industries	Tannery, leather, hide and similare	Paper and papery products industries;	Coal and oil treatment plants; chemical	Production and manufacturig of non-	Metal production and manifacturing of m	Production of machines and	mechanical, electrical and optical Mood in the several disease industrias:	Production and distribution of alastela	Production and distribution of electric	Building sector	SERVICE SECT OR	Trade, mending, hotels and restaurants, transports and	Bulk and retail trade; cars, motorcycles	and personal/home goods repair	Hotels and restaurants	Transports, logistics and	Monetary and financial brokerage; real estate and entrepreneurial	Monetary and financial brokerage	Real estate activities, renting,	informatics, research, other	Other activities and services	Public administration and defence; social	Education	Public health and other social services	Other public services, personal and	Domestic services for families	TOTAL

SOURCE: ISTAT databases ELABORATION: Italian delegation DATA EXTRACTION: 07-01-2011

Chart A.22 – Per-capita GDP at market prices and units of work in Italian Alpine

Regions

Per-capita GDP at market prices, GDP per unit of work, total units of work, incomes and consumptions in the Italian Alpine Regions (NUTS-2) in the period 1995-2009

SOURCE: ISTAT databases **ELABORATION: Italian delegation** DATA EXTRACTION: 07-01-2011

	varia tion % 2008- 2009	1,15%	-0,08%	0,77%	-1,82%	-0,62%		2,14%	
ROL	mean annual var. % 1995- 2008	0,92%	0,94%	1,15%	4,05%	4,03%		3,42%	
∋E / SÜDTI	2009	1.024,6	505,8	355,3	32.633,6	66.106,0		38.484,7	
alto adic	2008	1.013,0	506,2	352,6	33.238,8	66.516,9		37.676,7	
ENTINO - /	2005	979,9	487,2	336,6	30.278,6	6'868'09	26.005,1	34.825,9	
тк	2000	932,2	475,9	325,8	26.801,4	52.499,0	22.499,8	29.194,0	
	9661	904,4	450,9	306,7	21.767,9	43.661,4	18.375,9	26.081,2	
	variation % 2008- 2009	1,07%	-3,09%	-2,49%	-5,03%	~96'0-		1,75%	
	mean annual var. % 1995- 2008	0,71%	%86'0	1,25%	3,77%	3,47%		3,29%	
DIA	2009	9.795,9	4.439,7	3.304,5	31.743,1	70.039,0		39.659,3	
LOMBAR	2008	9.692,6	4.581,4	3.388,9	33.424,8	70.714,9		38.975,4	
	2005	9.434,1	4.495,7	3.299,9	31.545,2	66.196,7	21.011,6	36.182,2	
	5 2000	8.987,6	4.247,0	3.021,5	27.488,1	58.170,9	18.241,6	31.127,4	
	166	6 8.878,7	4.086,4	6 2.916,6	6 22.424,6	6 48.722,8	14.205,0	6 27.302,6	
	variatior - % 2008	% 0,87%	6 -2,70%	6 0,74%	6 -4,019	6 -0,49%		6 2,48%	
	nean a nnua var. % 1995 2001	0,639	69'0	0,75%	3,15%	3,07%		2,96%	
STA	2009	127,6	61,2	41,0	32.784,3	68.354,2		37.725,0	
ILLE D'AO	2008	126,5	62,9	40,7	34.154,6	68.689,2		36.810,3	
٨Þ	2005	123,4	60,4	39,7	31.700,6	64.765,9	29.925,4	34.964,7	
	2000	119,1	26'3	6'86	26.733,7	53.692,7	25.921,1	29.542,4	
	966	116,9	2'13	37,1	24.224,0	49.077,7	20.146,3	26.579,5	
	variation % 2008- 2009	%£9'0	-3,58%	-4,92%	-4,59%	-0,43%		1,62%	
	mean annual var. % 1995- 2008	0,29%	%69'0	0,75%	4'00%	3,44%		3,28%	
ТΕ	2008	4.444,6	1.946,3	1.311,9	27.350,7	62.458,5		38.147,3	
PIEMON	2008	4.416,9	2.018,5	1.379,8	28.665,7	62.726,5		37.539,6	
	2005	4.336,0	1.968,0	1.306,5	26.811,1	59.071,7	20.728,9	35.026,9	
	2000	4.222,2	1.918,1	1.322,9	23.382,3	51.470,0	17.672,6	29.728,7	
	1995	4.255,9	1.851,5	1.257,3	18.862,1	43.356,8	13.435,1	26.309,6	
REGION (NUTS 2) / AREA →	DATA/INDICATOR ↓	Vean annual resident population (x1000 inhab.)	Total units of w ork (thousands)	Total units of employees (thousands)	3DP at market prices per capita (current €)	3DP at market prices per unit of w ork (current €)	-inal internal consumptions per capita (current €)	incomes from employees work per unit of employees current $\ensuremath{\varepsilon}$)	

	ariation % 2008- 2009	0,60%	-2,92%	-2,53%	-3,72%	-0,23%		2,48%	
	mean annual v var. % 1995- 2008	0,29%	0,71%	1,06%	4,60%	3,99%		3,57%	
GIULIA	2009	1.233,9	565,1	419,1	28.248,7	61.681,3		38.136,0	
- VENEZIA	2008	1.226,5	582,1	430,0	29.341,1	61.822,4		37.213,0	
RIULI	2005	1.206,5	562,4	410,6	26.967,8	57.853,3	21.029,5	34.362,4	
	2000	1.179,8	568,6	406,3	23.100,1	47.930,8	17.954,9	28.136,6	
	1995	1.181,7	532,9	378,0	18.364,1	40.722,3	14.100,5	25.424,3	
	variation % 2008- 2009	0,94%	-2,99%	-3,20%	-4,91%	-1,06%		2,34%	
	mean annual var. % 1995- 2008	0,79%	1,10%	1,57%	4,11%	3,70%		3,61%	
	6002	4.904,7	2.268,9	1.643,1	28.856,0	62.378,2		36.769,0	
VENETO	2008	4.858,9	2.338,8	1.697,5	30.347,3	63.047,1		35.928,6	
	2005	4.719,1	2.257,5	1.563,6	28.432,8	59.436,3	20.539,4	33.307,6	
	2000	4.496,8	2.185,5	1.519,5	24.842,6	51.115,2	17.901,2	28.012,0	
	96 6 .	4.404,7	2.046,1	1.410,3	19.775,5	42.571,3	13.898,9	24.460,6	
	/ariation % 2008- 2009	1,07%	0,00%	%29'0	-1,53%	-0,48%		2,11%	
ZEN	mean annual v var. % 1995- 2008	0,84%	1,07%	1,03%	4,12%	3,81%		3,55%	
ANO/BOZEN	mean annual 1 2009 var. % 1995- 2008	501,7 0,84%	266,3 1,07%	180,0 1,03%	34.421,0 4,12%	64.847,9 3,81%		39.033,5 3,55%	
E OF BOLZANO / BOZEN	2008 2009 var. % 1995- 2008 2009 var. 2008	496,4 501,7 0,84%	266,3 266,3 1,07%	178,8 180,0 1,03%	34.955,9 34.421,0 4 ,12%	65.160,0 64.847,9 3,81%		38.226,9 39.033,5 3, 55%	
PROVINCE OF BOLZANO / BOZEN	2005 2008 2009 var.% 995-	479,9 496,4 501,7 0,84%	255,5 266,3 266,3 1,07%	170,6 178,8 180,0 1,03%	31.712,2 34.955,9 34.421,0 4,12%	59.564,4 65.160,0 64.847,9 3,81%	26.779,3	35.231,5 38.226,9 39.033,5 3,55%	
PROVINCE OF BOLZANO / BOZEN	2000 2005 2008 2009 var.% 1995- 2008	459,8 479,9 496,4 501,7 0,84%	245,8 255,5 266,3 266,3 1,07%	167,2 170,6 178,8 180,0 1,03%	27.799,6 31.712,2 34.955,9 34.421,0 4,12%	52.002,7 59.564,4 65.160,0 64.847,9 3,81%	23.049,2 26.779,3	29.547,8 35.231,5 38.226,9 39.033,5 3.55%	
PROVINCE OF BOLZANO / BOZEN	1 1000 2005 2008 2008 2009 21.% 19.95- 2008 2008 2008 2008 2008	, 447,3 459,8 479,9 496,4 501,7 0,84%	0 233,7 245,8 255,5 266,3 266,3 1,07%	157,6 167,2 170,6 178,8 180,0 1,03%	522.771,3 27.799,6 31.712,2 34.955,9 34.421,0 4, 12%	0 43.584,1 52.002,7 59.564,4 65.160,0 64.847,9 3, 81%	18.775,5 23.049,2 26.779,3	26.159,3 29.547,8 35.231,5 38.226,9 39.033,5 3,55%	
PROVINCE OF BOLZANO / BOZEN	variation % 2008- 895 2000 2005 2008 2009 var. % 1995- 2009	1,22% 447,3 459,8 479,9 496,4 501,7 0,84%	5 -0,17% 233,7 245,8 255,5 266,3 266,3 1,07%	3 0,86% 157,6 167,2 170,6 178,8 180,0 1,03%	; -2,12% 22.771,3 27.799,6 31.712,2 34.955,9 34.421,0 4,12%	3 -0,76% 43.584,1 52.002,7 59.564,4 65.160,0 64.847,9 3,81%	18.775,5 23.049,2 26.779,3	5 2,18% 26.159,3 29.547,8 35.231,5 38.226,9 39.033,5 3,55%	
PROVINCE OF BOLZANO / BOZEN	mean annual variation I var. % 1995- % 2008- 995 2000 2005 2008 2009 var. % 1995- 2008 2009 2008	1,00% 1,22% 447,3 459,8 479,9 496,4 501,7 0,84%	i 0,80% -0,17% 233,7 245,8 255,5 266,3 266,3 1,07%	1, 1,27% 0,86% 157,6 167,2 170,6 178,8 180,0 1 ,03 %	* 4,00% -2,12% 22.771,3 27.799,6 31.712,2 34.955,9 34.421,0 4, 12%	3, 4,27% -0,76% 43.584,1 52.002,7 59.564,4 65.160,0 64.847,9 3,81%		3,29% 2,18% 26,159,3 29547,8 35.231,5 38.226,9 39.033,5 3,55%	
TRENTO PROVINCE OF BOLZANO / BOZEN	I 2009 var.% 195- % 2008- 895 2000 2005 2008 var.% 195- % 2008 2008 var.% 1955- 2008 2008 var.% 1955- 2008 v	522,9 1,00% 1,22% 447,3 459,8 479,9 496,4 501,7 0,84%	· 239,5 0,80% -0,17% 233,7 245,8 255,5 266,3 266,3 1,07%	175,3 1,27% 0,86% 157,6 167,2 170,6 178,8 180,0 1,03%	\ <u>30.918,7</u> 4,00% -2,12% 22.771,3 27.799,6 31.712,2 34.955,9 34.421,0 4,12%	67.504,8 4,27% -0,76% 43.584,1 52.002,7 59.564,4 65.160,0 64.847,9 3,81%	18.775,5 23.049,2 26.779,3	· 37.921,2 3,29% 2,18% 26.159,3 29.547,8 35.231,5 38.226,9 39.033,5 3,55%	
VINCE OF TRENTO PROVINCE OF BOL ZANO / BOZEN	- 2008 2009 var. % 995- % 2008 895 2000 2005 2009 var. % 995- 2008 2009 var. % 995- 2008 2009 var. % 995- 2008 2008 2008 var. % 995- 2008 2008 2008 2008 2008 2008 2008 200	· 516,6 522,9 1,00% 1,22% 447,3 459,8 479,9 496,4 501,7 0,84%	· 239,9 239,5 0,80% -0,17% 233,7 245,8 255,5 266,3 266,3 1,07%	1 173,8 175,3 1,27% 0,86% 157,6 167,2 170,6 178,8 180,0 1,03%	1 31.588,7 30.918,7 4,00% -2,12% 2 2,771,3 27,799,6 31,712,2 34,955,9 34,421,0 4,12%	3, 68.023,1 67.504,8 4,27% -0,76% 43.584,1 52.002,7 59.564,4 65.160,0 64.847,9 3,81%	n 18.775,5 23.049,2 26.779,3	37.110,7 37.921,2 3,29% 24.159,3 29.547,8 35.231,5 38.226,9 39.033,5 3,55%	
PROVINCE OF TRENTO PROVINCE OF BOLZANO / BOZEN	2005 2008 2008 var.% rean annual rean var.% rean annual rean mean an	500,0 516,6 522,9 1,00% 1,22% 447,3 459,8 479,9 496,4 501,7 0,84%	231,7 239,9 239,5 0,80% -0,17% 233,7 245,8 255,5 266,3 266,3 1,07%	166,0 173,8 175,3 1,27% 0,86% 157,6 167,2 170,6 178,8 180,0 1,03%	28.902,5 31.588,7 30.918,7 4,00% -2,12% 22.771,3 27.799,6 31.712,2 34.955,9 34.421,0 4,12%	62.370,6 68.023,1 67.504,8 4,27% -0,76% 43.584,1 52.002,7 59.564,4 65.160,0 64.847,9 3,81%	25.262,0 18.775,5 23.049,2 26.779,3	34.409,0 37.110,7 37.921,2 3,29% 2,18% 26.156,3 29.547,8 35.231,5 38.226,9 39.033,5 3,55%	
PROVINCE OF TRENTO PROVINCE OF BOLZANO / BOZEN	- 2009 2015 2008 2009 var.% 1995- % 2008- 1995 2000 2005 2008 var.% 1995- 2008 2009 var.% 1995- 2008 2008 var.% 1995- 2008	472,4 500,0 516,6 522,9 1,00% 1,22% 447,3 459,8 479,9 496,4 501,7 0,84%	230,1 231,7 239,9 239,5 0,80% 0,17% 233,7 245,8 255,5 266,3 266,3 1,07%	158,6 166,0 173,8 175,3 1,27% 0,86% 157,6 167,2 170,6 178,8 180,0 1 ,03%	25.829,8 28.902,5 31.588,7 30.918,7 4,00% -21,2% 22.771,3 27.799,6 31.712,2 34.955,9 34.421,0 4,12%	53.029,1 62.370,6 68.023,1 67.504,8 4,27% -0,76% 43.584,1 52.002,7 59.564,4 65.160,0 64.847,9 3,81%	· 21.965,1 25.262,0 18.775,5 23.049,2 26.779,3	28820,9 34.409,0 37.110,7 37.921,2 3.29% 2.18% 26.159,3 29.547,8 35.231,5 38.226,9 39.033,5 3.55%	

