

Laurent Vanat
Consultant
19, Margelle
CH-1224 Genève

Tel / fax / messagerie :
(+41) 022 349 84 40
Courriel : vanat@vanat.ch
Internet : www.vanat.ch

2013 International Report on Snow & Mountain Tourism

*Overview of the key industry
figures for ski resorts*



Laurent Vanat

April 2013

Table of contents

Introduction	- 5 -
Glossary.....	- 6 -
The world ski market	- 7 -
<i>Participating countries.....</i>	- 7 -
<i>Ski resorts and infrastructure</i>	- 8 -
<i>Evolution of worldwide skier visits</i>	- 10 -
<i>Market share of worldwide skier visits.....</i>	- 11 -
<i>Skiers per region of origin</i>	- 11 -
<i>Future trends in market share</i>	- 13 -
<i>Comparative key figures.....</i>	- 13 -
<i>General benchmarking.....</i>	- 18 -
The Alps	- 20 -
<i>Austria</i>	- 20 -
<i>France</i>	- 22 -
<i>Italy.....</i>	- 23 -
<i>Switzerland</i>	- 25 -
Western Europe.....	- 27 -
<i>Andorra</i>	- 27 -
<i>Finland.....</i>	- 28 -
<i>Germany.....</i>	- 30 -
<i>Iceland</i>	- 31 -
<i>Norway.....</i>	- 32 -
<i>Spain</i>	- 33 -
<i>Sweden.....</i>	- 35 -
<i>United Kingdom.....</i>	- 37 -
Eastern Europe and Central Asia.....	- 39 -
<i>Armenia</i>	- 39 -
<i>Bosnia & Herzegovina</i>	- 40 -
<i>Bulgaria</i>	- 42 -
<i>Cyprus</i>	- 43 -
<i>Estonia</i>	- 44 -
<i>Czech Republic.....</i>	- 45 -
<i>Georgia.....</i>	- 46 -
<i>Greece.....</i>	- 47 -
<i>Hungary.....</i>	- 50 -
<i>Iran</i>	- 50 -
<i>Kazakhstan</i>	- 52 -
<i>Kyrgyzstan</i>	- 53 -
<i>Latvia</i>	- 54 -
<i>Lithuania.....</i>	- 55 -
<i>Macedonia</i>	- 56 -
<i>Montenegro.....</i>	- 57 -
<i>Poland</i>	- 58 -
<i>Romania</i>	- 60 -
<i>Russia.....</i>	- 61 -
<i>Serbia</i>	- 63 -
<i>Slovakia</i>	- 65 -
<i>Slovenia.....</i>	- 66 -
<i>Turkey</i>	- 68 -

<i>Ukraine</i>	- 69 -
The Americas	- 72 -
<i>Argentina</i>	- 72 -
<i>Canada</i>	- 74 -
<i>Chile</i>	- 76 -
<i>United States</i>	- 78 -
Asia and Pacific	- 81 -
<i>Australia</i>	- 81 -
<i>China</i>	- 83 -
<i>India</i>	- 85 -
<i>Japan</i>	- 87 -
<i>New Zealand</i>	- 88 -
<i>South Korea</i>	- 90 -
Various	- 93 -
<i>Lesotho</i>	- 93 -
<i>South Africa</i>	- 94 -
Conclusion	- 96 -
Sources and acknowledgments	- 98 -





Laurent Vanat is an independent consultant with skills as a general practitioner and a specialist. With a Master's degree in commercial & industrial sciences from the University of Geneva, he has over 25 years of professional experience as both a business consultant and a senior executive in upper management. He possesses executive experience in sales, finance and general management on the one hand, and advises companies and organizations of all horizons on the other. This broad experience means that Mr. Vanat is well acquainted with numerous industries.

Heavily involved in the tourism, hospitality & leisure industry, Mr. Vanat has closely followed the ski area industry for several years. During several years, he published a comprehensive overview of the market. This report took a broad approach to examining the European and World markets in search of new information, and has thus followed changes over time and provided new ideas to operators. This overview, selectively distributed, has already been well-utilized by large organizations active in mountain tourism. One of the key objectives was to feed the thought process of the industry and to render local actors more aware of key changes and new ideas.

In its search for information on ski areas, Mr. Vanat quickly understood the importance of tracking skier visits and collecting statistical data. Noting the difficulty in consolidating this information for the Swiss market, he found a way to contribute to the industry by taking the initiative to attempt a systematic collection of visitor data. For several consecutive years, this document has been an acknowledged reference for Switzerland. In order to analyze the competitive position of major players, via invitation from leading industry bodies and tourism conferences, he extended the scope of the research to produce an overview of the key industry figures worldwide. For several years now, the International Report on Snow & Mountain Tourism has been a reference resource. Coverage expands every year, along with the update of major figures.

Introduction

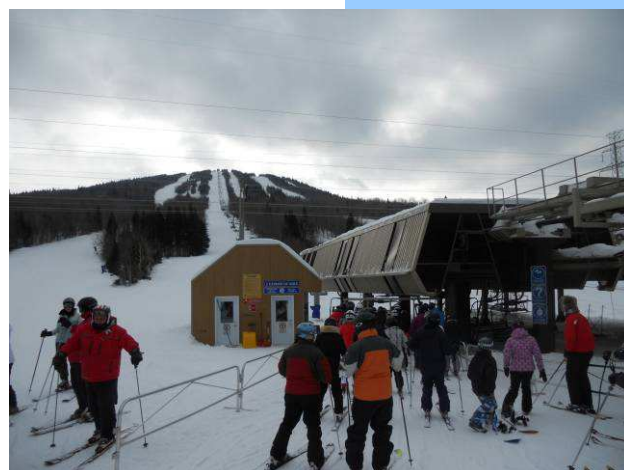
By expanding the scope of this report, which intends to soon provide full coverage of every ski country, several non-mountainous destinations have now been included. This required reconsidering the title of the report, which has been slightly modified to take non-mountainous countries into consideration. The title is now the ***International Report on Snow & Mountain Tourism*** and features an additional set of new countries such as Cyprus, Estonia, Lesotho, Latvia, Lithuania, Macedonia, Montenegro, Serbia and the United Kingdom.

In this 5th edition, as with prior editions, the option of updating and adding new information to the original document will continue in order to provide a comprehensive and reliable reference, rather than limiting the exercise to simply publishing updates. In fact, the goal of this document is to be the industry reference.

Therefore, readers of former editions should be aware that some data may have been amended, with the goal of always seeking to improve the accuracy of this report. The data is constantly being updated depending on new statistics made available. When new sources appear more reliable, necessary amendments have also been made.

Since some countries represent relatively small markets compared to alpine regions, they are not as well known. Therefore, for these countries, the report enters into more detail than with the most familiar markets.

In order to ensure further development of this work, once again a call for data contributions from national associations and all other national entities and organizations involved in the industry is appropriate (please refer to the last page of the document for detailed references).



Glossary

Alpine country: those countries that are part of the European Alps (Austria, France, Italy and Switzerland).

CRM: Customer Relationship Management; an information system that enables the recording of customer data and personalized follow up.

FIS: International Ski Federation, based in Switzerland. It was founded in 1924 and now comprises 107 national ski associations. Its mission is to promote and direct the development of ski and snowboarding activities worldwide, and monitor competition.

Hourly lift output (skiers/hour): The manufacturer's rated number of skiers per hour a lift can transport to the top of the lift. Total country capacity is the sum of all the individual lift capacities.

Number of skiers transported per year: Meant by number of passengers transported per lift; one skier taking the same lift 5 times accounts for 5 skiers transported, also referred to as *frequencies*.

National participation rate: skiers as a percentage of the total country population.

Ski area: a designated place where one skis (in some countries, these areas may not have lifts).

Ski resort: A ski resort is considered as an organized ski area with more than four lifts.

Skier visits (or skier-days): One person visiting a ski area for all or any part of a day or night for the purpose of skiing, snowboarding, or other downhill sliding. Skier visits include full-day, half-day, night, complimentary, adult, child, season pass and any other type of ticket that gives a skier/snowboarder the use of an area's facilities. A skier skiing for a whole week in a resort accounts for 7 skier visits for instance.

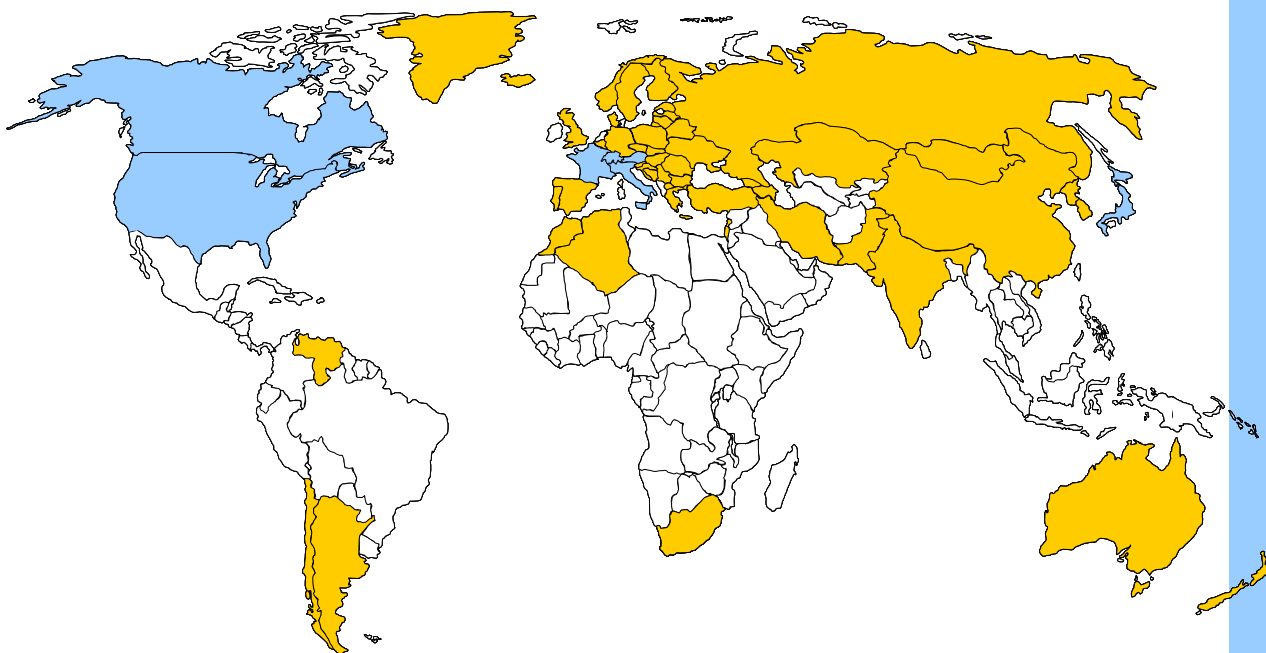
Skier: One person participating in skiing, snowboarding or other downhill sliding, independent of the rate of practice.

Vertical Transport Meters per Hour (VTMH): Product of each individual lift's hourly capacity multiplied by the vertical drop (the figure is usually expressed in thousands).