	0,60%	-2,92%	-2,53%	-3,72%	-0,23%		2,48%		variation % 2008- 2009	1,06%	-2,49%	-2,37%	-4,49%	-1,01%		2,19%
	0,29%	0,71%	1,06%	4,60%	3,99%		3,57%		mean annual var. % 1995- 2008	0,75%	1,04%	1,58%	4,10%	3,71%		3,43%
	3,9	5 ,1	9,1	8,7	1,3		6,0	\ST	2009	11.526,0	5.477,9	3.948,9	29.746,4	62.589,2		37.205,6
	5 1.23.	1 56.	0 41.	1 28.24	4 61.68		0 38.13	NORTH-EA	2008	11.405,3	5.618,0	4.044,6	31.143,4	63.225,4		36.408,2
	1.226,5	582,1	430,0	29.341,1	61.822,4		37.213,0	-	2005	11.075,0	5.391,7	3.766,8	3 28.945,3	3 59.456,0	9 21.771,0	33.782,6
	1.206,5	562,4	410,6	26.967,8	57.853,3	21.029,5	34.362,4		5 2000	8 10.564,7	4 5.256	8 3.613,	7 25.579,	5 51.411.2	1 18.901	2 28.584,7
	1.179,8	568,6	406,3	3.100,1	7.930,8	7.954,9	3.136,6		п 7 9	% 10.386,8	% 4.948,4	% 3.356,1	% 20.320	% 42.653,	14.747	% 25.169,
	.181,7	532,9	378,0	.364,1 2;	.722,3 4	.100,5 1	.424,3 20		ual variatio 95- % 2008 08 200	0% 0,87	1% -3,07	2% -2,98	7% -4,61	4% -0,73		1% 1,79
	94% 1	%66	20%	31% 18	06% 40	14	34% 25		mean ann var. % 199 20	9'2	0,8	1,0	3,9	3'2		3,3
-	š'0 %	% -2,9	% -3,2	% -4,9	~ -1,0		% 2,5	EST	2009	15.985,5	7.104,4	5.105,5	30.035,9	67.583,2		39.152,6
	0,79	1,10	1,57	4,119	3,70		3,619	NORTH-WI	5 2008	7 15.848,4	9 7.329,4	4 5.262,5	31.486,1	2 68.082,5	···· 6	38.463,7
	904,7	268,9	643,1	856,0	378,2		769,0		2006	15.494,7	7.169,9	5.082,4	29.522,0	63.799,2	3 21.120,9	35.706,6
	8,9 4.	18,8 2.	1.1	17,3 28.	17,1 62.		8,6 36.		2000	\$ 14.912,3	1 6.876,6	1 4.830,7	5 25.660,0	55.645,3	5 18.240,3	30.534,6
	1 4.85	5 2.33	6 1.69	8 30.34	3 63.04	4	6 35.92		1996	14.886,6	6.633,4	4.644.4	20.773,5	46.619,6	14.122,5	26.897,1
	4.719,	2.257,	1.563,	28.432,	59.436,	20.539,	33.307,		- % 2008-	% 0,95%	% -2,82%	% -2,72%	<mark>% -4,56%</mark>	%98'0- %		4 1,95%
	4.496,8	2.185,5	1.519,5	24.842,6	51.115,2	17.901,2	28.012,0		mean annua var. % 1995- 2008	609'0	0,91%	1,26%	4'05%	3,60%		3,35%
	4.404,7	2.046,1	1.410,3	19.775,5	42.571,3	13.898,9	24.460,6	ITALY	8 2009	7 27.511,5	4 12.582,3	9.054,4	7 29.914,6	9 65.409,0		4 38.303,5
	1,07%	%00'0	0,67%	1,53%	0,48%		2,11%	ORTHERN	2006	7 27.253,7	3 12.947,4	2 9.307,1	31.342,7	0 65.974,5		37.570,4
	84%	%20	03%	12% -	81% -		55%	N	0 2004	0 26.569,7	1 12.561,6	8 8.849,2	8 29.281,6	0 61.935,0	7 21.391,9	2 34.887,6
	0,	1,	1,	4,	3,		3		6 200	4 25.477,0	8 12.133,	2 8.443,4	4 25.626,4	1 53.811,0	2 18.514.7	1 29.700,2
	501,7	266,3	180,0	34.421,0	34.847,9		39.033,5		n 3- 199	% 25.273,	% 11.581,	% 8.001,	% 20.587,	% 44.925,	14.379,	% 26.172,
	496,4	266,3	178,8	1.955,9 3	6.160,0		8.226,9		ial variatio 5- % 2008 08 200	0,72	1% -2,65°	-2,67	. <mark>3,69</mark>	96,00,36		% 2,13
	479,9	255,5	170,6	712,2 34	564,4 65	779,3	231,5 38		meanannu 9 var.% 199 20	0,40	0,84	1,17	2 4,4(3,79		4 3,51
	59,8	15,8	37,2	39,6 31.	72,7 59.	19,2 26.	17,8 35.	Country)	8 2005	2 60.263,0	5 24.269,5	1 17.432,4	25.237,2	2 62.665,5		8 37.422,4
	3 45	24	16	27.79	52.00	23.04	29.54	whole	2006	9.832.2	929,(7.910,	6.204	2.891,2		36.641,6
	N.	2	9	3	-	2	ŝ	۲X(9	9 56	5 24	9 1	9 2	4 6	6	
	44	233,7	157,6	22.771,3	43.584,1	18.775,5	26.159,3	ITALY (0 2005	2 58.607,0 59	3 24.411,6 24	2 17.306,9 1	9 24.390,9 2	1 58.557,4 6	7 19.611,9	0 33.627;
	1,22% 44	-0,17% 233,7	0,86% 157,6	-2,12% 22.771,3	-0,76% 43.584,1	18.775,5	2,18% 26.159,3	ITALY (6 2000 2005	4 56.942,2 58.607,0 59	7 23.412,3 24.411,6 24	4 16.279,2 17.306,9 1	5 20.916,9 24.390,9 2	0 50.873,1 58.557,4 6	7 16.697,7 19.611,9	7 28.711,0 33.627;
	1,00% 1,22% 44	0,80% -0,17% 233,7	1,27% 0,86% 157,6	4,00% -2,12% 22.771,3	4,27% -0,76% 43.584,1	18.775,5	3,29% 2,18% 26.159,3	ITALY (- 1995 2000 2005	% 56.844,4 56.942,2 58.607,0 59	% 22.487,7 23.412,3 24.411,6 24	% 15.549,4 16.279,2 17.306,9 1	Value 16.665,5 20.916,9 24.390,9 2	% 42.127,0 50.873,1 58.557,4 6	12.987,7 16.697,7 19.611,9	% 25.161,7 28.711,0 33.627,
	9 1,00% 1,22% 44	5 0,80% -0,17% 233,7	157% 0,86% 157,6	7 4,00% -2,12% 22.771,3	3 4,27% -0,76% 43.584,1	18.775,5	26.159, 3,29% 2,18% 26.159,3		I variation - % 2008- 1995 2000 2005 3 2009	% 0,31% 56.844,4 56.942,2 58.607,0 58	% -1,41% 22.487,7 23.412,3 24.411,6 24	1,10% 15.549,4 16.279,2 17.306,9 1.	% -1,79% 16.665,5 20.916,9 24.390,9 2	% -0,08% 42.127,0 50.873,1 58.557,4 6	12.987,7 16.697,7 19.611,9	2,37% 25.161,7 28.711,0 33.627
	522,9 1,00% 1,22% 44	239,5 0,80% -0,17% 233,7	175,3 1,27% 0,86% 157,6	30.918,7 4,00% -2,12% 22.771,3	67.504,8 4,27% -0,76% 43.584,1	18.775,5	37.921,2 3,29% 2,18% 26.159,3	ITALY (mean annual variation var. % 1995- % 2008- 1995 2000 2008 2009	-0,11% 0,31% 56.844,4 56.942,2 58.607,0 5	0,35% -1,41% 22.487,7 23.412,3 24.411,6 24	0,35% -1,10% 15.549.4 16.279.2 17.306.9 1	5,03% -1,79% 16.665,5 20.916,9 24.390,9 2	4,31% -0,08% 42.127,0 50.873,1 58.557,4 6	12.987,7 16.697,7 19.611,9	3,47% 25.161,7 28.711,0 33.627;
	516,6 522,9 1,00% 1,22% 44	239,9 239,5 0,80% -0,17% 233,7	173,8 175,3 1,27% 0,86% 157,6	31.588,7 30.918,7 4,00% -2,12% 22.771,3	68.023,1 67.504,8 4,27% -0,76% 43.584,1	18.775,5	37.110,7 37.921,2 3,29% 2,18% 26.159,3	ITALY (mean annual variation station sold 2006 2006 2006 2005 </td <td>1 1.617,4 -0,11% 0,31% 56.844,4 56.942,2 58.607,0 5</td> <td>3 657,2 0,35% -1,41% 22.487,7 23.412,3 24.411,6 24</td> <td>1 448,1 0,35% -1,10% 15.549,4 16.279,2 17.306,9 1</td> <td>4 26.858,0 5,03% -1,79% 16.665,5 20.916,9 24.390,9 2</td> <td>4 66.098,7 4,31% -0,08% 42.127,0 50.873,1 58.557,4 6</td> <td> 12.987,7 16.697,7 19.611,9</td> <td>3 38.490,5 3,47% 2,37% 25.161,7 28.711,0 33.627</td>	1 1.617,4 -0,11% 0,31% 56.844,4 56.942,2 58.607,0 5	3 657,2 0,35% -1,41% 22.487,7 23.412,3 24.411,6 24	1 448,1 0,35% -1,10% 15.549,4 16.279,2 17.306,9 1	4 26.858,0 5,03% -1,79% 16.665,5 20.916,9 24.390,9 2	4 66.098,7 4,31% -0,08% 42.127,0 50.873,1 58.557,4 6	12.987,7 16.697,7 19.611,9	3 38.490,5 3,47% 2,37% 25.161,7 28.711,0 33.627
	500,0 516,6 522,9 1,00% 1,22% 44	231,7 239,9 239,5 0,80% -0,17% 233,7	166,0 173,8 175,3 1 ,27% 0,86% 157,6	\8.902,5 31.588,7 30.918,7 4,00% -2,12% 22.771,3	V2.370,6 68.023,1 67.504,8 4,27% -0,76% 43.584,1	5.262,0 18.775,5	44.409,0 37.110,7 37.921,2 3,29% 2,18% 26.159,3	LIGURIA ITALY (Image: Second Se Second Second Sec	2 1.612,4 1.617,4 -0,11% 0,31% 56.844,4 56.942,2 58.607,0 5	8 666,6 657,2 0,35% -1,41% 22.487,7 23.412,3 24.411,6 24	3 453,1 448,1 0,35% -1,10% 15.549,4 16.279,2 17.306,9 1	4 27.348,4 26.858,0 5,03% -1,79% 16.665,5 20.916,9 24.390,9 2	7 66.151,4 66.098,7 4,31% -0,08% 42.127,0 50.873,1 58.557,4 6	8 12.987,7 16.697,7 19.611,9	9 37.598.8 38.490.5 3,47% 2,37% 25.161.7 28.711,0 33.627.
	472,4 500,0 516,6 522,9 1,00% 1,22% 44	230,1 231,7 239,9 239,5 0,80% -0,17% 233,7	158,6 166,0 173,8 175,3 1,27% 0,86% 157,6	.829,8 28.902,5 31.588,7 30.918,7 4,00% -2,12% 22.771,3	.029,1 62.370,6 68.023,1 67.504,8 4, 27% -0,76% 43.584,1	.965,1 25.262,0 18.775,5	.820.9 34.409.0 37.110.7 37.921.2 3,29% 2,18% 26.159.3	LIGURIA ITALY (00 205 208 var. % 995- % 2008 200 2005 209 var. % 995- % 2008- 955 2000 2005	3,4 1.601,2 1.612,4 1.617,4 -0,11% 0,31% 56.844,4 56.942,2 58.607,0 59	2,2 645,8 666,6 657,2 0,35% -1,41% 22.487,7 23.412,3 24.411,6 24	7,4 436,3 453,1 448,1 0,35% -1,10% 15.549,4 16.279,2 17.306,9 1	3.9 24.774,4 26.858,0 5,03% -1,79% 16.665,5 20.916,9 24.390,9 2	5,8 61.425,7 66.151,4 66.098,7 4,31% -0,08% 42.127,0 50.873,1 58.557,4 6	3,3 22.147,8 19.611,9 12.987,7 16.697,7 19.611,9	1,4 3.4.2.12;9 3.7.598;8 38.490;5 3.47% 2.37% 25.161;7 28.711,0 33.627;
	57,1 472,4 500,0 516,6 522,9 1 ,00% 1,22% 44	17,2 230,1 231,7 239,9 239,5 0,80% -0,17% 233,7	49,1 158,6 166,0 173,8 175,3 1 ,27% 0,86% 157,6	96,1 25.829,8 28.902,5 31.588,7 30.918,7 4,00% -2,12% 22.771,3	44,5 53.029,1 62.370,6 68.023,1 67.504,8 4,27% -0,76% 43.584,1	94,9 21.965,1 25.262,0 18.775,5	98,7 28.820,9 34.409,0 37.110,7 37.921,2 3,29% 2,18% 26.159,3	LIGURIA	156 2000 2005 2008 2009 2005	1 1.583.4 1.601.2 1.612.4 1.617.4 -0,11% 0,31% 56.844.4 56.942.2 58.607.0 58.	7,8 652,2 645,8 666,6 657,2 0,35% -1,41% 22.487,7 23.412,3 24.411,6 24	3,4 447,4 436,3 453,1 448,1 0,35% -1,10% 15.549,4 16.279,2 17.306,9 1	3,4 21.276,9 24.774,4 27.348,4 26.858,0 5,03% -1,79% 16.665,5 20.916,9 24.390,9 2	3,6 51.655,8 61.425,7 66.151,4 66.098,7 4,31% -0,08% 42.127,0 50.873,1 58.557,4 6	2,5 19.169,3 22.147,8 12.987,7 19.611,9	3,2 29,000,4 34.212,9 37,598,8 38,490,5 3,47% 2,37% 25,161,7 28,711,0 33,627

			LAB	JUR FORCES					NOT-L	ABOUR FOR	CES				Activity rate (%	Employment	Unemployment
REGION			People s	earching for	a job			Searchin a	Don't	Don't	Not-Jahour	Not-Jahour		Mean	ratio between	rate (% ratio	rate (% ratio
(NUTS 2)/	Periodo di riferimen	to Workers	With	Without		Total	Searching for a job not-	for a job but	searching for a job but	searching for a job and	forces:	forces:	Total	population of the	the total labour forces	between the total amount of	between people in search of a job and
AKEA			previous working	previous working	Total		actively	not available to work	available to work	not available to work	population <15	population >64		period	and the pop.	workers and the	the total amount of labour forces)
	2004 III quarter	. 1.798	experiences	experiences 28	106	1.904	46	16	40	819	528	885	2.334	4.238	67.1	63.3	5.6
•	2005 III quarter	. 1.841	54	21	75	1.916	40	14	30	848	539	907	2.378	4.294	67,0	64,3	3,9
•	2006 III quarter	. 1.864	t 52	24	76	1.940	42	18	28	815	541	928	2.372	4.312	61,9	65,2	3,9
PIEMONTE	2007 III quarter	. 1.865	57	19	76	1.945	38	20	61	795	548	931	2.392	4.337	67,7	65,0	3,9
	2008 III quarter	. 1.875	72	24	76	1.975	36	20	49	792	559	945	2.401	4.377	68,4	65,0	4, <mark>9</mark>
•	2009 III quarter	· 1.855	5 97	22	119	1.974	54	22	37	800	565	950	2.428	4.402	68,0	63,8	6,0
•	2010 III quarter	. 1.833	3 105	24	129	1.963	60	18	41	802	570	963	2.454	4.416	67,7	63,2	6,6
	2004 III quarter	. 55	5 1	0	1	57	1	1	1	23	16	23	65	121	68,5	67,1	2,0
	2005 III quarter	54	1 2	0	2	56	1	0	1	25	16	23	66	122	67,7	65,3	3,4
VALLE	2006 III quarter	· 56	5 1	0	1	58	4	1	1	23	17	24	66	123	69,1	67,5	2,4
VALLE	2007 III quarter	. 56	5 2	0	2	58	1	0	1	23	17	24	66	124	70,1	67,6	3,5
D'AUSIA	2008 III quarter	. 56	5 1	0	2	58	1	1	1	22	17	25	67	125	69,1	67,1	2,9
	2009 III quarter	54	1 2	0	3	57	1	0	1	24	18	25	69	126	68,0	64,7	4,7
	2010 III quarter	· 57	1 2	0	3	60	2	1	1	21	18	25	67	127	70,6	67,4	4,5
	2004 III quarter	4.125	5 128	49	177	4.302	101	46	88	1.776	1.252	1.653	4.916	9.218	61,9	65,0	4,1
	2005 III quarter	. 4.164	134	38	172	4.336	83	35	76	1.850	1.280	1.705	5.029	9.366	67,6	64,9	4,0
	2006 III quarter	. 4.275	107	40	147	4.426	78	37	100	1.743	1.295	1.756	5.009	9.435	69,0	66,7	3,3
LOMBARDIA	2007 III quarter	· 4.321	114	37	152	4.473	82	37	124	1.706	1.320	1.777	5.045	9.518	69,3	66,9	3,4
	2008 III quarter	4.382	110	35	144	4.527	96	50	120	1.669	1.346	1.807	5.088	9.615	<u>69,7</u>	67,4	3,2
	2009 III quarter	· 4.282	2 187	46	233	4.515	107	4	96	1.735	1.370	1.848	5.199	9.714	69,2	65,6	5,2
	2010 III quarter	. 4.225	5 187	38	225	4.450	125	54	97	1.796	1.394	1.879	5.345	9.795	67,9	64,5	5,1
	2004 III quarter	. 447	7 11	2	13	460	5	3	6	174	156	151	495	955	70,6	68,6	2,8
1	2005 III quarter	. 445	3 12	3	15	458	9	3	7	180	158	155	509	967	69,6	67,3	3,2
TRENTINO-	2006 III quarter	. 451	12	3	15	466	9	9	9	176	160	159	512	978	70,2	68,0	3,2
ALTO ADIGE /	2007 III quarter	• 462	9	2	11	472	4	9	7	173	161	164	515	987	70,9	69,3	2,3
SUDTIROL	2008 III quarter	475	6	- 1	10	483	. 3	9	9	170	163	167	518	1.000	71,5	70,0	2,0
	2009 III quarter	474	13	2	15	489	. 5	9		173	163	169	523	1.011	71,4	69,2	3,0 2,0
	2010 III quarter	4/4	12	υ -	U r	C84 000	4 4	0 0	1	1/9	104	C/1 0	050	120.1	70.7	00,0	3,0 2 2
	2005 III quarter	27	L 1	1	- x	228	1 4	10	4	16	92	% %	266	494	68.2	65.9	3.4
	2006 III quarter	. 222	6	1	7	229	4	4	4	94	11	87	270	499	68,1	65.9	3,1
THO VINCE OF	2007 III quarter	. 227	1 5	1	9	233	2	3	5	93	78	89	271	504	68,9	67,2	2,4
OTHENT	2008 III quarter	. 233	5 5	1	5	238	1	3	5	93	79	91	272	510	69,6	68,0	2,3
	2009 III quarter	. 230	7	1	8	238	4	4	6	92	80	93	279	516	69,0	66,7	3,2
	2010 III quarter	. 225	9 8	2	9	239	4	3	6	96	81	95	283	522	68,6	65,9	3,9
	2004 III quarter	. 226	5 5	1	9	232	1	1	2	83	81	69	236	468	72,4	70,6	2,5
	2005 III quarter	. 223	3 5	2	7	230	2	1	2	86	82	70	243	473	71,0	68,8	3,0
PROVINCE OF	2006 III quarter	. 230) 6	2	8	237	1	2	2	82	82	71	241	479	72,5	70,1	3,2
BOLZANO/	2007 III quarter	. 235	5 4	1	5	240	2	4	1	80	83	75	244	484	73,0	71,4	2,1
BOZEN	2008 III quarter	. 240) 4	0	4	245	1	33	4	78	83	76	245	490	73,4	72,1	1,8
	2009 III quarter	. 24/	1 7	1	7	251	-	2	1	80	28	76	244	495	74,0	71,8	2,9
	2010 III quarter	. 241	5	1	5	247	1	3	2	83	8	80	253	499	73,0	71,3	2,2

Chart A.23 – Activity rates, employment rates and unemployment rates in the Italian Alpine Regions

Activity rates, employment rates and unemployment rates from 2004 to 2010 in the Italian Alpine area by NUTS-2 levels