The world ski market

Participating countries

One considers that there are about 80 countries in the world where skiing is an activity. Among these, roughly 70 countries offer open air ski areas, the balance having only indoor facilities¹. Even if snow fields are much more numerous², about 2'000 ski resorts have been identified worldwide. Besides the major ski destinations in terms of visits, shown in blue on the map below, there are a number of other, smaller destinations, where skiing has been an industry for a long time, or is currently developing. The most obvious new destinations are Eastern Europe and China, but there are a number of other small players, spread out across the globe: Algeria, Cyprus, Greece, India, Iran, Israel, Lebanon, Lesotho, Morocco, New Zealand, Pakistan, South Africa, Turkey and many more.



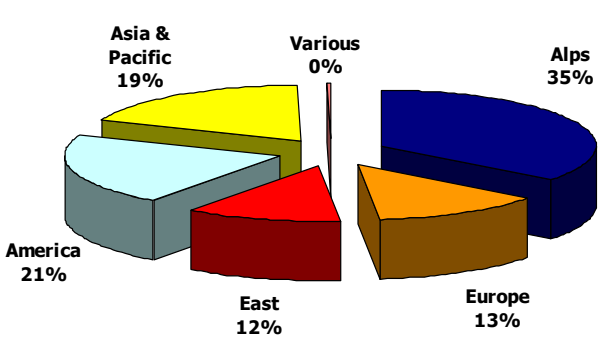
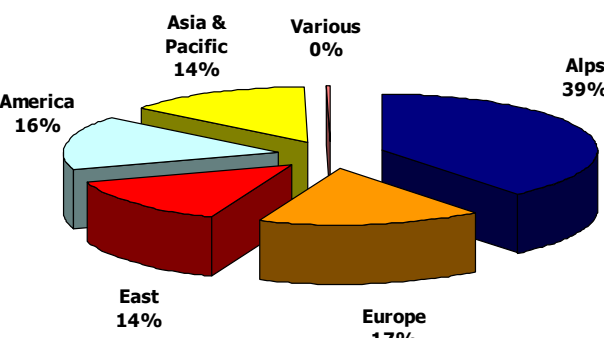
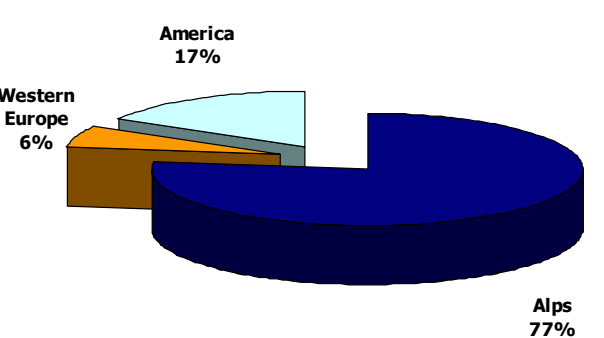
The industry currently offers about 6 million commercial beds in the mountains. These are primarily concentrated in the *industrialized* ski markets, which have a high volume of skier visits.

¹ There are about 60 indoor snow centers operating in 25 countries around the world

² Estimate is 5'000 to 6'000 designated areas for skiing

Ski resorts and infrastructure

Based on the latest situation, the key figures for ski resorts and their equipment are presented in following tables.

<p>Distribution of the number of ski resorts worldwide (2'110 resorts): More than one third of all ski resorts are located in the Alps³.</p>	 <table border="1"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Alps</td> <td>35%</td> </tr> <tr> <td>America</td> <td>21%</td> </tr> <tr> <td>East</td> <td>12%</td> </tr> <tr> <td>Europe</td> <td>13%</td> </tr> <tr> <td>Asia & Pacific</td> <td>19%</td> </tr> <tr> <td>Various</td> <td>0%</td> </tr> </tbody> </table>	Region	Percentage	Alps	35%	America	21%	East	12%	Europe	13%	Asia & Pacific	19%	Various	0%
Region	Percentage														
Alps	35%														
America	21%														
East	12%														
Europe	13%														
Asia & Pacific	19%														
Various	0%														
<p>Distribution of the number of lifts worldwide (26'819 lifts): The number of lifts emphasizes the weight of the Alps in the industry.</p>	 <table border="1"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Alps</td> <td>39%</td> </tr> <tr> <td>America</td> <td>16%</td> </tr> <tr> <td>East</td> <td>14%</td> </tr> <tr> <td>Europe</td> <td>17%</td> </tr> <tr> <td>Asia & Pacific</td> <td>14%</td> </tr> <tr> <td>Various</td> <td>0%</td> </tr> </tbody> </table>	Region	Percentage	Alps	39%	America	16%	East	14%	Europe	17%	Asia & Pacific	14%	Various	0%
Region	Percentage														
Alps	39%														
America	16%														
East	14%														
Europe	17%														
Asia & Pacific	14%														
Various	0%														
<p>Distribution of the number of major resorts worldwide (48 resorts): There are a limited number of major resorts worldwide⁴. More than 75% of them are located in the Alps.</p>	 <table border="1"> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Alps</td> <td>77%</td> </tr> <tr> <td>America</td> <td>17%</td> </tr> <tr> <td>Western Europe</td> <td>6%</td> </tr> </tbody> </table>	Region	Percentage	Alps	77%	America	17%	Western Europe	6%						
Region	Percentage														
Alps	77%														
America	17%														
Western Europe	6%														

³ In the charts, Eastern Europe and Central Asia have been designated as *East*.

⁴ A resort is considered as major if its attendance reaches over 1 million skier visits per winter season.

The major ski resorts worldwide have been ranked below on the basis of their average annual skier visits⁵ during the last few winter seasons.

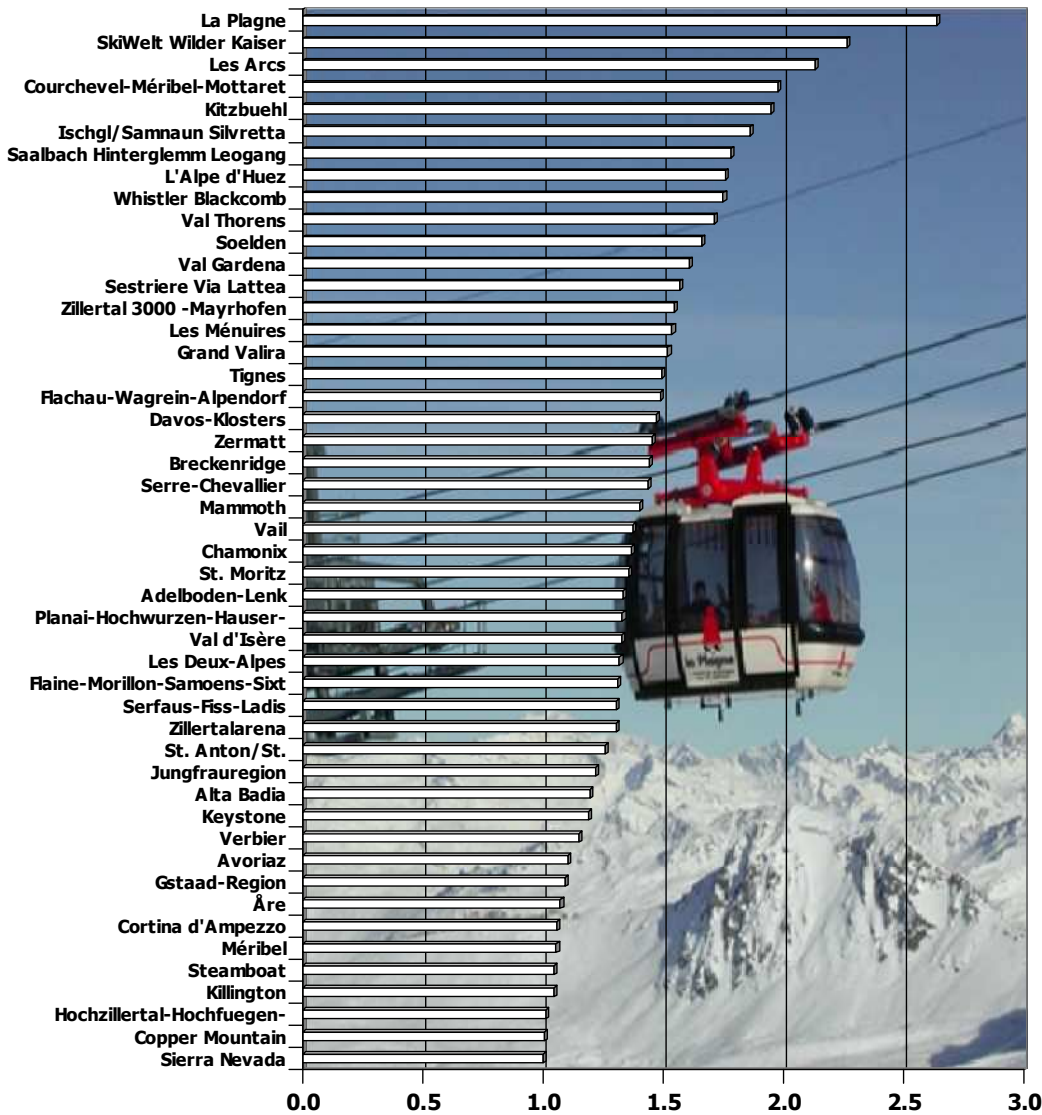


Figure 1: Top world resorts in millions of skier visits

Most of the industry is concentrated around the resorts that generate more than 100'000 skier visits per year. Even if they only account for 20% of the resorts, they account for 80% of all skier visits.

Although often important at a regional level, the altitude of a ski resort is not really an important benchmark worldwide, since at some

⁵ Publicized data or estimates when required.

places around the globe one can ski at sea level, whereas in other countries, one needs to be at the higher elevations to access decent snow conditions.

Evolution of worldwide skier visits

Although data collection within the industry is not always well organized and yearly number of visits may vary due to weather conditions, for several years the estimate has been an overall draw of approximately 400 million skier visits worldwide⁶. The assumption is that figures have been stable over the last 10 years, as major mature markets experienced reduced growth (when not experiencing a dramatic decline as with Japan), while other markets were emerging.

The chart below appears to confirm this assumed trend, and reflects the evolution of skier visits in those countries considered to be a large sample⁷ of the most significant industry players over the last decade.

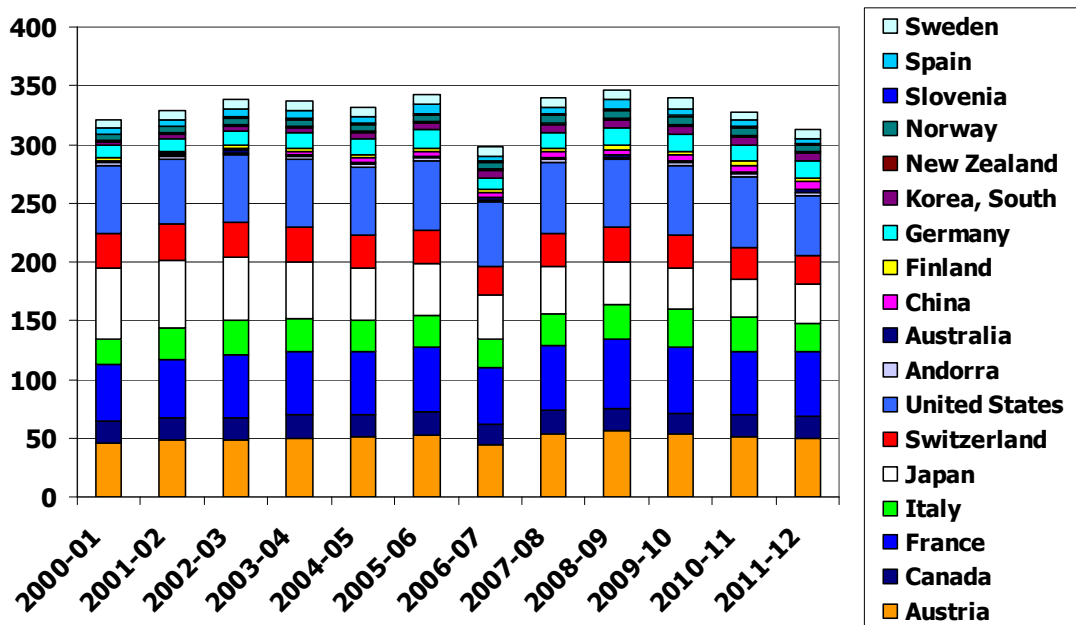


Figure 2: Evolution of skier visits in millions

⁶ Including visitors to indoor ski centers.

⁷ This sample refers to the countries where skier visits are measured and publicized on a yearly basis. In spite of the very representative sample, it is of course not a comprehensive sample of all countries with ski areas.

Market share of worldwide skier visits

The relative importance of the major destinations is showed in the pie chart below. Clearly, the Alps are the biggest ski destination in the world, capturing 44% of skier visits. The second biggest destination is America (mostly North America), accounting for 22% of skier visits worldwide.

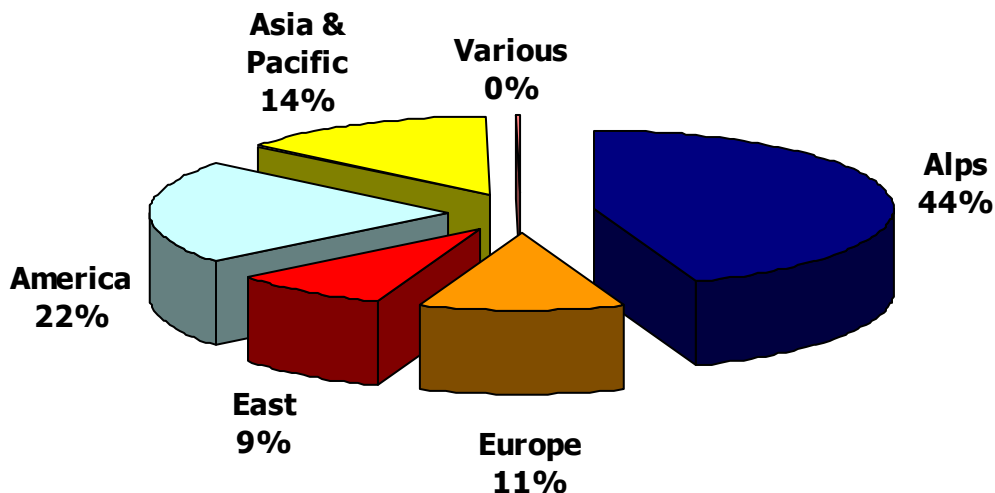


Figure 3 : repartition of skier visits worldwide

Asia & Pacific used to have the same market share as America. However, the continuous decline of the industry in Japan has still not been replaced by the growing ski markets in South Korea and China. In the long term, countries such as India and Pakistan may join them and contribute to increasing the weight of Asia in the international spread of skier visits. Northern, Southern and Western European non alpine countries (grouped under the label of Western Europe) also attract 11% of the market, even if skier visits are spread primarily over a large number of small resorts.

Skiers per region of origin

The total number of skiers worldwide was estimated based on both the number of skier visits in the various countries as well as on the national rates of participation⁸. The figure is currently estimated to

⁸ It must however be stressed that the number of days per potential skier may vary significantly from one country to another. Skiers have been considered independent of their rate of participation.

be at 115 million⁹ and seems to be growing over the long term¹⁰. Although some countries have no ski areas (in some instances only ski domes), they have skiers who ski abroad. For example, this is the case with the Netherlands, which accounts for more than 1 million outbound skiers.

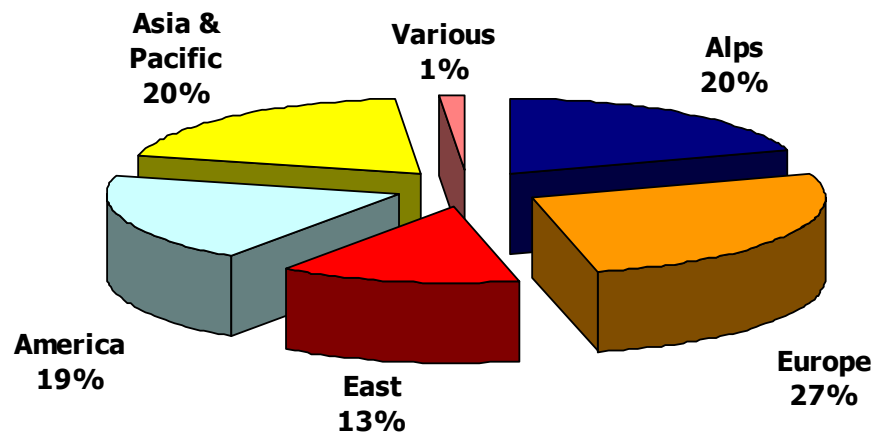


Figure 4: distribution of skiers by region of origin

This chart, comparing to skier visits, clearly shows the regions that are exporters of skiers and those that are recipients. The Alps is the most internationally visited ski destination, attracting most of the inbound skier travel. Even though it hosts 44% of skier visits, it only produces 20% of the skiers. No other region has such a high proportion of foreign visitors. Typically for America, its share of worldwide skier visits roughly matches its share of skiers.

The international flow of skiers is primarily concentrated within Europe. For instance, overseas skiers represented only 3.1% of total skier visits to U.S. ski resorts in 2007/08. The weight of international customers is limited for most ski destination countries. Moreover, the international catchment areas are also limited, due to various factors such as market size, transportation, travel time and costs, and possible saturation of airports at ski destinations in Europe. Outbound European markets are not increasing but will be spread over more destinations in the future. For instance, British customers familiar with the Alps and Andorra now also have other destinations to choose

⁹ Since the 2010 edition of this report, some important markets produced more reliable figures, or revised figures of previous estimates for national skiers. Thus the change compared to previous year is not significant of a short term variation.

¹⁰ Interestingly, this is not yet reflected in the evolution of skier visits, as the participation rate of new entrants is still lower than those of declining skiing populations.

from such as Bulgaria, Romania, Slovakia, etc. It is also foreseeable that the new markets will supply themselves at a regional level. The recent growth of skiing in Asia will feed resorts in Japan and South Korea, before eventually, if ever, benefiting resorts in the European Alps or North America.

Future trends in market share

It also appears from figures 3 and 4 that the regions of Eastern Europe and Asia & Pacific provide for 33% of the skiers worldwide, but only produce, at this stage, 23% of skier visits.

These regions clearly represent the future growth potential of the market. Besides, a look at new deliveries of lifts confirms that Eastern European and Asian countries are building up at a higher rate than the more traditional ski regions, if the figures are analyzed in relative terms. In addition, with the exception of one resort in Canada¹¹, no new resorts have been created in the traditional markets.

Although consumption patterns of skiing in countries like China still need to be confirmed on a broader scale, it is likely that the Eastern European and Asian markets will grow their skier visit figures over the new decade. They may end up reaching the weight equivalent of the other major regions in terms of skiers by the year 2020. If this growth occurs without affecting skier visits at western resorts, and provided they find adequate ways to address the generational issue, worldwide skier visits may then increase to over 420 million by this date.



Comparative key figures

Various organizations and entities usually collect ski resort data at a national level. This information has been compiled to produce an international overview of the key figures of the industry. For some countries, since data is lacking or incomplete, some research has been conducted in order to either collect and consolidate detailed national data or to extrapolate figures based on known benchmarks.

¹¹ Revelstoke Mountain, Canada, opened in 2007 with a gondola and a few chairlifts. Its goal is to offer the greatest lift-served vertical drop in America. Total forecasted investment is USD 1 billion over 15 years.

Numerous sources were checked to ensure the most accurate figures. Some general information was also provided from global directories or statistics.



Although some definitions may vary from one country to another, the table presented on the following pages summarizes some of the key comparative figures for the industry¹². They are provided for a large range of ski countries, representing 99% of the total market in terms of skier visits. Continuous efforts have been made to broaden the scope of this report.

Under the country review section, charts are presented for those where attendance at ski resorts is measured and consolidated on a yearly basis. On the charts, in addition to yearly data, the evolution of the 5 year average has also been included (blue line). It helps to understand the long term trend for each of these markets.

25 Years Of Modern Indoor Snow Centers

2013 marks 25 years since the first of the current *modern* indoor snow centers were created.

Three indoor snow centers opened around 1988 in Australia (Mount TheBarton), Japan (Ski In Tsudanuma) and in Belgium (Skibaan Casablanca). Unfortunately all three centers have since closed.

Earlier versions of indoor snow centers date back to the 1920's in Berlin and Vienna and in the early 1950's a complex using crushed ice as a snow surface for part of the year opened in Seibu, Japan. Now fitted with an artificial slope surface under the snow, this complex celebrated 60 years of operations in 2012.

The longest established and still operational *real snow* indoor snow centre is generally agreed to be Tamworth Snowdome in the UK which opened in 1993. It is 20 years old this year. A small earlier *test facility* at nearby Telford, which was opened in 1989 by operator Acer Snowmec who has gone on to make snow for many of the world's leading indoor snow facilities, also opened to the public in 1993 but has since closed.

One of the world's largest ever indoor snow centers, the SSAWS indoor snow center in Tokyo Harbor, also opened in 1993 just after the Japanese bubble economy burst, and never recouped its USD 300 million construction cost before closing in 2002.

¹² Please refer to the Glossary at the front of the document for further definitions of the terms employed.

Around 80 indoor snow centers have been built in approximately 30 countries over the past 25 years, and around 50 are still operational, with the most (6+) in Germany, Japan, the Netherlands and the UK. The largest in terms of slope surface area is Snowworld Landgraaf, in the Netherlands, and in terms of slope length is the Amneville Snow Hall in France.