		_	LABC	JUR FORCES	s				NOT-L	ABOUR FOR	CES				Activity rate (%	Employment	Unemployment
REGION (NUTS 2) / AREA	Periodo di riferimen	uto Workers	People si With previous working	earching for Without previous working	a job Total	Total	Searching for a job not- actively	Searching for a job but fot available to work	Don't searching for a job but available to work	Don't searching for a job and not available to work	Not-labour forces: population <15	Not-labour forces: population >64	Total	Mean population of the period	ratio between the total labour forces and the pop. 15<×<64)	rate (% ratio between the total amount of workers and the pop. 15<<<64)	rate (% ratio between people in search of a job and the total amount of labour forces)
	2004 III quarter	2.05	3 62	17	79	2.132	37	25	45	923	641	808	2.480	4.611	67,1	64,6	3,7
	2005 III quarter	. 2.06	6 70	19	89	2.155	46	12	56	914	652	833	2.512	4.667	67,4	64,5	4,1
	2006 III quarter	2.10	0 70	17	87	2.187	37	28	49	895	659	853	2.520	4.707	68,1	65,4	4,0
VENETO	2007 III quarter	2.12	3 57	16	73	2.196	36	23	62	886	670	873	2.551	4.747	68,3	66,0	3,3 3.6
	2005 III quarter	01.2	10 2	21 2	10 10	0777	55	17	00	C88	180	890	080.2	4.800	00,0	00,0	6 <mark>7</mark>
	2010 III quarter	200	5 83 81	77	C01 114	2.188	22	02 02	60 47	928	260 608	914 971	2.000	4.824	67.6 67.6	63,9 64 1	4,8 7 2
	2004 III quarter	0.1	15 15	¹ 4	10	575	ŕ	27	10	124	147	170	650	1 195	66.1	141 63 8	3,4
	2005 III quarter		CI 2	0 6	19	525	0	- 9	10	234	142	253	600 668	1.193	00,1 65.7	02,0 63.2	3,4 3.7
FRIULI -	2006 III quarter	51	2 18	7	24	537	12	4	14	228	146	257	661	1.198	67.0	63.9	4.5
VENEZIA	2007 III quarter	52	8 11	5	15	543	9	6	21	212	148	264	660	1.203	68,3	66,4	2,8
GIULIA	2008 III quarter	. 52	2 20	4	23	545	8	5	15	222	151	267	668	1.213	68,2	65,3	4,3
	2009 III quarter	. 50	5 19	4	23	528	10	4	16	239	153	271	693	1.221	65,8	62,9	4,3
	2010 III quarter	. 50	2 22	9	28	530	12	7	12	233	154	276	694	1.224	66,5	63,0	5,2
	2004 III quarter	· 61	1 21	7	27	639	21	5	23	311	173	395	928	1.567	63,5	60,7	4,3
	2005 III quarter	. 63	5 24	8	32	666	16	8	12	307	177	400	919	1.586	65,5	62,3	4,8
	2006 III quarter	. 65	1 20	4	24	675	13	8	19	301	179	404	923	1.598	65,8	63,5	3,5
LIGURIA	2007 III quarter	. 65	3 24	3	27	680	15	10	21	282	179	409	917	1.597	67,0	64,4	4,0
	2008 III quarter	. 65	3 24	5	29	682	14	8	13	292	181	409	918	1.600	67,1	64,2	4,3
	2009 III quarter	. 2	9 35	L	43	692	16	7	11	282	183	412	912	1.604	68,2	63,9	6,2
	2010 III quarter	. 63	9 33	4	37	677	19	4	23	280	185	417	928	1.605	67,2	63,4	5,5
	2004 III quarter	· 22.48	5 1.202	599	1.800	24.286	1.371	371	981	11.758	8.225	10.620	33.326	57.612	62,3	57,7	7,4
	2005 III quarter	· 22.54	2 1.124	602	1.726	24.268	1.406	318	971	12.080	8.278	10.879	33.932	58.200	61,8	57,4	7,1
	2006 III quarter	· 23.00	1 990	499	1.489	24.490	1.371	436	1.095	11.714	8.274	11.081	33.972	58.462	62,3	58,4	6,1
IIALY (whole	2007 III quarter	· 23.41	7 957	443	1.401	24.818	1.337	348	1.431	11.438	8.335	11.229	34.118	58.935	62,7	59,1	5,6
Country)	2008 III quarter	· 23.51	8 1.042	485	1.527	25.045	1.406	350	1.428	11.387	8.393	11.381	34.345	59.390	62,8	59,0	6,1
	2009 III quarter	· 23.01	1 1.307	507	1.814	24.824	1.505	360	1.242	11.855	8.439	11.565	34.966	59.791	62,1	57,5	7,3
	2010 III quarter	· 22.78	9 1.374	490	1.864	24.653	1.644	351	1.248	12.024	8.480	11.683	35.429	60.082	61,4	56,7	7,6
	2004 III quarter	· 11.43	6 369	118	487	11.922	241	118	258	4.968	3.407	5.044	14.036	25.958	67,8	65,0	4,1
	2005 III quarter	· 11.57	8 366	104	470	12.048	236	95	214	5.082	3.481	5.172	14.279	26.327	67,8	65,1	3,9
	2006 III quarter	• 11.83	4 335	103	438	12.272	212	123	250	4.867	3.521	5.277	14.250	26.522	68,9	66,4	3,6
NORTH	2007 III quarter	• 11.98	4 313	91	404	12.388	209	130	334	4.738	3.581	5.342	14.334	26.722	69,2	66,9	3,3
	2008 III quarter	• 12.13	5 329	95	423	12.558	217	127	320	4.723	3.655	5.403	14.445	27.003	69,6	67,2	3,4
	2009 III quarter	· 11.86	0 523	119	642	12.502	278	120	267	4.872	3.713	5.505	14.754	27.256	69,0	65,4	5,1
	2010 III quarter	· 11.77	7 528	120	648	12.425	310	124	258	4.964	3.763	5.584	15.004	27.428	68,4	64,8	5,2
	2004 III quarter	· 6.58	9 228	83	312	6.901	169	67	152	2.930	1.969	2.956	8.243	15.144	67,2	64,2	4,5
	2005 III quarter	.69.9	4 214	67	281	6.975	139	57	119	3.029	2.012	3.036	8.392	15.367	67,2	64,5	4,0
	2006 III quarter	· 6.85	1 180	67	248	7.098	134	64	148	2.881	2.032	3.112	8.370	15.469	68,4	66,0	3,5
NORTH-WEST	2007 III quarter	. 6.90	0 197	60	257	7.156	135	67	206	2.806	2.064	3.141	8.420	15.576	68,6	66,1	3,6
	2008 III quarter	. 6.97	0 207	65	272	7.242	148	79	183	2.775	2.104	3.186	8.475	15.717	69,1	66,4	3,8
	2009 III quarter	· 6.84	1 322	76	398	7.238	178	73	145	2.841	2.136	3.235	8.608	15.846	68,8	64,9	5.5
	2010 III quarter	. 6.75	5 327	67	394	7.149	205	77	162	2.899	2.166	3.284	8.794	15.943	67,8	64,0	5,5
	2004 III quarter	· 4.84	6 140	35	175	5.022	72	50	106	2.038	1.438	2.088	5.793	10.815	68,6	66,2	3,5
	2005 III quarter	. 4.88	4 152	38	189	5.073	97	38	95	2.053	1.469	2.136	5.887	10.960	68,6	66,0	3,7
	2006 III quarter	• 4.98	4 154	36	190	5.174	79	59	102	1.986	1.489	2.165	5.880	11.054	69,5	66,9	3,7
NORTH-EAST	2007 III quarter	· 5.08	4 116	31	147	5.231	74	63	128	1.932	1.517	2.200	5.915	11.146	70,0	68,0	2,8
	2008 III quarter	· 5.16	4 122	30	152	5.316	69	48	137	1.947	1.551	2.217	5.970	11.286	70,3	68,2	2,9
	2009 III quarter	· 5.02	0 201	43	244	5.264	100	46	122	2.031	1.576	2.270	6.146	11.410	69,2	66,0	4,6
	2010 III quarter	. 5.02	2 201	53	253	5.276	105	47	96	2.065	1.597	2.300	6.210	11.485	69,2	65,8	4,8

SOURCE: ISTAT databases - ELABORATION: Italian delegation - DATA EXTRACTION: 07-01-2011

LOCAL LABOUR- SYS TEMS IN 2001	Locatio	uo		Main productive special	izations	Census	data 2001			Mean val	ues in 200	(in thousa	nds inhab.)				Rates	
Name of the main centre in the area	REGION (NUTS-2)	9) 3) 3)	NIAM NOITAJIISSAJJ	-BUS CLASSIFICATION	GROUP-CLASSIFICATION OF THE LOCAL LABOUR-SYSTEM	Number of involved St municipalities 2001 in 2001	urface Re 11 (km ²) pop	esident Popu pulation 2001	lation 0- Popu 14 an	ulation 15 Le d more fo	pour V	orkers In se	earch of forc a job 15 a	oHabour ces aged po and more (an annual Acti total ratio pulation forc (2007) 1	ivity rate (% E between the (btal labour t ces and the ces and the pop. ≥15)	Employ ment rate (% ratio between ne total amount of workers and the pop. ≥15)	Unemployment rate (% ratio between people in search of a job and the total amount of labour forces)
BARDONECCHIA	Piemonte Toi	nino N	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	11	690,5	10.224	1,4	9,7	5,5	5,3	0,2	4,2	11,1	56,8	54,4	4,1
CIRIE'	Piemonte Toi	orino	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	37	926,6 1	100.543	14,2	90,4	47,9	45,9	2,0	42,6	104,7	52,9	50,7	4,2
IVREA	Piemonte Toi	N oninc	Not-manifacturing system	Urban system	Hghly specialized urban area	63	655,7 1	109.782	13,5	6'26	48,4	46,4	2,0	49,5	111,3	49,4	47,4	4,1
PINEROLO	Piemonte Toi	orino	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	42	1.124,9 1	121.386	15,8	109,0	54,5	52,3	2,2	54,4	124,7	50,0	48,0	4,0
RIVAROLO CANAVESE	Piemonte To:	ino inc	Heavy industries system	Heavy industries system	Means of transport-sy stem	41	920,2	71.938	9,3	63,8	32,8	31,3	1,4	31,0	73,1	51,4	49,2	4,4
SUSA	Piemonte Toi	i oninc	Heavy industries system	Heavy industries system	Means of transport-sy stem	24	464,7	48.183	6,5	43,3	22,1	21,2	6'0	21,2	49,8	51,1	49,0	4,2
TORINO	Piemonte To:	orino	Heavy industries system	Heavy industries system	Means of transport-sy stem	88	1.879,0 1.6	384.336	222,0	1.524,8	784,0	746,0	38,0	740,9	1.746,9	51,4	48,9	4,8
BORGOSESIA	Piemonte Vei	srcelli	Made-in-Italy system	Leather and textile-clothing system	Tex file industries system	28	457,8	68.905	7,9	59,5	29,4	28,2	1,2	30,1	67,4	49,4	47,4	4,1
VARALLO SESIA	Piemonte Vei	srcelli	Made-in-Italy system	Leather and textile-clothing system	Tex file industries system	25	683,9	16.118	1,8	14,2	7,0	6,7	0,3	7,3	16,1	49,1	47,1	4,0
BORGOMANERO	Piemonte No	ov ara	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	39	387,8	95.445	12,8	86,3	45,5	43,2	2,3	40,8	99,1	52,7	50,0	5,1
ALBA	Piemonte Cu.	09UF	Made-in-Italy system	Other made-in-Italy system	Food-processing sy stem	46	610,9 1	100.898	14,3	89,9	49,2	48,1	1,1	40,7	104,2	54,8	53,5	2,3
CEVA	Piemonte Cui	ueo n	Heavy industries system	Heavy industries system	Chemical and oil system	26	647,2	20.099	2,2	17,5	8,6	8,4	0,2	8,9	19,8	49,1	48,0	2,3
CORTEMILIA	Piemonte Cui	oeur.	Made-in-Italy system	Other made-in-Italy system	Food-processing sy stem	18	222,4	9.098	0,8	7,8	3,7	3,6	0,1	4,2	8,7	46,9	45,7	2,4
CUNEO	Piemonte Cui	N oeur.	Not-manifacturing system	Urban system	Low specialized urban area	54 2	2.474,1 1	154.657	22,3	137,0	75,4	73,8	1,7	61,6	159,3	55,1	53,9	2,2
DOGLIANI	Piemonte Cu.	oeur,	Made-in-Italy system	Other made-in-Italy system	Food-processing sy stem	15	197,2	13.507	1,8	11,9	6,2	6,1	0,1	5,7	13,7	52,1	50,9	2,2
MONDOVI	Piemonte Cu.	nneo	Heavy industries system	Heavy industries system	Means of transport-sy stem	23	625,2	52.775	7,4	46,2	24,9	24,3	0,5	21,3	53,5	53,9	52,7	2,2
SALUZZO	Piemonte Cu.	oeur,	Made-in-Italy system	Other made-in-Italy system	Food-processing sy stem	29	791,6	67.429	9,5	59,8	32,6	31,8	0,8	27,2	69,3	54,5	53,2	2,4
SANTO STEFANO BELBO	Piemonte Cu.	uneo N	Not-manifacturing system	Other not-manifacturing system	Mainly farming areas system	5	64,2	6.414	0,8	5,5	2,8	2,7	0,1	2,7	6,3	51,1	49,9	2,3
VERZUOLO	Piemonte Cu.	09UF	Made-in-Italy system	Other made-in-Italy system	Wood and fumiture system	15	497,7	18.336	2,4	16,0	8,6	8,4	0,2	7,5	18,4	53,5	52,3	2,3
BIELLA	Piem onte Bie	ella	Made-in-Italy system	Leather and textile-clothing system	Tex file industries system	71	791,5 1	171.969	20,5	149,9	6'11	74,5	3,4	71,9	170,4	52,0	49,7	4,3
CANNOBIO	Piemonte Vei	srbano-Cusi	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	9	132,1	7.256	0,8	6,4	3,2	3,1	0,1	3,2	7,3	49,9	48,3	3,3
DOMODOSSOLA	Piemonte Ve.	srbano-Cusi	Heavy industries system	Heavy industries system	Chemical and oil sy stem	37	1.574,7	62.466	7,2	54,5	26,4	25,6	0,9	28,0	61,7	48,6	46,9	3,3
OMEGNA	Piemonte Vei	erbano-Cusi	Made-in-Italy system	Other made-in-Italy system	Sy stem of production of machines and devices	21	277,7	41.206	5,4	36,6	19,4	18,8	0'0	17,2	42,0	53,0	51,3	3,2
VERBANIA	Piemonte Ve.	Prbano-Cusi	Not-manifacturing system	Urban system	Low specialized urban area	18	291,3	52.435	6,6	47,5	24,0	23,2	0,8	23,5	54,2	50,5	48,9	3,2
AOSTA	Valle d'Aosta Ao:	osta 🔥	Not-manifacturing system	Urban system	Low specialized urban area	35	1.629,8	72.201	10,4	65,1	35,3	34,3	1,0	29,8	75,4	54,3	52,6	3,0
COURMAYEUR	Valle d'Aosta Ao:	osta N	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	5	496,5	8.257	1,2	7,5	4,4	4,2	0,1	3,1	8,7	58,4	56,5	3,2
SAINT-VINCENT	Valle d'Aosta Ao:	osta 🔥	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	36	1.165,4	40.940	5,4	36,3	19,7	19,0	0,7	16,6	41,7	54,2	52,3	3,6
DIANO MARINA	Liguria Im ₁	peria N	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	7	56,3	14.266	1,6	13,2	6,3	6,0	0,3	6'9	14,8	47,7	45,3	4,9
IMPERIA	Liguria Im ₁	-peria A	Not-manifacturing system	Urban system	Mainly port urban area	23	390,8	54.091	6,8	49,6	24,5	23,4	1,1	25,1	56,3	49,3	47,2	4,4
SAN REMO	Liguria Im ₁	peria A	Not-manifacturing system	Urban system	Low specialized urban area	4	116,4	55.542	7,0	54,3	25,6	24,5	1,2	28,6	61,3	47,3	45,1	4,6
TAGGIA	Liguria Im ₁	peria h	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	11	223,1	22.757	2,9	21,0	10,6	10,1	0,5	10,4	23,9	50,6	48,1	4,9
VENTIMIGLIA	Liguria Im ₁	peria A	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	17	300,8	56.919	7,0	51,7	26,6	25,2	1,4	25,2	58,7	51,3	48,7	5,2
ALBENGA	Liguria Sa:	av ona 🔥	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	24	328,3	51.316	6,4	47,9	24,5	23,4	1,0	23,5	54,3	51,0	48,9	4,2
ANDORA	Liguria Sa:	av ona 🔥	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	3	59,3	7.721	1,0	7,4	3,7	3,5	0,2	3,7	8,3	49,7	47,5	4,5
CAIRO MONTENOTTE	Liguria Sa:	av ona	Heavy industries system	Heavy industries system	Chemical and oil sy stem	25	657,7	44.393	4,7	39,6	18,9	18,1	0,8	20,7	44,3	47,7	45,8	4,0
FINALE LIGURE	Liguria Sa	av ona 👖	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	15	217,4	50.134	5,9	47,0	22,3	21,3	1,0	24,7	52,9	47,4	45,4	4,3

Chart A.24 – Activity, employment and unemployment rates in the Italian Alpine Local Labour Systems Rates based on 2007 data (2001 for census data) for 129 Local Labour Systems in the Italian Alps

SYSTEMS IN 2001	Loc	ation		Main productive special	zations	Cens	us data 200	-		Mean	alues in 200)7 (in thous	ands inhat	()			Rates	
Name of the main centre in the area	Region (NUTS-2)	PROVINCE (NUTS- 3)	MAIN CLRSSIFICATION	SUB- CLASSIFICATION	GROUP-CLASSIFICATION OF THE LOCAL LABOUR-SYSTEM	Number of involved nunicipalities in 2001	Surface 1 2001 (km ²)	Resident Pc opulation in 2001	pulation 0- Po 14 a	oulation 15 nd more	Labour forces	Morkers In :	search of ft a job 11	Vot-labour brces aged 5 and more	ean annual ra total ra copulation (2007)	vctivity rate (% fio between the total labour borces and the pop. ≥15)	Employ ment rate (% ratio betw een the total amount of workers and the pop. ≥5)	Unemploy ment rate (% ratio betw een people in search of a job and the btal amount of labour forces)
ILUNO	Lombardia	Varese	Made-in-Italy system	Other made-in-Italy system	Food-processing sy stem	28	245,8	53.034	7,4	47,7	26,2	25,4	0,8	21,5	55,1	54,8	53,2	2,9
SESTO CALENDE	Lombardia	Varese	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	45	374,2	137.064	20,1	125,8	68,1	66,0	2,0	57,7	145,9	54,1	52,5 52,6	3,0
RELLAGIO	Lombardia	Como	Mot-manifacturing system	Other not-manifacturing system	System of production of machines and devices Tourist system	1	231,3 110.8	200.002 Q Q65	24 t	4'012	4/211	45	3,2 0.2	30,0	10.3	- 1 8	02'0 40 0	2,0 3.5
COMO	Lombardia	Como	Made-in-Italy system	Leather and textile-clothing system	Textile industries system	88	543.0	408.746	61.5	372.4	202.5	194,5	8.1	169.9	433,9	54,4	52,2	4,0
DON GO	Lombardia	Como	Heavy industries system	Heavy industries system	Metal production and manifacturing of metal-bea	18	239,4	17.534	2,1	15,3	7,9	7,6	0,3	7,4	17,4	51,5	49,7	3,7
MENAGGIO	Lombardia	Como	Not-manifacturing system	Other not-manifacturing system	Tourist system	23	256,4	26.378	3,6	23,2	12,0	11,6	0,5	11,1	26,7	52,0	50,0	3,8
SAN FEDELE INTELVI	Lombardia	Como	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	14	88,7	9.077	1,3	8,4	4,5	4,3	0,2	3,9	9,7	53,3	51,4	3,5
BORMIO	Lombardia	Sondrio	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	5	800,6	19.032	3,6	16,1	9,5	9'0	0,4	6,6	19,7	58,8	56,1	4,6
CHIAVENNA	Lombardia	Sondrio	Made-in-Italy system	Other made-in-Italy system	Food-processing system	12	565,6	23.021	3,4	19,9	10,9	10,4	0,5	8,9	23,3	55,0	52,5	4,5
CHIESA IN VALMALENCO	Lombardia	Sondrio	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	4	283,2	6.673	0,9	5,6 AE E	3,1	2,9	0,1	2,6	6,5	54,2 E.4.1	51,7 51 0	4,6
SONDALO	Lombardia	Sondrio	Heavy industries system	Heavy industries system	rouu-processing system Chemical and oil system	9	315.1	12.865	1.7	10.9	5.6	5.3	0'-	5.3	12.7	51.2	31,0 48.7	4,2
SONDRIO	Lombardia	Sondrio	Not-manifacturing system	Urban svstem	Low specialized urban area	18	507.3	49.678	6.3	43.9	23.2	22.2	1.0	20.7	50.2	52.8	50.5	4,3
TIRANO	Lombardia	Sondrio	Made-in-Italy system	Other made-in-Italy system	Food-processing system	9	212,5	19.109	2,5	16,6	8,5	8,2	0,4	8,1	19,1	51,5	49,3	4,2
ALBINO	Lombardia	Bergamo	Made-in-Italy system	Leather and textile-clothing system	Tex file industries system	16	179,0	70.072	10,6	61,5	32,3	31,5	0,8	29,2	72,1	52,6	51,2	2,5
BERGAMO	Lombardia	Bergamo	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	124	906,3	705.872	116,6	645,4	351,6	342,6	9,1	293,8	762,0	54,5	53,1	2,6
CLUSONE	Lombardia	Bergamo	Made-in-Italy system	Leather and textile-clothing system	Clothing manifacture and trade system	20	459,8	37.684	5,7	33,4	17,2	16,7	0,5	16,2	39,1	51,4	50,0	2,8
COSTA VOLPINO	Lombardia	Bergamo	Heavy industries system	Heavy industries system	Metal production and manifacturing of metal-bea	21	246,7	55.628	8,6	50,0	26,3	25,6	0,7	23,7	58,5	52,7	51,2	2,8
PIAZZA BREMBANA	Lombardia	Bergamo	Heavy industries system	Heavy industries system	Metal production and manifacturing of metal-bea	20	314,5	7.644	0'0	6,4	3,1	3,0	0,1	3,3	7,3	48,0	46,7	2,7
VILMINORE DI SCALVE	Lombardia	Bergamo	Made-in-Italy system	Other made-in-Italy system	Food-processing system	4	140,4	4.482	0'0	3,8	2,0	1,9	0,1	1,9	4,4	51,3	49,9	2,8
ZOGNO	Lombardia	Bergamo	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	19	335,5	38.197	5,7	32,8	17,0	16,5	0,5	15,8	38,5	51,7	50,3 50,6	2,7
BRESCIA	Lombardia	Brescia	Made-in-Italy system	Other made-in-italy system	System of production of machines and devices	32	538, T	40/.88/	03,7	309,0	192,8	1,001	0'.	1/0/1	432,1 oro o	5,26 5,26	50,6 F2.6	3,2
	Lombardia Lombardia	Brescia	Made-in-Italy system Made-in-Italy system	Other made-in-Italy system Other made-in-Italy system	System of production of machines and devices Food-processing system	24	2,500	58.790	39,4	2,4,5 52,6	28.2	27.9	6'S	30,2	200,9 613	50,Z 53.5	53,0 51,8	2,9 3.3
EDOLO	Lombardia	Brescia	Made-in-Italy system	Other made-in-Italy system	Food-processing system	16	749.7	24.061	2.8	20.9	10.5	10.1	0.4	10.4	23.7	50.3	48.5	3.5
LIMONE SUL GARDA	Lombardia	Brescia	Not-manifacturing system	Other not-manifacturing system	Tourist system	2	98,6	2.956	0,5	2,8	1,4	1,4	0'0	1,3	3,2	51,3	49,6	3,3
LUMEZZANE	Lombardia	Brescia	Heavy industries system	Heavy industries system	Metal production and manifacturing of metal-bea	14	310,9	73.647	11,4	65,0	34,5	33,4	1,1	30,5	76,5	53,1	51,4	3,2
SALO'	Lombardia	Brescia	Heavy industries system	Heavy industries system	Metal production and manifacturing of metal-bea	19	306,6	73.175	12,0	68,5	36,6	35,5	1,2	31,8	80,5	53,5	51,8	3,2
TOSC OLAN O-MADERNO	Lombardia	Brescia	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	5	223,2	14.032	1,8	13,0	6,1	5,9	0,2	6,8	14,8	47,2	45,7	3,1
VESTONE	Lombardia	Brescia	Heavy industries system	Heavy industries system	Metal production and manifacturing of metal-bea	17	329,2	22.310	3,6	19,5	10,3	10,0	0,3	9,1	23,1	53,1	51,4	3,2
LECCO	Lombardia	Lecco	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	70	531,2	269.308	40,6	240,9	130,0	126,7	3,3	110,9	281,5	54,0	52,6	2,5
PREMANA	Lombardia	Lecco	Made-In-Italy system	Uther made-in-italy system	system of production of machines and devices	<u>۹</u> '	270'8	14.930	2,4	13,3	6,1 2,0	1.1	0'Z'0	0'0	0,01	24,1	53,3 51.0	2'0 2'1
MALCESINE MALCESINE	Veneto	Verona	Not-manifacturing system	Other not-manifedulaties system	Duiluing-materials sy sterii Touriet evention	0 6	214,0 160.6	8 401	1.1	7.7	3'D	3.0	0.1	2'1	1'N2 8 8	0//2	50, Z F/ 3	3,1
	Variato	Varona	Mada-in-Italy evetam	Other mode in talve system	Svetam of moducition of machines and day ines	۶ ۲	574 F	117 018	20.4	107.1	614 614	50 1	0.0	46.0	197.6	510 570	55.0	3.1
SAN GIOVANNI ILARIONE	Veneto	Verona	Made-in-Italy system	Leather and textile-clothing system	Tannery , leather, hide integrated system	4	88,6	15.083	2.5	13,1	7,6	7,4	0,2	5,4	15,6	58,4	56,7	3,0
VERONA	Veneto	Verona	Not-manifacturing system	Urban system	Not-specialized urban area	38	1.315,4	540.753	83,5	489,6	269,4	260,2	9,2	220,3	573,2	55,0	53,1	3,4
ARZIGNANO	Veneto	Vicenza	Made-in-Italy system	Leather and textile-clothing system	Tannery, leather, hide integrated system	16	346,9	115.743	19,1	102,1	55,9	54,2	1,8	46,2	121,2	54,8	53,1	3,1
ASIAGO	Veneto	Vicenza	Not-manifacturing system	Other not-manifacturing system	Tourist sy stem	5	352,6	13.922	2,0	12,2	6,3	6,0	0,2	5,9	14,3	51,4	49,4	3,9
BASSANO DEL GRAPPA	Veneto	Vicenza	Made-in-Italy system	Other made-in-Italy system	Wood and fumiture system	28	575,3	174.859	29,7	154,5	84,1	81,1	3,0	70,4	184,2	54,5	52,5	3,6
SCHIO	Veneto	Vicenza	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	8	236,4	78.245	12,7	69,5	37,1	35,8	1,3	32,4	82,2	53,4	51,5	3,4
THIENE	Veneto	Vicenza	Made-in-Italy system	Other made-in-Italy system	System of production of machines and devices	25	450,6	104.094	16,7	91,8	50,3	48,6	1,8	41,5	108,5	54,8	52,9	3,5
AGORDO	Veneto	Belluno	Made-in-Italy system	Other made-in-Italy system	Glasses-manufacturing system	15	561,5	19.959	2,4	16,8	8,5	8,3	0,2	8,3	19,3	50,6	49,4	2,5
AURONZO DI CADORE	Veneto	Belluno	Made-in-Italy system	Other made-in-Italy system	Glasses-manutacturing system	7	564,0	13.143	1,6	1,11	5,7	5,6	0,2	5,4	12,7	51,5	50,1	2,8
BELLUNO	Veneto	Belluno	Made-in-Italy system	Other made-in-Italy system	Glasses-manufacturing system	20	1.006,4	93.131 5.712	12,2	82,3	44,3	43,5	0,8	38'0	94,5	53,9	52,9	1,8
COK LINA U AMPEZZO	Veneto	Belluno	Mode in Holu and and	Other not-manifacturing system	I OUINST SY STEM	4	290,1	51.5.8	- 1°	8,3 F 1	4,2	- ч ц	1'n	- '- '- '- '- '- '- '- '- '- '- '- '- '-	0'A	20'8	49,5 E0 0	2'8
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	Valielu Vanaty	Traviso	Made-in-Italy system Made-in-Italy system	UTTEL IIIAU&111-11AIY 3Y30011 Loothor and textile-clothing system	W000 drid Turriure systerii Frodu aar, evelam	17	020'I	110.345	19.7	107.4	or,u 613	0,00	0'0 9.4	46.1	100,3	00,1 67.0	678 54.8	4'C
PIEVE DI SOLIGO	Veneto	Treviso	Made-in-Italy system	Other made-in-Italy system	Wood and fumiture system	6	191,9	41.816	6'9	38,0	21,5	20,7	4'7 0'8	16,5	44,9	56,7	54,5	3,8