Source : Snowhunter



Laurent Vanat

Country	Number of ski areas ¹³	Number of areas > 4 lifts	Number of major resorts (>1 mio SV)	Number of lifts	Skier visits ¹⁴ (SV)	SV/lift	Population	National participation rate (in % population)	Number of skiers (national)	Ranking in world tourism ¹⁵	Arrivals of international tourists	Proportion foreign skiers	SV per inhabitant ¹⁶	SV per foreign visitor ¹⁷
Andorra	3	3	1	140	2'200'806	15'720	82'627	20.0%	16'525	#N/A	1'830'000	95.0%	1.33	1.14
Argentina	22	10	0	145	1'500'000	10'345	40'482'000	2.5%	1'012'050	44	4'300'000	25.0%	0.03	0.09
Armenia	3	1	0	7	50'000	7'143	2'968'586	2.0%	59'372	#N/A	575'000	2.0%	0.02	0.00
Australia	10	7	0	158	2'059'400	13'034	21'007'310	2.0%	420'146	40	5'600'000	1.5%	0.10	0.01
Austria	254	199	12	3'028	52'962'000	17'491	8'205'533	36.0%	2'953'992	12	21'400'000	66.0%	2.19	1.63
Bosnia and Herzegovina	11	4	0	35	400'000	11'429	4'590'310	5.0%	229'516	#N/A	311'000	50.0%	0.04	0.64
Bulgaria	32	7	0	110	1'200'000	10'909	7'262'675	5.0%	363'134	39	5'700'000	25.0%	0.12	0.05
Canada	288	73	1	922	19'066'200	20'679	33'212'696	15.0%	4'981'904	15	15'800'000	14.3%	0.49	0.17
Chile	21	9	0	122	1'250'000	10'246	16'454'143	3.0%	493'624	#N/A	2'750'000	15.0%	0.06	0.07
China	350	77	0	869	5'640'000	6'490	1'330'044'544	0.4%	5'054'169	4	50'900'000	0.5%	0.00	0.00
Cyprus	1	0	0	5	20'000	4'000	792'604	1.0%	7'926	#N/A	2'141'000	0.0%	0.03	0.00
Czech Republic	176	70	0	816	8'700'000	10'662	10'220'911	20.0%	2'044'182	36	6'100'000	35.0%	0.55	0.50
Estonia	9	1	0	17	125'000	7'353	1'307'605	5.0%	65'380	#N/A	1'970'000	5.0%	0.09	0.00
Finland	76	30	0	374	2'794'000	7'471	5'244'749	24.0%	1'258'740	50	3'423'000	17.0%	0.44	0.14
France	325	233	14	3'595	55'646'000	15'479	64'057'792	19.0%	12'170'980	1	74'200'000	28.0%	0.63	0.21
Georgia	5	2	0	14	100'000	7'143	4'630'841	2.0%	92'617	#N/A	1'052'000	10.0%	0.02	0.01
Germany	510	82	0	1'827	14'322'000	7'839	82'369'552	18.0%	14'826'519	9	24'200'000	10.0%	0.16	0.06
Greece	22	6	0	111	800'000	7'207	10'722'816	2.0%	214'456	16	14'900'000	10.0%	0.07	0.01
Hungary	34	5	0	70	500'000	7'143	9'930'915	5.0%	496'546	26	9'100'000	10.0%	0.05	0.01
Iceland	13	2	0	49	250'000	5'102	304'367	20.0%	60'873	#N/A	1'235'000	5.0%	0.78	0.01
India	15	1	0	22	200'000	9'091	1'147'995'904	0.1%	1'147'996	41	5'100'000	1.0%	0.00	0.00
Iran	19	4	0	51	500'000	9'804	65'875'224	1.0%	658'752	#N/A	2'034'000	1.0%	0.01	0.00
Italy	349	216	4	2'127	28'260'000	13'286	58'145'320	8.0%	4'651'626	5	43'200'000	15.0%	0.41	0.10

¹³ The number of ski areas includes some very small ones, for instance in France, only 233 areas have more than 4 lifts and concentrate most of the activity

¹⁴ Average last 5 seasons or estimate

¹⁵ Based on arrivals of international tourists (WTO)

¹⁶ Ratio of domestic skier visits divided by the population.

¹⁷ Ratio of skier visits of foreign visitors divided by the total number of foreign visitors.

Country	Number of ski areas ¹³	Number of areas > 4 lifts	Number of major resorts (>1 mio SV)	Number of lifts	Skier visits ¹⁴ (SV)	SV/lift	Population	National participation rate (in % population)	Number of skiers (national)	Ranking in world tourism ¹⁵	Arrivals of international tourists	Proportion foreign skiers	SV per inhabitant ¹⁶	SV per foreign visitor ¹⁷
Japan	547	280	0	2'422	35'665'753	14'726	127'288'416	9.0%	11'455'957	28	6'800'000	3.0%	0.27	0.16
Kazakhstan	10	2	0	25	250'000	10'000	15'340'533	1.5%	230'108	#N/A	3'447'000	2.0%	0.02	0.00
Korea, South	18	16	0	150	6'597'229	43'982	48'379'392	6.0%	2'902'764	35	7'800'000	10.0%	0.12	0.08
Kyrgyzstan	16	1	0	24	100'000	4'167	5'356'869	1.0%	53'569	#N/A	2'147'000	20.0%	0.01	0.01
Latvia	26	5	0	77	800'000	10'390	2'245'423	10.0%	224'542	#N/A	1'684'000	15.0%	0.30	0.07
Lesotho	1	0	0	1	12'000	12'000	2'128'180	0.1%	2'128	#N/A	320'000	90.0%	0.00	0.03
Lithuania	11	0	0	19	200'000	10'526	3'565'205	5.0%	178'260	#N/A	1'611'000	10.0%	0.05	0.01
Macedonia	8	2	0	34	300'000	8'824	2'061'315	7.5%	154'599	#N/A	259'000	10.0%	0.13	0.12
Montenegro	4	2	0	23	250'000	10'870	678'177	10.0%	67'818	#N/A	1'044'000	25.0%	0.28	0.06
New Zealand	25	10	0	100	1'424'152	14'242	4'173'460	7.0%	292'142	#N/A	2'458'000	36.0%	0.22	0.21
Norway	213	40	0	667	6'310'000	9'460	4'644'457	25.0%	1'161'114	46	4'300'000	8.0%	1.25	0.12
Poland	182	13	0	832	5'000'000	6'010	38'500'696	6.0%	2'310'042	19	11'900'000	10.0%	0.12	0.04
Romania	44	5	0	141	1'200'000	8'511	22'246'862	3.0%	667'406	#N/A	1'272'000	5.0%	0.05	0.05
Russia	170	31	0	414	3'000'000	7'246	140'702'096	2.5%	3'517'552	13	19'400'000	2.0%	0.02	0.00
Serbia	31	2	0	64	650'000	10'156	10'159'046	3.0%	304'771	#N/A	683'000	20.0%	0.05	0.19
Slovakia	91	47	0	547	5'000'000	9'141	5'455'407	18.0%	981'973	#N/A	1'298'000	25.0%	0.69	0.96
Slovenia	44	24	0	217	1'397'128	6'438	2'007'711	15.0%	301'157	#N/A	1'668'000	17.0%	0.58	0.14
South Africa	1	0	0	4	25'000	6'250	48'782'756	0.2%	97'566	24	7'000'000	0.0%	0.00	0.00
Spain	34	30	1	360	5'863'771	16'288	40'491'052	5.0%	2'024'553	3	52'200'000	10.0%	0.13	0.01
Sweden	228	69	1	820	7'990'800	9'745	9'045'389	20.0%	1'809'078	38	4'900'000	8.0%	0.81	0.13
Switzerland	240	102	7	1'749	27'200'186	15'552	7'581'520	37.0%	2'805'162	27	8'300'000	50.0%	1.79	1.64
Turkey	25	6	0	102	1'000'000	9'804	71'892'808	1.0%	718'928	8	25'500'000	15.0%	0.01	0.01
Ukraine	41	8	0	98	800'000	8'163	45'994'288	2.0%	919'886	7	20'700'000	5.0%	0.02	0.00
United Kingdom	10	5	0	124	224'130	1'808	60'943'912	10.0%	6'094'391	6	28'000'000	1.0%	0.00	0.00
United States	481	354	7	2'970	57'745'399	19'443	303'824'640	4.3%	13'064'460	2	54'900'000	5.6%	0.18	0.06



General benchmarking

The United States, Japan and France have the most **ski resorts**, with more than 200 each. If Germany also shows a significant number of ski areas, most of them are very small ones that are not considered ski resorts under the definition used in this report. Only Austria and France have more than 10 resorts that generate over 1 million skier visits per season.

France, Austria and the United States top the list of countries with the most **lifts**, with about 3'000 each. They are also the countries posting the highest total **skier visit** figures, with more than 50 million each, and the United States ranks first on a 5 year average. However, France is close behind and may soon be near or at the same level.

The introduction of South Korean data in the benchmarking table provides a new record breaking figure as far as **skier visits produced per lift** is concerned, with 43'982 skier visits generated per lift per season. The number of skier visits per lift is also higher in Canada and the United States than in the other countries, showing the difference in the business model from that in Europe, where an emphasis is placed on lift mechanics and sophisticated infrastructure.

With more than 1'300 million inhabitants, the biggest **national market** of the sample is China, far greater than any other. However, at this stage, the size of the ski industry is not proportional. India, which also has over one billion inhabitants, still has a very low number of skiers. The United States is the biggest mature market, with a population of over 300 million inhabitants.

The Austrians, Swiss and Norwegians are the populations with the highest **participation rates**, with 25% or more of the population participating in skiing. However, since they benefit from much large populations, the United States, Germany and France account for the highest **number of national skiers**, with around 12 million each.

France, the United States and Spain are the **countries with the most foreign tourists**, but it is only in France that they provide a noticeable benefit to ski resorts. Most foreign visitors, however, do not come for the purpose of skiing. For the 2 other countries, foreign tourists only marginally contribute to the number of visits to ski resorts.

In nearly every country, the main portion of skier visits consists of domestic skiers. There are only 3 countries worldwide where **international customers** represents at least half, if not more, of skier

visits. In Andorra, Austria and Switzerland, foreign customers represent between 50% and 95% of all skier visits. Besides posting a record proportion of foreign skier visits, these countries also have the highest ratio of **skier visits per inhabitant and per foreign visitor** of the sample, with more than 1.3 and 1.1 visits respectively, clearly showing the importance of winter tourism.

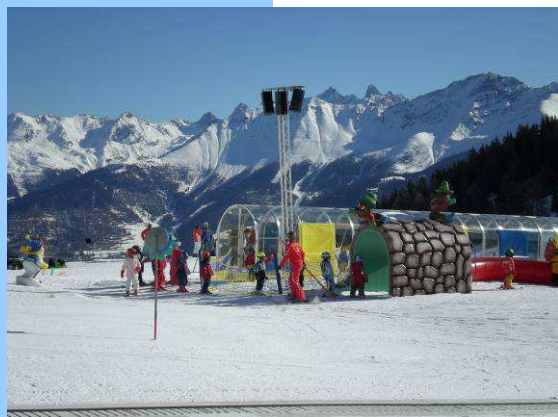


The Alps



Austria

With EUR 6 billion spent since year 2000, the Austrian operators have been massively investing over the last few years, showing the most updated lift infrastructure of the industry. To some extent, or when measured to other countries' standards, the infrastructure in some places even tends to be luxurious, with equipment such as 8-seaters detachable chairlifts with heated seats, bubbles and underground parking. The industry now also covers 70% of the slopes with snowmaking¹⁸. It is worth noting that the economic sustainability of such a high level of investment is still difficult to demonstrate, when more than 50% of revenues have been reinvested for several consecutive years.



For the observer, there is a high level of individuality between the ski resorts, and the business models of the alpine villages show some particularities. Austria is the European country with the largest hotel accommodation offering. Since most of these hotels are family-owned¹⁹, they still have a very conservative approach to marketing, but benefit from loyal returning customers. This seems to be successful with both the domestic and the large German and Dutch customer base (respectively 23%, 40% and 9% of overnight stays²⁰). In fact, the country is a big importer of skiers; most of its skier visits are generated by foreign tourists. Another traditional customer base is via British tour operators.



A couple of Austrian resorts have a very strong market positioning. Some, although not connected, have joint marketing efforts, showing an example of a new dynamic. Despite the fact that it is not possible to ski between each of the resorts, the benefits of using this common brand have appeared, for instance by allowing higher pricing and joint advertising actions.

Austria is also the only country where schools still go on ski weeks on a regular basis. This may be the secret to the growth in skier visits.

¹⁸ About EUR 800 million have been invested in snowmaking over the last 5 years

¹⁹ The same families also often own shares in the lift companies

²⁰ Figures from 2008/09 winter season, Statistik Austria

Austria experienced continuous growth in skier visits up to the 2008/09 season. With an average yearly increase of 2.25%, since beginning of the century, the country was close to reaching the level of skier visits in France. In the last 3 seasons however, the Austrian resorts have experienced a decrease in visits, as with other alpine destinations (with the exception of France last season).

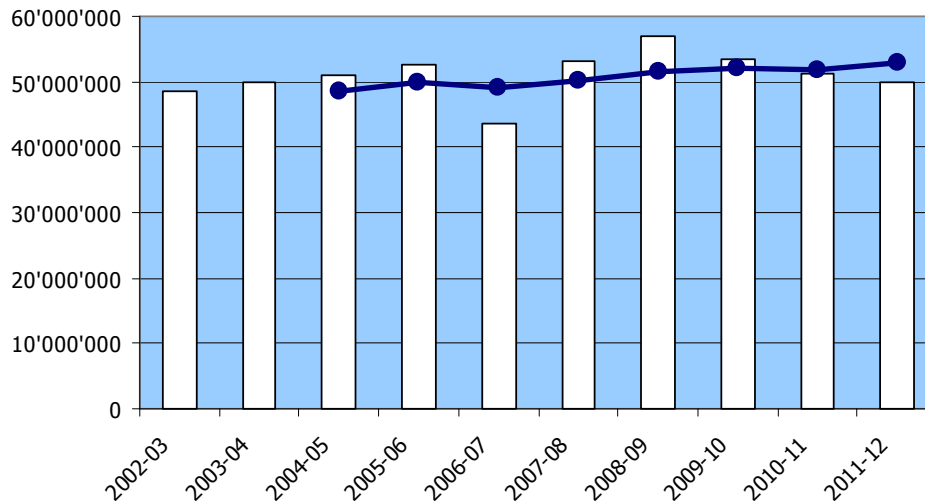


Figure 5 : Austria, evolution of skier visits

Difficult weather and snow conditions, together with a shorter season, brought on decreasing attendance figures. With 50 million skier visits, the 2011/12 season was about 2% down from the year before. With some extreme weather at the beginning of the season, December and January showed poor attendance. The extremely low temperatures, snow and storms even prevented visitors from being able to reach some ski areas, when lifts were not closed due to unsafe operating conditions. With the return of better weather in February and March, these months performed well, providing an adequate finish to the season.

New Austrian Ski Region Opening 2012-13

A rare new ski region in the Austrian Tirol will open this winter thanks to a gondola connection between Alpbach and the Wildschonau ski areas.

The new *Ski Juwel* (which means *Ski Jewel* or *Ski Gem*) area will finally link the neighbouring areas, which have both established separate international reputations over more than 50 years of ski history. Both are well-known not only for their skiing but also for their scenic beauty, with Alpbach previously named the *most beautiful village in Austria*.

Connecting the two areas is an eight-seat gondola between Inneralpbach and the Schatzberg ski area at Auffach in Wildschonau, thanks to a EUR 13.5 million investment.

The combined area will have 145 kilometers (91 miles) of runs served by 47 lifts. The terrain will be made up of 33 kilometers of easy blue runs (22%), 77 kilometers of intermediate red runs (53%), 13 kilometers of difficult black runs (8%) and 12 kilometers of off piste itineraries (7%). A six-day lift pass will cost EUR 197.00 for adults and EUR 98.50 for children.

Source : Snowhunter



France

Although France is the number one destination in terms of arrivals in world tourism, the ski industry still works primarily with the domestic market. Some of the major French resorts were created from scratch in the 1960's and 1970's, initially as integrated operations. They were dismantled in the 1980's and lift operations were distributed among numerous actors, giving birth to the Compagnie des Alpes, the world's largest ski resort operator. France is the only European country with such a dominant operator who runs nearly all the major resorts. There are also a few other smaller operators that manage lifts for several ski areas. In France, ski lifts are still considered to be a public service, and the operating companies are either partially owned or even directly managed by municipalities.

Another particularity of French resorts, especially in the purpose-built big resorts, is the extremely high proportion of apartment housing. Hotels are quite rare and most customers spend their ski week in what is called a *Résidence de tourisme*, which are to some extent the French equivalent of the North American condos, with much less surface area per guest, and with a level of comfort in many cases still based on the standards of the 1970's.

Over the last few years, it is estimated that the French ski industry has lost between 300'000 and 400'000 national skiers. This decrease has been partially compensated by a 1% to 2% annual growth rate of foreign customers, deriving primarily from new outbound markets with high potential. There are about 2 million foreign skiers who visit France each winter season. The British represent one quarter, followed by the Italians, Belgians, Germans and Russians. The latter have become increasingly numerous at ski resorts, now accounting for 7% to 9% overnight stays in hotels.

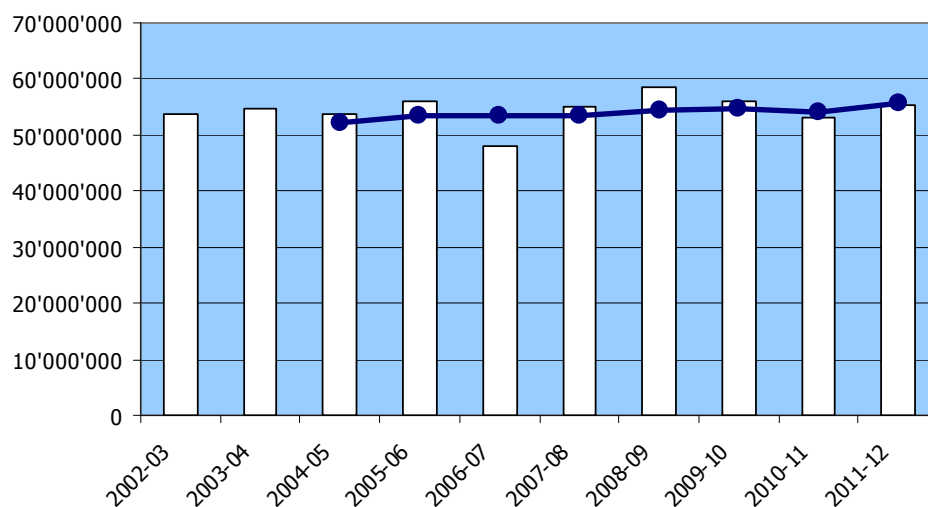


Figure 6 : France, evolution of skier visits

After the 2009/10 and 2010/11 winters broke with the long range perceivable trend towards growth (France was one of the rare countries still showing such a tendency among the major players), the 2011/12 season showed a return to a good level of skier visits. It should be highlighted that France was the only alpine country to experience growth during this season (4% over the previous year).

Even if the season did not begin so well due to an unfavorable calendar and gloomy weather, heavy snowfall through mid-January ensured good skiing conditions. Visits increased during the February holidays and continued through Easter weekend. Even though the Northern Alps and Jura Mountains performed well, some low-altitude ski areas suffered in the other regions.



Italy

Although most of the ski resorts are concentrated in the northern regions of Piemonte, Valle d'Aosta, Lombardia, Tretino, Alto Adige (Südtirol) and Veneto, there are minor ski resorts throughout most of the country, including the islands of Sicily and Sardinia. The Italian ski industry is similar to the Austrian model in the South Tyrol and eastern regions, and shares some similarities to the French resorts in

the west. Some players are very dynamic, like the *Dolomiti Superski* area, and offer a high level of infrastructure and state-of-the-art lifts and snowmaking facilities under a common brand name. This packaging is, however, formed by a multitude of small operators. The evolution of some other areas has been slower, contributing to a temporary decline in skier visits.



The Italian industry is quite fragmented, with no major operator. It relies primarily on domestic customers and presents the lowest rate of foreign participants of the alpine countries.

From 2002 up to 2009, 20% of the lifts were removed and a further 20% have been renewed, for a total of 445 new lifts. Although Italian operators have been investing quite heavily over the last decade, the attendance has started to decline. Even if this trend reversed over a couple of the last few seasons, Italy still seems to have a rather mature market profile and it is not clear if it will experience any real growth in the future. Attendance during the 2011/12 winter was rather poor, as were also the weather conditions at the beginning of the season.

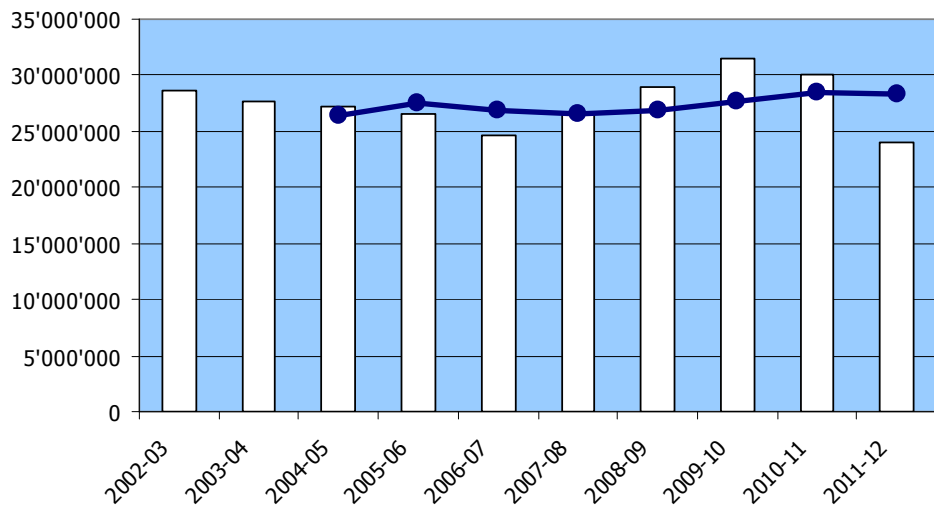


Figure 7 : Italy, evolution of skier visits



Switzerland

Switzerland was, for quite some time during the last century, the most well-known ski destination in the world, with some places still garnering lasting recognition. The country was also once the leader in terms of lift infrastructure. However, the industry lost part of its luster in the 1980's. Too many fragmented operators fighting over the same mountains led several companies into a poor financial situation. Investment has thus slowed down for quite some time and Switzerland lost part of its appeal to foreign tourists. This has not been helped by its legendary, but not always true, reputation as being an expensive destination. It should nevertheless be pointed out that for the last 3 years the exchange rate between the Swiss Franc, the Euro and the British Pound was unfavorable and led to a revival of this reputation for being expensive.