	Unemploy ment rate (% ratio between people in search of a job and the total amount of labour forces)	4,4	2,3	2,5	2,6	2,7	2,4	2,4	2,7	2,8	2,5	2,5	2,9	2,9	2,9	2,7	2,8	2,5	2,8	3,1	3,0	3,0	2,8	3,1	2,6	3,5	2,9	5,3	4,3	3,1	3,U	3.1	2,7	3.6	3,1	3,7	3,2	3,4	3,2	3,0	2,8	3,5	6,1
Rates	Employment rate (% ratio between the total amount of workers and the pop. ≥ 5)	54,0	55,9	60,5	60,2	59,6	59,4	57,2	58,1	55,5	60,0	57,6	57,6	58,3	58,5	57,9	59,3	54,6	52,5	51,9	51,5	52,8	52,7	50,9	51,2	49,7	54,2	48,3	48,1	51,8	51,4	510	53.8	45.4	49,0	50,3	49,0	49,7	48,4	50,4	53,0	51,4	45.9
	Activity rate (% ratio between the total labour forces and the pop. ≥ 15)	56,5	57,2	62,1	61,8	61,2	60,8	58,6	59,8	57,0	61,5	59,1	59,4	60,1	60,2	59,6	61,0	26,0	54,0	23,6	53,0	54,4	54,2	52,6	52,6	51,5	55,8	51,0	50,3	53,4	8'7C	50.7	55.3	47.1	50,6	52,2	9'05	51,4	20'0	52,0	54,5	53,3	48'6
	Mean annual total population (2007)	11,7	166,8	49,3	34,9	12,7	10,4	23,1	15,6	75,4	7,2	5,6	11,4	15,1	8,6	17,9	17,5	13,8	51,3	10,1	26,3	19,1	23,5	10,0	10,1	9,1	26,0	9,3	6,2	7,5	14,9	13.3	187.9	4.5	75,7	8,6	38,4	269,0	148,0	52,6	240,5	10.726,847	7 58.879,975
ıhab.)	If Not-labour forces aged 15 and more	2 4,1	8 60,3	6 15,2	5 10,9	2 4,0	3,3	3 7,9	2 5,1	0 27,2	1 2,3	1 1,8	2 3,7	2 4,9	1 2,7	2 5,9	2 5,6	2 5,0	7 19,9	3,9	4 10,5	3 7,3	3 9,0	1 4,0	1 4,0	1 3,7	3 9,7	2 3,8	1 2,6	3,0	30,0	5.4	4 71.1	1 2.2	0 32,8	1 3,7	6 16,7	1 114,6	1 65,0	7 22,1	1 94,4	3 4.312,275	11 25.824,87
housands in	In search o a job	1 0,5	9 1,4	2	1 0,	1	.'0	0''0	4 0,3	1,1	6 0,	6 0,	2 0,3	2 0.3	0	5 0,2	2 0'3	3 0,2	7 0,	4 0.	5 0,	4 0,3	4 0,5	3 0,	3 0,	8	9 0,	7 0,2	2	.0	2 4		4	6	6 1,0	.'0 6	9'0	1 4,	0 2,	2 0,7	1 3,	0 171,43	37 1.506,04
in 2007 (in tl	Workers	3 5,	7 78,	8 24	6 17,	3 6,	1 5,	10,	6 7,	2 35,	7 3,	7 2,	4 5.	4 7,	2 4,	7 8,	8	4 6,	3 22.	6 4,	8 11,	7 8,	7 10,	5 4,	4 4,	0 3,	2 11,	3.	6	4	0 32,	2 0	8 85.	6	6 32,	3,	1 16,	2 117,	1 63,	9 23,	2 110,	3 4.744,42	78 23.221,83
lean values i	15 Labour e forces	,5 5,	,0 80,	0 24	.4 17,	.3 6	4 5,	,0 11,	,8 7,	4 36,	,9 3,	,5 2,	.1	,3 7,	9	.7 8,	4 8	'2 °	,2 23,	5 4	,3 11,	,0 8,	,8 10,	,5 4,	.4 4,	.7 4,	,9 12,	.7 3,	2 2,	3	2 23 2 23		87	-	5 33	7 4,	6 17	,8 121,	,1 65,	,1 23,	,6 113,	28 4.915,85	55 24.727,8
×	0- Population and more	2 9	,8 141	.3 40	5 28	5 10	.0	.1 19	.8 12	.1 63	.3 5	,1	3	.8 12	.7 6	,2 14	.1	.3 11	,0 43	9	,9 22	.1 16	.7 19	5 8	7 8	4 7	,1 21	,6	0	. 2	- 1, 20 20		.1 158	4	,2 66	6,9	,5 33	,2 235	.9 130	,5 46	.9 207	19 9.228,11	20 50.552,7
	t Population n 14	12 2	25 25	8	8 8	35	6 2	22 4	4 2	57 12	30 1	90	96 2	2 2	8	2	8 3	37 2	8	22	33 3	8 3	14 3	35 1	1	33 1	8	55	7		2 2		z 29	31	31 9	0 6	90 4	33 33	32 17	4 6	33 32	1.498,7	44 8.327,2
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ensus data	of Sunface ties 2001 (km	6 500	14 801	14 758	9 466	4 542	3 204	11 247	7 729	17 642	3 282	2 162	4 146	7 549	3 313	5 501	5 588	3 215	16 424	9 293	21 578	11 415	18 339	8 413	16 218	9 252	16 222	7 318	5 356	8 291	04C 7	10 480	37 778	6 378	22 689	5 592	25 1.126	42 1.237	28 428	23 1.214	25 939	06 65.048	101 301.33
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zations	GROUP-CLASSIFICATION OF THE LOCA LABOUR-SYSTEM	Tourist sy stem	Low specialized urban area	Tourist sy stem	Food-processing system	Tourist system	Tourist system	Food-processing sy stem	Tourist sy stem	Tourist sy stem	Glasses-manufacturing sy stem	Tourist sy stem	Tourist sy stem	Tourist system	Tourist sy stem	Tourist sy stem	Tourist sy stem	Food-processing sy stem	Food-processing sy stem	Tourist sy stem	Food-processing sy stem	Tourist sy stem	Mainly farming areas system	Tourist sy stem	Tourist sy stem	Tourist sy stem	Food-processing sy stem	Tourist system	Tourist sy stem	Tourist sy stem	Nor-specialized urban area Mohi production and manifoducing of mohi h	Food oncreasing system	Low specialized urban area	Glasses-manufacturing sv stem	Food-processing sy stem	Tourist sy stem	Food-processing sy stem	Not-specialized urban area	Wood and furniture system	System of production of machines and devic	Wood and furniture system		
Main productive speciali	SUB- CLASSIFICATION	Other not-manifacturing system	Urban system	Other not-manifacturing system	Other made-in-Italy system	Other not-manifacturing system	Other not-manifacturing system	Other made-in-Italy system	Other not-manifacturing system	Other not-manifacturing system	Other made-in-Italy system	Other not-manifacturing system	Other not-manifacturing system	Other not-manifacturing system	Other not-manifacturing system	Other not-manifacturing system	Other not-manifacturing system	Other made-in-Italy system	Other made-in-Italy system	Other not-manifacturing system	Other made-in-Italy system	Other not-manifacturing system	Other made-in-Italy system	Other not-manifacturing system	Other not-manifacturing system	Other not-manifacturing system	Urban system Lowis industries events	Other made in Italy evetem	Urban system	Other made-in-Italv svstem	Other made-in-Italy system	Other not-manifacturing system	Other made-in-Italy system	Urban system	Other made-in-Italy system	Other made-in-Italy system	Other made-in-Italy system						
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LOCAL LABOUR- SYSTEMS IN 2001	Name of the main centre in the area	BADIA Tr	BOLZANO Tr.	BRESSANONE Tr	BRUNCO	CAMPO TURES Tr	CASTELROTTO Tr	EGNA Tr	MALLES VENOSTA Tr	MERANO Tr	NATURNO Tr.	NOVA PONENTE Tr	ORTISEI Tr	SAN CANDIDO Tr	SAN LEONARDO IN PASS. Tr	SILANDRO	VIPITENO	ALA Tr.	ARCO Tr	BLEGGIO INFERIORE Tr	BORGO VALSUGANA Tr.	CAVALESE Tr.	CLES Tr	FIERA DI PRIMIERO	FONDO	MALE' Tr	MEZZOLOMBARDO Tr.	MOENA Tr	PEIO	PINZOLO Tr		TIONE DITRENTO	TRENTO	AMPEZZO	GEMONA DEL FRIULI Fr	TARVISIO Fr	TOLMEZZO Fr	UDINE	GORIZIA	MANIAGO Fr	PORDENONE Fr.	ALPINE SPACE (considered labour systems)	ITALY (whole Country)