Swiss ski areas host an important foreign customer base, made up of Germans, the British, the French, Italians and Americans²¹. Over the last few years, Spanish and Russian customers also increased their presence.

The Swiss ski industry is facing the demographics issue with the domestic customer base. The skier visit figures present a small decline at the beginning of the decade, and then are flat over recent years, punctuated by downturns due to adverse meteorological conditions. The result is a long range declining trend.

With 24.8 million skier visits, attendance during the 2011/12 season was the lowest in the last 5 years. It is down 4.8% compared to the previous season (26.0 million skier visits) and 8.7% under the five-year average. However, attendance was still better than during the 2006/07 winter, which totaled only 24.2 million skier visits.

The 2011/12 season was peculiar. The season was shorter than average for most resorts. Even if there were no lack-of-snow issues, the weather conditions were poor during the Christmas and New Year's holidays. Then February experienced a long period of very cold weather. Even in the valleys, it remained below freezing for 2



²¹ top 5 in hotels overnight stays

weeks, with temperatures hovering around minus 15 degrees Celsius. It reached a point where the media recommended not going skiing. Obviously, they forgot that such low temperatures are business-as-usual for many ski areas around the world and that existing ski clothing design easily copes with such extreme conditions! Nevertheless, the collateral damage occurred in the form of cancelled ski vacations.

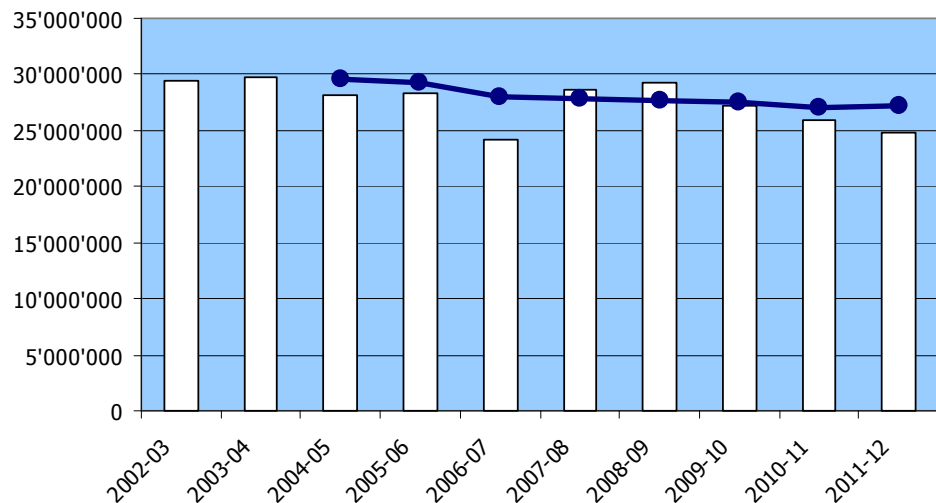


Figure 8 : Switzerland, evolution of skier visits

The evolution for the future is still unclear and is a concern for operators. For the time being, Swiss operators have not taken any strong action to anticipate the impact of the demographic changes in their client base. Some campaigns were launched during the last few winters to get citizens of major cities acquainted with the pleasures of skiing. Various ideas are being studied but customer knowledge still needs to be improved to develop successful CRM programs.

Further improvements to the client experience will also pass through the modernization of part of the aging hotel infrastructure, which offers very unequal quality depending on the destination. The increase in the non-skiing offer will also help the Swiss alpine resorts to be more appealing to a larger customer base both in winter and in summer.

Western Europe²²



Andorra

With 62 peaks over 2'000 meters within the country's 468 square kilometer surface area, the Principality is located in the highest part of the Pyrenees and has the largest ski area in the Pyrenees. The resorts are located at altitudes between 1'550 and 2'640 meters above sea level. Due to the southern location, the climate is milder and sunnier than in the other European ski regions. Even if susceptible to an unreliable snowpack, snow conditions are generally good, and enhanced by a solid snow-making system.



As the Andorran population is very small, the national customer base is insignificant. Most skiers are foreign visitors. Although there is no direct access by rail or air to Andorra, the ski areas are close to big cities from neighboring Spain and France, and also attract other international visitors, such as British and Russian skiers. The resorts offer many hotels for all tastes and budgets. They are also valued for their nightlife and shopping.

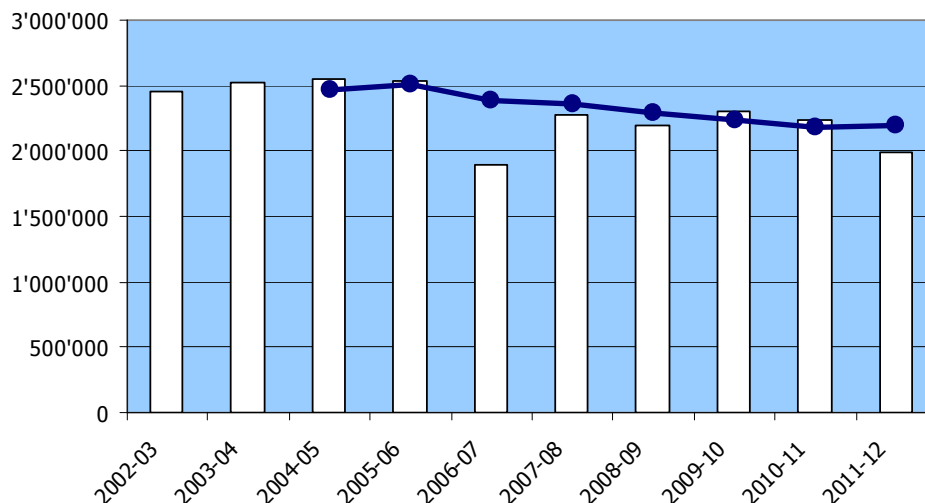


Figure 9: Andorra, evolution of skier visits

²² Although geographically part of Western Europe, the Alpine countries have been treated as a separate group, due to their major importance in terms of market share.



Due to the huge portion of international customers in the number of skier visits, Andorra is the only destination in Europe that experienced a decrease in skier visits immediately after the 2008 crisis. Even if some recovery occurred in 2009/10, for the time being, the long range outlook is continued decline, as the country has to fight against increasing international competition and lacks a domestic market.

Despite modern infrastructure, good snowmaking, and large enough resorts to compete with the Alps, part of the skier market does not consider Andorran resorts as attractive as those in the Alps, since their layout differs slightly. Villages are extensively connected over wide areas, but vertical drop is lower than in the major alpine resorts.

Le Pas de la Casa-Grau Roig and Soldeu-El Tarter form the Grandvalira ski area. Grandvalira is the largest ski area in the Pyrenees. With its 67 lifts, 110 runs for a total of 193 kilometers of skiing, it has entered the exclusive club of the top 50 largest resorts in the world (over one million skier visits per year).

The other resort is Vallnord, which is made up of the 3 distinct ski areas of Pal, Arcalis and Arinsal. Since 2004, the three areas have been covered by the same lift pass, offering guests the opportunity for a wide variety of skiing and snowboarding. Arinsal and Pal are linked via a 50-person cable car, but a 40 minute bus ride is required to reach Arcalis. Vallnord features 43 lifts and 70 runs for a total of 93 kilometers of skiing.



Finland

Despite the coastal plains and the flat terrain of Southeast Finland, the country has mountains on the Finnish-Norwegian border, whose high point is Mount Halti, 1'328 meters above sea level. Even with few mountains, Finland has about 80 ski areas in the North and Lapland (22), the South (26) and in the middle of the country (31).

The longest ski trail is in Lapland (over 3'000 meters long) but the average length of a ski run in Finland is between 600 and 800 meters. The Finnish lift passes are among the cheapest in Western Europe.

Skiing has been in Scandinavia for several thousand years and it is said that the Vikings already used skis as a means of transportation. If the existence of skiing is very old, its practice as a sport is more recent. It was developed after 1850, when the first races were held (mainly in Norway), and the Finnish Ski Federation was founded in 1908.

With a very low proportion of foreign skiers, the progression of skier visits in Finland is quite slow. With ups and downs, the long range trend is flat, even if 2010/11 was an excellent season as far as the number of visits is concerned.

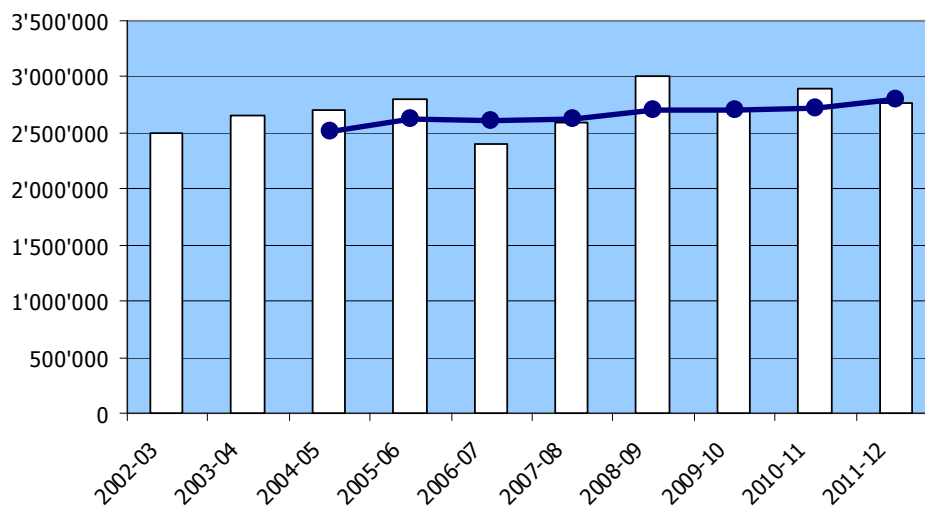


Figure 10 : Finland, evolution of skier visits

The main ski resorts of Finland are Levi, Ylläs and Rukas. They mainly target families, recreational skiers and people attracted to the many adventure activities they offer (excursions, etc.). Levi is the fastest growing ski resort in Finland. It is located in the northern part of the country. It has 2 cable cars, 1 chairlift and 25 surface lifts with a total capacity of 27'900 people per hour. Levi offers 230 kilometers of runs and 10% of them are lit for night skiing. From time to time the resort hosts Alpine Ski World Cup races.

The Ylläs ski area consists of seven peaks and two original Lapp villages. At 718 meters above sea level, Mount Ylläs itself is one of the highest peaks in Finnish Lapland. The Ylläs ski resort features 29 ski lifts, 61 trails, a Super-G-slope and the longest run in Finland (3.5 kilometers). The winter season lasts from October to May.



Germany

There are over 500 ski areas in Germany to satisfy the largest population of skiers in Europe: more than 12 million. But nearly half of these areas have only one lift. The country's main resorts are located along the southern border of the Black Forest and in the Bavarian Alps, bordering Switzerland and Austria. The German Alps, the Harz Mountains, Black Forest, Bavarian Forest, and the Thuringian Forest are middle altitude mountains, rising as high as 1'500 meters above sea level. They often sit at altitudes lower than Austrian or Swiss resorts, and skier visit figures have shown high sensitivity to snow conditions in the past. They therefore have invested heavily in snowmaking systems. It may be too early to conclude whether this infrastructure will be able to definitively mitigate the meteorological risks, but visitor figures have remained steady over the last 5 winters, even if they no longer show a long range trend towards growth.

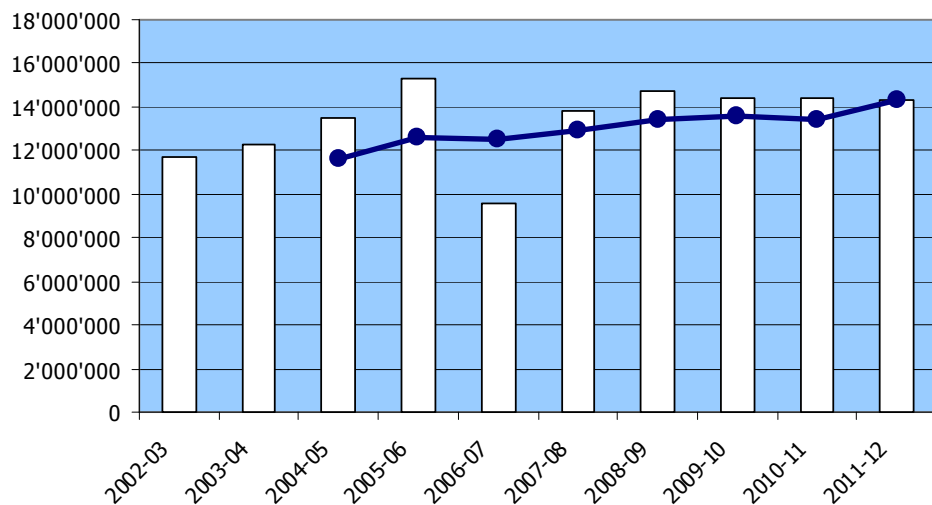


Figure 11: Germany, evolution of skier visits

The major catchment areas for German skiers are Munich, Stuttgart and regions further north. However, the Germans are big consumers of skiing abroad, and represent, for example, the largest foreign customer base for Austrian resorts.

Garmisch-Partenkirchen is the undisputed German winter sports capital. Renowned for its traditional New Year's ski jumping competition and for being an Olympic city, Garmisch today is a cosmopolitan place. Its ski area extends to the Austrian border, and includes over

60 kilometers of trails. The Zugspitze is the highest ski lift in Germany, topping out at 2'830 meters. Skiing in Germany is not limited to Garmisch. In Western länder, there are ski areas such as Oberstdorf, Balderschwang and Oberammergau in the Bavarian Alps or Reit im Winkl, Oberaudorf and Berchtesgaden in the East.



Iceland

Unlike the name of the country, it may be warmer at the ski resorts in Iceland than at many ski areas in Europe or North America. However, the snow conditions are in general cold and firm instead of powder. Most of the Icelandic mountains are no higher than 1'500 meters above sea level. The slopes may therefore lack enough vertical for experienced skiers. Several ski areas are located near urban centers, including the capital, Reykjavik. The main areas are equipped for night skiing, which is absolutely necessary given the very short winter days. They usually offer a reasonable variety of runs. Many also offer cross-country ski trails, skating rinks and the possibility of renting snowmobiles.

The two best known resorts are Bláfjöll, 30 minutes away from the capital, and Akureyri, on Mount Hlíðarfjall. Bláfjöll is the largest in the country with 11 lifts (2 chairlifts and 9 surface lifts) and a total hourly capacity of over 8'000 people. Opened in 1982, it has 16 runs for all levels, but only a small portion are for advanced skiers. The area ranges between 480 and 700 meters altitude, offering limited vertical drop. Glacier skiing is possible during the summer. Accommodations are limited, with only 100 beds available for visitors in homes belonging to three ski clubs. One daily lift pass costs less than EUR 20. However, life in Iceland is pretty expensive for the extras.

Akureyri is the most popular and most comprehensive ski destination in the country. It is equipped with seven lifts including a chairlift and a moving carpet and features a wide variety of downhill ski runs from the summit. Indeed, there are 24 runs that cater primarily to beginner and intermediate skiers. With an altitude ranging between 500 and 950 meters above sea level, the area is equipped with a snow-making system. In addition to skiing and a skating rink, visitors can also enjoy the snowpark, a swimming pool heated by geothermal activity and a fitness center. Accommodations at the ski area only amount to 100 beds, but other options are available in the town of Akureyri, seven kilometers from the resort. The daily lift pass costs around EUR 20.



Norway

Most of the country is dominated by mountainous regions or high terrain, with 26 peaks higher than 2'300 meters above sea level. The highest summit tops out at 2'469 meters. Skiing has been an activity in Norway for over 4'000 years and modern skiing was invented here. Initially, skis were solely a means of transportation, but skiing soon became a recreational activity. Morgedal, the birthplace of Sondre Norheim, the skiing pioneer and developer of the telemark technique, is called the cradle of skiing and was chosen three times to light the Olympic torch for the Winter Games. Norway has more than 200 ski resorts and over 650 ski lifts. Skier visits seemed to be growing through the 2008/09 winter. It has since decreased, as with many European countries.

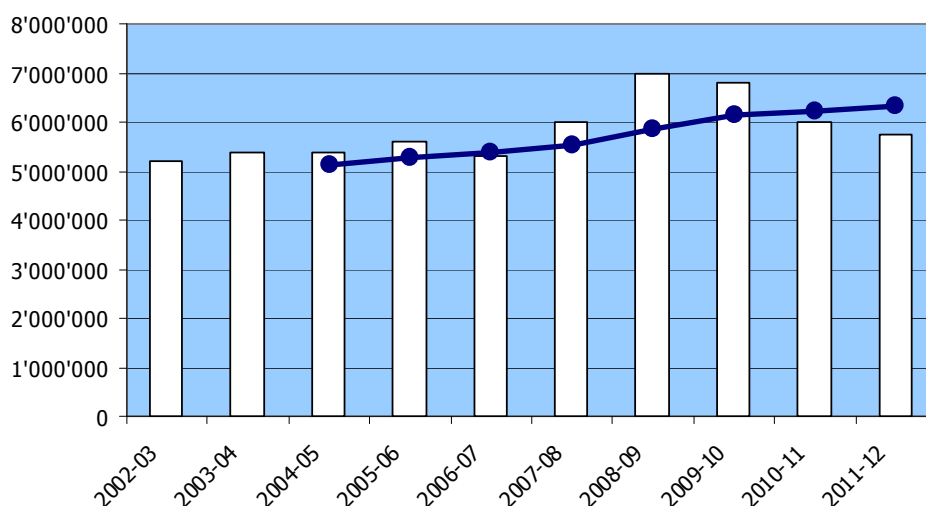


Figure 12 : Norway, evolution of skier visits

Norway is an ideal holiday destination for families, thanks to its excellent childcare facilities. Children under the age of seven can ski for free, provided they are wearing a helmet. The ski season begins very early and lasts from November until Easter. Norwegian ski resorts benefit from good snow conditions and are not as overrun as elsewhere, so that ski lift lines are rare. The two largest ski resorts – Trysil and Hemsedal – even offer their guests a snow guarantee: If the guaranteed ski trails are not open for an extended period of time, the resort refunds their guests the money for their hotel, ski school, ski rentals and the lift pass.

In the far North, there are no big resorts, but there is a wide variety of ski areas with cozy holiday cottages that are often rented out by private owners. Many holiday homes and hotels are very close to the ski lifts. Norway also offers many snowboard parks and over 30'000 kilometers of cross country skiing trails. 2'500 of them are lit, as night falls very early in Norway.

Geilo is the oldest ski resort of Norway and has since become a modern resort with good infrastructure, excellent ski runs, snowboard parks, mountain restaurants, hotels and spas. It has 6 chairlifts, 14 T-bar-lifts and 4 children's lifts with a total capacity of 22'000 people per hour, all located between 800 and 1'178 meters above sea level.

Hafjell is the third largest alpine ski area in Norway, well-known thanks to the 1994 Lillehammer Olympic Winter Games. It has 6 surface lifts, 3 chairlifts, over 25 kilometers of well maintained ski runs and 320 kilometers of cross country skiing trails. Hafjell is a very modern and sunny ski resort.

Hemsedal, in the *Scandinavian Alps*, is only a 3 hour drive from Oslo. The summit of the resort culminates at 1'450 meters above sea level. Hemsedal offers 30 downhill runs for a total of 43 kilometers of skiing, 11 surface lifts, 5 chairlifts. There are two mogul runs and two runs are lit for night skiing.



Spain

Despite the images of beaches commonly associated with Spain, the country ranks well among the mountainous regions of Europe (with a mean altitude of 650 meters above sea level, the country is even the fifth most mountainous in Europe). It has a centuries-old tradition of skiing, with 34 ski resorts located throughout various parts of the country. Spaniards, like many Europeans, love winter sports. Families go skiing or snowboarding on weekends and many people own second homes in the Pyrenees. Even King Juan Carlos spends several days a year under the spotlight at ski resorts. In most resorts, 90% or more of skier visits consists of domestic skiers.

With the exception of those seasons that experienced bad snow and weather conditions, skier visits to Spanish ski resorts was growing slightly during the first few



seasons of the new millenium, before flattening out and even declining in recent years, following a record 2008/09 winter. The country's difficult economic situation may delay recovery. Resorts may have to wait a bit longer to benefit from having expanded their infrastructure. For instance, the number of lifts grew from 228 in 2003 to 360 today.