SOURCE: ISTAT databases - ELABORATION: Italian delegation - DATA EXTRACTION: 07-01-2011

Map A.25 – Population change in Switzerland



Map A.26 – People aged 80+ in Switzerland

Rates of people aged 80+ to population 65+ in 1999 Anteil der ab 80jährigen an den ab 65jährigen, 1999 Proportion des personnes de 80 ans et plus parmi celles de 65 ans et plus, en 1999



Map A.27 – Young people in Switzerland



Map A.28 – Accessibility index in Switzerland

Mean distance to the nearest service, into a selection of 22 different services, in 2001

Dienstleistungen für die Bevölkerung: Erreichbarkeitsindex, 2001 Services à la population: Indice d'accessibilité, en 2001



Map A.29 – Grocery accessibility in Switzerland





Working Group Demography and Employment of the Alpine Convention

<u>GOOD PRACTICES COLLECTION</u> -to be developed more in detail-

Institutional initiatives aimed at dealing with demographic change and re-launching Alpine economy

- **GERMANY** - Regional Management structures have been established in the entire Alpine region except in the districts of Bad Tölz-Wolfratshausen and Rosenheim (see the map). Regional Management as an instrument of regional development makes a major contribution to improve regional competitiveness by establishing regional multidisciplinary networks in rural districts and urban districts makes. These networks are to make optimum use of the existing potential in sub-regions and strengthen self-reliant, sustainable development . The target is to compensate for the weaknesses of an area and to safeguard and expand existing strengths.

Map B.1 - Regional Management in the Alpine Area



Source: http://www.landesentwicklung.bayern.de/instrumente/regionalmanagement/interaktive-karte.html

On the basis of operational concepts and with the use of project managers, Regional Management creates development through projects and networking.

Thus, the region Allgäu currently operates the following projects:

- Region Allgäu Brand
- Allgäu Heads a region speaks for itself
- Life 60 Plus Demo Change
- Transport Strategy Allgäu
- Virtual Electricity Supply System Allgäu
- Climate Protection the Allgäu acts
- Regional Marketing Allgäu

- ITALY Friuli-Venezia Giulia Region 322 million Euros have been provided in the framework of the EU Objective 2 for the period 2000-2006, in order to establish a co-financing to favour the purchase and/or renovation of principal/first residence in mountain areas (the Region experienced a strong demographic decrease over the XX century), the re-launching of Alpine economy (through incentives for the creation of new production-settlement, the delocalization of enterprises in the higher areas, the development of ICTs) and the adaptation of the touristic structures. One of the main structured results in the creation of a network of "scattered hotels" "Innovation..." (see the section of the Good Practices Collection). (http://www.regione.fvg.it/obiettivo2/txt-spiegazione.htm ; Meridiani Montagne, n° 21, July 2006, page VI-VII Appendix)
- SWITZERLAND The Interreg programme Demochange and its try to make "invisible ageing" visible
 Different types of "alpine spaces": different situations of demographic change and problem consciousness in Central Switzerland (the four study areas of the two Interreg projects, plus eventually Glaris and/ or the example of Andermatt).
- **SWITZERLAND** Rhone valley, especially the lower Valais, is experiencing a strong economic growth in the last years. There are different factors contributing to this development, among them the increased accessibility of the valley from both the West and the North thanks to infrastructural developments (tunnel of Lötschberg, highway from lake Geneva). Another important factor could become the recent foundation of the Technical University of Western Switzerland with its site in Sion, where the knowledge transfer between industry and university shall be promoted. This question is also addressed in the Interreg project Comunis by a pilot region in the Valais.
- **SWITZERLAND** Within the framework of the Interreg Project CapaCities, with its incentives to attract new habitants are in course of development in the pilot region Grono/ Roveredo.

Institutional initiatives aimed at dealing with the brain-drain phenomena and favouring the creation of gualified employment for the young

- SWITZERLAND Brain drain in Central Switzerland (Interreg-project Brain Drain Brain Gain)
 - > Nearly all the assessed cantons are currently losing highly qualified labour
 - An enquiry in enterprises of Central Switzerland shows that brain drain is a serious economic problem, expressing itself in the difficulty to find highly qualified labour
 - Manifold reasons for brain-drain can be made out, be it personal events and preferences or external factors, e.g. infrastructures (Rieder et al. 2005: p. 32).
 - Complexity: Frey (2008) pleads for considering restrictions in spatial mobility leading to a reinforcement (with strong centres vs weak peripheries). He suggests to consider both negative and positive consequences of emigration.
- Successful measures against brain drain
 - 3 measures resulting from the project Brain Drain Brain Gain: Urilink, Careers Service and innovation days
 - Recommendations from the "handbook" on the possibilities of spatial planning in influencing demography, developed at the Lucerne University of Applied Sciences and Arts

Maintaining and/or growth of the population in equilibrium with the local community

- **ITALY -** Project "Dislivelli": the case of Rore in **Val Varaita (CN)**. (<u>http://www.dislivelli.eu/files/albums/Documenti/progetto%20rore.pdf</u>)

The employment in traditional activities as an opportunity to avoid emigration

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- ITALY The case of Calalzo di Cadore (BL), where several young people (many with relevant qualifications) decided to remain in the area working on traditional activities (timber-mill, farming, breeding, craftsmanship, mountain guide, etc.); the local Municipality decided to promote the local employment for the young people, with the help of a sponsorship from CAI (Italian Alpine Club) and the Angelini Foundation. (http://www.cai.it/uploads/media/MondoCAI_123_1_maggio_2010.pdf, page 20 "Lo Scarpone" n°5, May 2010, page 28)
- ITALY The case of Valstagna (VI), where the medium-slope terraces, after being abandoned during the 60's, are now seeing the return of "old" and "new highlanders", who are maintaining the slope-stability and the local economy (<u>http://www.comunevalstagna.it/fazzoletti-di-terra.html</u>; <u>http://www.ilgiornaledivicenza.it/stories/Bassano/154263 il tabacco e le terrazze in un docu mentario/</u>). The "come back to the terraces" is also favoured by the initiative "Adopt a terrace", sponsored by the Municipality of Valstagna (VI), the Group "Higher Areas" of the Italian Alpine Club, and the Department of Geography of the University of Padova, which grant the permissions to take care of an abandoned terrace for a symbolic price to the people interested, thus favouring the conservation of the territory as well as stimulating someone to come back to the alpine traditional way of life (http://www.adottaunterrazzamento.org/).
- **ITALY** On the **Asiago plateau** (VI), the property of the territory is shared between the municipalities and the citizens. The municipalities entrust the pastures and the mountain barns (*malghe*) by means of public auctions to the farmers for a 6 years period. The contracts establish both the fees and the activities to be carried out. This traditional system of entrusting ensures the proper management of the territory also thanks to the public right "intrusion" which allows authorities to exclude applicants from the auctions in case of past non-fulfilments. Nowadays all of the pastures and the mountain barns are managed half by local farmers and the other half by entrepreneurs coming from the plains of Padova and Vicenza and the total population employed in the barns management amounts to about 300 people.

(http://www.comune.asiago.vi.it/opencms/cmsinternaente.act?dir=/opencms/opencms/ProvVI/As iago/Vivere/Patrimonio_ambiente/Le_malghe.html; Meridiani Montagne, n° 28, September 2007, pages 76-94)

ITALY - In the area of the **National Park of the Dolomiti Bellunesi (BL)**, in the 50's about 4000 heads of cattle were present in the alpine barns; in 1994 only 2 alpine barns were still being used due to emigration. But the Park Authority, conscious of the importance of the agriculture and the breeding for the conservation of the territory and the landscape, with initiative of the Park called *"Malghe modello"* (model- alpine barns) allowed for the restoration and modernization of 5 barns, realizing model-structure actively managed by local farmers with traditional –biologic- activities mixed with the "km-0" ("zero kilometres". i.e. on-place) selling of products and activities such as the farm-holidays and the environmental education activities/programmes for the guests. The Park Authority furnished these barns with more feasible muletracks and with innovative solution in energy production (<u>http://www.dolomitipark.it/it/page.php?id=237</u>; *Enrico Camanni*; LA NUOVA VITA DELLE ALPI; Bollati Boringhieri, Torino; 2002 – pages 154-156 ; Meridiani Montagne, n° 38, May 2009, pages 55-57).

Innovation as a driver of cultural and environmental-sustainable development which preserve culture and population

 ITALY - The "scattered hotels" are a new concept which aims to preserve and revitalize the semiabandoned villages of some Italian regions (e.g. Friuli-Venezia Giulia's mountains which experienced a strong decrease of population over the XX century) offering the empty houses to a sensitive tourism, ensuring also a source of income for the local communities and some workplaces; some examples can be found in: Maranzanis (UD), Malborghetto and Valbruna (UD), Zahre/Sauris (UD), Sutrio (UD), Forgaria Monte Prat (UD). The answer of the tourists are a growing success.

(http://travel.nytimes.com/2010/05/23/travel/23journeys.html?scp=1&sq=albergo%20diffuso&st= cse ; http://www.albergodiffuso.com/ ;

http://www.ansa.it/web/notizie/regioni/friuliveneziagiulia/2010/11/27/visualizza_new.html_1676 352722.html

"New highlanders" and their integration in the local community

- ITALY Project "Dislivelli": "new higlinders" in Val Chiusella (TO) and in Val di Susa/ Susa Valley (TO). (<u>http://www.dislivelli.eu/blog/vivere-a-km-0-in-valchiusella.html</u>)
- ITALY In Valle Stura (CN), one of the Alpine valleys where emigration has been strongest in XX century, some families decided to move away from the towns, settling down in the Vernante Municipality and devoting themselves to cow-breeding as well as the production and the selling of milk, yogurt and cheese. (Meridiani Montagne n°20, May 2006, page 26)
- **ITALY** At the feet of the Monviso Peak, in the last 15 years a community of about 1000 Chinese established itself in the municipalities of **Barge and Bagnolo (CN)**, representing about the 7% of the total inhabitants and the 20% of the scholastic population. The Chinese men are mainly employed in the local marble pits, thanks in particular to a particular ability in finding the right veins as well as to the lack of native workforce. The Chinese community seems to be well integrated in the local society, also thanks to public initiatives of formation. (Meridiani Montagne n°23, November 2006, page 62)

Analysis and management of the fluxes of commuters – public transports as a solution

Education and training: primary schools in the weak regions; professional schools in the higher valleys to train up a new generation of people who could attend to the traditional activities

- ITALY The Soraperra School of Art in Pozza di Fassa (TN) receives about 150 of young people from Val di Fassa and Val di Fiemme that are between the areas in Trentino with a lower degree of qualified people and train up the student also to the traditional craftsmanship (<u>http://www.scuoladifassa.it/istituto/istituto.htm</u>; Meridiani Montagne, n° 21, Luglio 2006, page 21).
- **ITALY** The Scholl of Art "Cademia" in **Ortisei / St. Ulrich (BZ)** has the main goal to train up a new generation of craftsmen to perk up the traditional craftsmanship of the valley (<u>http://www.ks-groeden.schule.suedtirol.it/main/static/page/10</u>).
- **ITALY** The opening up of a winter-school for the employees in agriculture in **Val d'Ultimo/ Ultental (BZ)** has the goals of teaching the traditional craftsmanship techniques and the

manufacturing of raw materials, thus giving the possibility of additional incomes to farmers through the sale of the self-made products. The training intends to transmit to the participants the abilities and the professional practical and theoretical notions, so they could be able to learn various typologies of workmanship and handicraft techniques and to realize different products. The sale of the self-made products and of the raw materials will offer new opportunities of income to the employees in mountain agriculture (<u>http://www.alpenallianz.org/it/buone-pratiche/109</u>).

- SWITZERLAND On the one hand very remote valleys especially in the upper Valais (German speaking area) are searching survival strategies to their severe economic and demographic problems: be it the valley of "Binntal" which has shown how to prevent the close-down of a school by attractive family policies or the valley of Goms, trying to find new value chains in the domains of energy an mobility, combined with tourism. The "Energy Region Goms" is furthermore a pilot project supported by the Federal Office for Spatial Development.
- **SWITZERLAND** Toggenburg valley in Eastern Switzerland has become an Energy Region supported by the Federal Office for Spatial Development and has a high wood and biomass potential.

<u>Universities, research and innovation centers, office districts, enterprises (and detatched seats of these)</u> which require trained employees – counteracting emigration and *brain drain*

- ITALY The demographic evolution of Agordo (BL) is strongly linked with the history of Luxottica, founded in 1961. This enterprise producing glasses, number about 3,500 (also in qualified-positions) employees in the first productive settlement of Agordo and a total of about 7,800 in the 6 Italian settlements (5 on these belonging to the Alpine region: Agordo (BL), Sedico (BL), Cencenighe Agordino (BL), Pederobba (TV), Rovereto (TN)). In Agordo about the 68% working-age local population is working in the industrial sector and the total population amounts to 4,281 inhabitants (3,305 in 1901; 3,119 in 1936; 3,522 in 1961; 4,281). Generally speaking, wherever there are Luxottica's productive-settlements we can notice population trends more favourable than in the surroundings (i.e. Sedico, in addition to host a plant, it is in a convenient location to reach both Agordo and Cencenighe, and the main towns Belluno and Feltre (BL); in fact in Agordo are working about 4,800 people, 112% of the resident population). (ISTAT data; Meridiani Montagne n°30, January 2008; http://www.luxottica.com/it/)
- **SWITZERLAND** Lucerne as a new "sciency city": Contributions of the HS LU in the demographic context (in terms of sciency, but also in terms of educating highly qualified persons, prone to braindrain)
- **SWITZERLAND** The Polo Poschiavo initiative offers ICT education to locals as well as it is a pool for Interreg Projects and thus contributes to economic development of the region (eventually by becoming the first organic farming valley).

Ad-hoc policies for public services and in particular for senior citizens

- **GERMANY** - almost all districts of the Alps, there is now a "senior citizen policy concept", which is usually drawn up by the district administration in collaboration with a consulting institute. It is an advancement of the nursing requirement plan created in 2004.

The integrative senior citizen political concepts were established on the basis of:

- the analysis of demographic developments,
- a comprehensive inventory of the also non-public provisions for the elderly,
- a survey among public administrators in towns, municipalities and local communities

• an extensive mail survey of elderly residents.

The development of the policy concept also relied on the collaboration of senior citizen care professionals in monitoring committees and workshops.

With these policy concepts a framework was created that shows fields of action to be addressed by the district and subordinate public administrations on the basis of existing supplies and structural set-ups.

The goal is to create living conditions for senior citizens in the district that they meet their needs and desires, especially if they wish to remain in their place of residence. This follows the principle of "outpatient over inpatient care" and enables an aging population to lead self-determined and independent lives in their own homes for as long as possible. "Civic engagement by and for seniors" also plays a major role in these policy concepts.

- **SWITZERLAND** - Central Switzerland as a functional entity: historics about concordats and current developments

<u>Cases of integrated domiciliary assistance with services of other type (transport of alimentary products, etc)</u>

International projects dealing with the demographic and occupational issues in the Alpine Space (only links)

- Alpine Space Project **Demochange**: <u>http://www.demochange.org/</u>
- Alpine Space Project Comunis: <u>http://www.comunis.eu/</u>
- Interreg IV C Project Padima: <u>http://www.padima.org/index.php</u>
- Alpine Space Project **Capacities**: http://www.capacities-alpinespace.eu/acm-online/HomePage.html
- Alpine Space Project Access: <u>http://www.access-alpinespace.eu/</u>
- Alpine Space Project Diamont: <u>http://www.alpine-space.org/diamont.html</u>

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ANNEX C: Brief on the Forum "Demography and employment -The contribution and experiences of the European Territorial Cooperation Projects"

3rd meeting Working Group Demography and Employment Turin, 25th -26th January 2011 Regional Museum of Natural Sciences via Giolitti, 36 - Torino

Brief on the Forum "Demography and employment", The contribution and experiences of the European Territorial Cooperation Projects

On the 25th-26th January 2011 the Working Group "Demography and Employment" met in Turin at the Regional Museum of Nature Science. During the 1st working session the invited experts introduced the Projects of the European Territorial Cooperation in which their Administrations are involved. In the afternoon session, the Working Group "Demography and Employment" started his working activities tout court analyzing the National Contributions and the draft report on Demography and Employment assembled by the Presidency.

Project DIAMONT (http://www.alpine-space.org/diamont.html)

"The demographic and social change in the Alps: main results and collected data", (C. Pecher – Eurac Research)

The project DIAMONT aimed to give a vital impulse to the re-launching of SOIA (System for Observation of and Information on the Alps). DIAMONT has taken into account the expectations of experts for regional development as well as the needs of the Alpine population. DIAMONT has integrated cultural, regional and local factors into the analysis of the sustainable regional development's dynamics. The project's results supplied a method that can be adapted also to other European mountain areas.

Eight partners from six Alpine countries (Austria, Slovenia, Germany, Switzerland, Italy, France) participated in the DIAMONT project. The project was developed from March 2005 until February 2008¹⁵⁷.

The project has deepened different work packages to analyze the demographic dynamics in the Alps. These studies aim to identify different cultures influencing regional development in the Alps and thus to contribute to the understanding of trans-cultural driving forces and factors present in the region (administration, culture, value systems, language, norms).

The study, among the results, brings out 8 regions characterized by similar development patterns, classified as follows: 1) employment hubs, 2) residential municipalities, 3) important tourist centres (in particular in Tyrol and in the Italian Alps), 4) dynamic rural areas (northern Switzerland and Alto Adige/Südtirol), 5) standard alpine regions (in particular in the eastern part of Alpine arch), 6) moving-back rural contests (in particular in in Valle D'Aosta, northern Piemonte and Valais), 7) traditional agricultural regions (southern France), and 8) forgotten rural areas (in Liguria, Piemonte , Friuli, southern France, Slovenia and Eastern Austria).

This survey aimed to understand the perception and weighing of some relevant Alpine issues by asking Alpine stakeholders and scientists for their attitudes, in particular on the different focal points and challenges for regional development in the Alps¹⁵⁸.

¹⁵⁷ www.uibk.ac.at/diamont/results/publications.htm

Project DEMOCHANGE (http://www.demochange.org/)

"How to face demographic change and ageing of the population in the Alps? New tendencies and good practices", (N. Mignone – UNCEM Piemonte)

The project DEMOCHANGE has been co-funded in the framework of the "Alpine Space Programme". It takes place between 2007 and 2013.

The DEMOCHANGE project's aim is to better understand the past, current and future regional and spatial impacts of demographic change specifically within the mountain regions. DEMOCHANGE is the first and currently only project addressing the effects and opportunities that may derive from demographic change in the Alpine Space.

The project analyzes in particular the demographic issues, the competitiveness of the services and the development plans. The project aims to develop separate analyses of each Alpine area in various fields such as migration, cost and quality of settlement and housing, labour market, changes in regional demand for public services (i.e. transportation, healthcare, education) and changes in consumer behaviour related to key economies such as tourism and agriculture¹⁵⁹.

Project PADIMA (http://www.padima.org/index.php)

"Education and training as an opportunity to face with the depopulation of the less favoured areas: main findings and good practices", (M.G.Pedrana - IREALP)

The Project PADIMA is co-funded by the EU INTERREG IV C Programme and it extends to the whole of Europe. 8 partners from 5 European countries are engaged in a 3-year collaboration, between January 2010 and January 2013, and is expected to produce policy guidelines on successful methods to attract new inhabitants to mountain areas.¹⁶⁰

The PADIMA project's aim is to improve the design and implementation of regional policies against depopulation. This is made possible through the exchange and transfer of good practices to encourage the growth and permanence of the population in mountain areas. The long-term goal of the project is to help increase the population in mountain areas meanwhile promoting sustainable development.

The main activity envisaged by PADIMA is the exchange of experiences, and it is articulated on three main themes: education and training; local marketing; economic diversification.

In particular, a survey work that will be carried out on the educational context in Val Brembana (a territory identified by IREALP as a pilot-area in relation to the recent trends of depopulation occurred in some municipalities of the above upper valleys) has been described more in depth, which enables the identification of this work as an example of good practice, presented at the European level¹⁶¹.

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¹⁵⁹ www.demochange.org

¹⁶⁰ http://www.irealp.it/1077,Projects.html

¹⁶¹ http://www.irealp.it/1169,News.html

Project CAPACITIES (http://www.capacities-alpinespace.eu/acm-on-line/HomePage.html)

"The competitiveness of the Alpine space: main findings, strategic actions and good practies", (E. Del Degan – Region Valle d'Aosta)

The project CAPACities, financed in the framework of Alpine Space Programme is focused on small urban centres in the alpine area and in the mountain areas that surround them.

The project's aim is to promote the small Alpine Space urban centres' potential through different means: the adoption of an integrated and transnational approach, the promotion of innovative urban policies and actions, the strengthening of links with main urban and economic regional networks. The project focuses on territorial governance: it designs shared development strategies, and aims at integrating different issues such as urban multi-functionality, environment, culture, tourism, etc.

CAPACities has as starting point the results of project CulturAlp, ended in 2005. It deepens the analysis on issues related to local development in Alpine space areas implemented in that framework.

On the Italian side, Regione Valle d'Aosta and Regione Piemonte participate in CAPACities with other nine partners, the lead one being Region Lombardia.¹⁶²

Project COMUNIS (http://www.comunis.eu/)

"Main Projects goals and the Commercial Location Development; a pilot case in Alto Adige/ Südtirol: local development and commuting in Val Passiria/ Passeiertal", (M. L. Wei β – Eurac Research)

The project COMUNIS will last between 2009 and 2012. It has 11 project partners and it focuses on Commercial Location Development (CLD). The analysis includes the location profile, the inter-municipal cooperation and the commercial management.

Commercial local development on the inter-municipal level, drawing on the full potential of each region, contributes significantly to innovation and preservation of small- and medium-sized enterprises (SMEs) and jobs, being consistent with the goal of the Alpine Space Programme of "increasing competitiveness and attractiveness of the cooperation area by developing joint actions"¹⁶³.

In the Alps, controlling land development requires special consideration due to topography, scarcity of land, overlapping land use interests and problems of traffic management. Therefore, land resources for commercial development are scarce and framework conditions for business development are not optimal in many municipalities. Moreover, commercial development often takes place in strong competition with the adjacent municipalities instead of being focused on keeping the existing enterprises in the region and to provide them attractive options for development¹⁶⁴.

¹⁶² http://www.regione.pmn.it/sit/argomenti/pianifica/programmi/capacities.htm

¹⁶³ www.comunis.eu/project/coherence-with-the-programme

¹⁶⁴ Ut supra