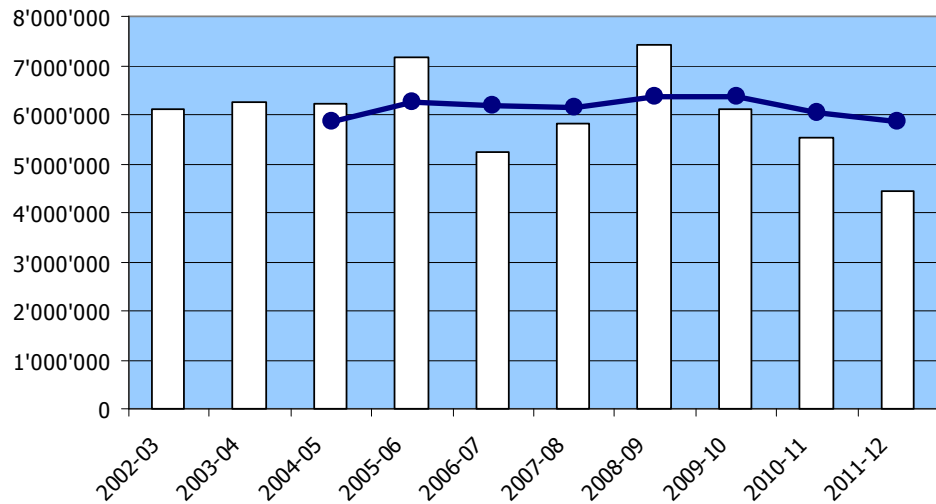


Figure 13: Spain, evolution of skier visits

The ski areas are well equipped and are suitable for skiers of all levels. The facilities on the mountain are continuously being improved upon: trails, infrastructure, machinery, access, accommodations and services. Annual investments, totaling millions of euros in the first years of the 2000's, have contributed to raising the resorts to international standards, in an ongoing effort to respect the environment and natural sites. Some areas have been certified by the *Q* trademark of Spanish Tourism Quality. This label is granted to establishments which meet the quality standards required.

Snow conditions are usually good; daylight hours are longer in the winter than in the Alps. In addition, resorts offer a wide range of complementary activities to visitors.

In the North, the Pyrenees form a natural barrier between France and Spain and have offered favorable conditions for building multiple ski resorts. Among the famous ones of the region, Baqueria Beret is located in the Aran Valley. It was founded in 1964 and is today one of the largest in Spain. Formigal resort is another internationally renowned resort in the Pyrenees.

Apart from the Pyrenees, which represent the most extensive ski region of Spain, the center of the country, the Cordillera Central, has 4 ski resorts essentially on the outskirts of Madrid, Salamanca and Segovia.

Let's not forget Andalusia. It has the largest resort in Spain, Sierra Nevada (which recently entered into the ranks of the top 50 biggest resorts in the world). Located in the second highest mountain chain in Europe, it is the southernmost resort in continental Europe, with 14 peaks over 3'000 meters high. Skiing at an altitude of 3'400 meters, an hour's drive from the Mediterranean, presents an exotic experience, as there are very few places where you can swim or surf in the sea in the morning and ski or snowboard in the afternoon. With over 65 kilometers of ski runs and snow about 5 months per year, Sierra Nevada offers all winter sports, for beginners and experts alike. It is also possible to ski at night during some weekends or holiday periods. The resort has many bars, restaurants, and discotheques for evening entertainment.



Sweden

Sweden has over 200 resorts with a total of more than 800 ski lifts, most of them in the North, but skiing is also possible and popular in the southern part of the country. The highest mountain is Kebnekaise, topping out at 2'100 meters above sea level. The Swedish winter is rather long, with a lot of snow. In the North the season lasts until May. Sweden is a sought-after winter sports destination as

snow is practically guaranteed. In addition, cross country skiing is very popular and the beautiful landscapes, lakes and forests offer a breathtaking panorama for skiing and relaxing.

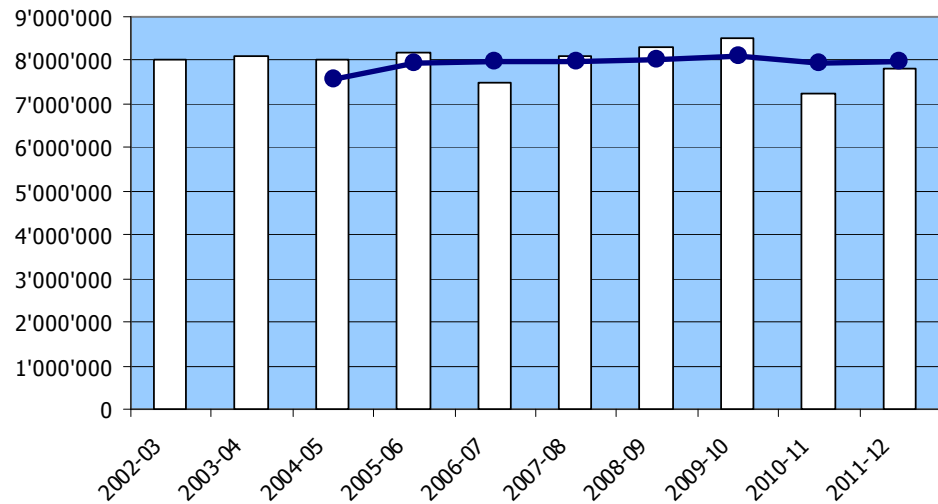


Figure 14 : Sweden, evolution of skier visits

Overall, ski tourism has been very stable, despite some weaker seasons. New investments have been made and in the next couple of years, hotel and accommodation capacities will expand. Despite the financial crisis, visitor numbers increased at Swedish ski destinations from 2006/07 to 2009/10. At the same time, low building costs encouraged many businesses to renovate. In addition, the low exchange rate of the Swedish krona also had a positive effect on the tourism industry. The last 2 seasons, however, saw decreasing attendance figures.

Climate change, and its consequences for the countries in the European Alps, is considered to be an advantage for Sweden, as ski tourism may shift to the colder northern Scandinavian countries.

The biggest and most modern ski resort in Sweden is Are, where the 2007 World Alpine Skiing Championships were held. It has 41 ski lifts and 75 kilometers of ski runs. The second largest resort is Lindvallen, featuring 54 ski lifts and 54 kilometers of ski runs. Riksgfänsen is considered to be the northernmost ski resort in the world. With its 6 ski lifts and 15 ski runs, it is famous for skiing under the midnight sun and for high-speed snowboarding.



United Kingdom

Although many English people are fans of skiing, there are only 5 ski resorts with natural snow in the United Kingdom, located in Scotland, plus a few ski areas managed by ski clubs in Northern England and Wales. The country however has roughly 50 to 60 dry slopes, where skiers can slide down slopes covered with synthetic material²³. Furthermore, there are 6 indoor snow centers, where skiers can experience manmade snow at any time of the year.

Skiing has a long history in Scotland, with resorts such as Glencoe and Glenshee starting in the early 1930's. Although at that time they were already equipped with a small engine-powered tow, the first permanent lifts were installed in the 1950's. Skiing took off in the 1960's with several developments that proved unsustainable, especially due to the unreliable snow conditions. After Lecht opened in the 1970's and Nevis Range in the 1980's, with the first modern gondola in the United Kingdom, Scotland currently has 5 ski areas in operation.

The Scottish resorts reach a total yearly average of 200'000 skier visits, but attendance is highly sensitive to weather and snow conditions and can double from one season to another. The Scottish ski season usually starts at Christmas, but ski lifts sometimes open in October. The end of the season may also be extended. One of the record seasons, the 2009/10 winter, lasted through May and even June at some resorts.

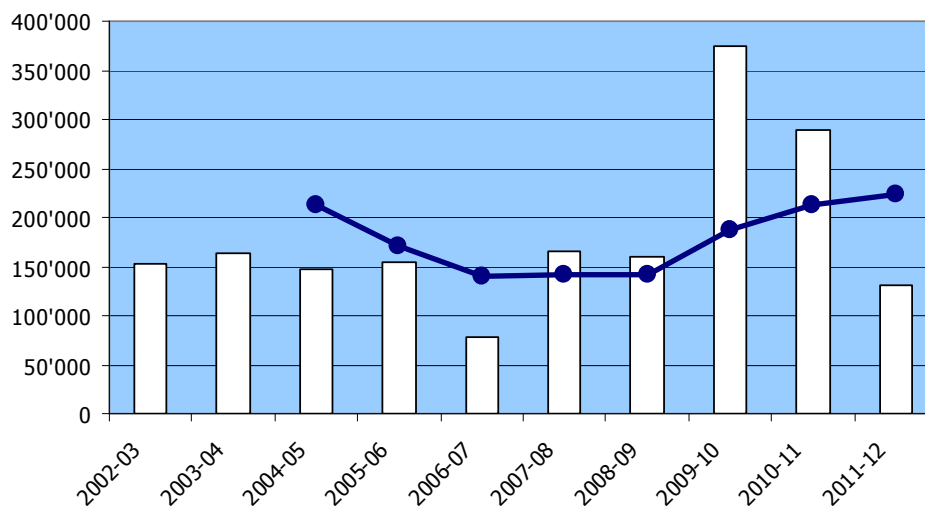


Figure 15 : United Kingdom, evolution of skier visits

²³ There were over 200 dry slopes in the 1970/80's, but most have closed.

With its 19 surface lifts and 3 chairlifts, the resort of Glenshee offers the most extensive skiing and snowboarding facilities. Culminating at 1'108 meters above sea level, with a base elevation of 305 meters, Glencoe Mountain resort has the highest vertical drop and also offers the longest and steepest runs in Scotland. While Cairngorm offers the only Scottish funicular railway, Nevis Range features the only gondola lift. Both also operate in summer time.

The indoor slopes are working hard to attract new people to snow-sports, which is a benefit for the industry. One indoor ski center offers a *Learn to Ski in a Day* program, which is very attractive for first time skiers and snowboarders. The artificial ski slopes are also very good opportunities to enable novices to learn and become familiar with skiing. The national snowsports governing body is working to introduce snowsports to people who have never skied or snowboarded before. Some private clubs even have their own artificial slope.

In the 1980's and 1990's, skier visit figures in the United Kingdom were higher than they are today. But with improving roads and air connection to Europe, together with the introduction of low cost airlines, most of the UK ski business is currently done abroad. Every year there are more than one million skiers who travel to the Alps or other destinations for winter sports²⁴. Even if it lost some of its market share, France is still the most popular country with British skiers, accounting for more than one third of travelers. Austria is ranked second, capturing about 25% of the British skier market. Next is Italy (about 14%), then Andorra (about 6%), which is on a par with Switzerland (also about 6%), North America (less than 5%) and Bulgaria (about 4%). More than half of British skiers go through tour operators. Several major firms specialize in winter ski travel.

²⁴ The amount of visitors peaked at 1.4 million for the 2007/08 winter; it declined to 1.1 million for the 2010/11 and 2011/12 winters.

Eastern Europe and Central Asia²⁵



Armenia

Half of Armenia is covered by mountains. The largest part of the country is at an altitude of more than 1'000 meters above sea level. Winters are cold, offering the perfect snow conditions for winter sports.

Yet, the country has only one single ski resort, Tsakhkadzor, located 55 kilometers from the capital, Yerevan. It was at one time the training place for the Soviet Olympic team. The first lift system was installed in 1972, turning the city into a ski resort. A ski teaching center was founded there in 1986, training athletes, including some who participated in the Olympic Games. The ski area is located between 1'966 and 2'819 meters elevation, East of Mount Teghenis.

In 2005, the Government started a special program to develop Tsakhkadzor into an international tourism destination. Since then, the site has expanded quickly and every year features new hotels and recreational facilities. New lifts of international standard were built between 2004 and 2008. Among them a three-stage chairlift, offering new runs and growing the popularity of Tsakhkadzor as a genuine ski resort. The total hourly capacity of the lifts is 4'400 skiers. The ski area extends for over 30 square kilometers and includes ten runs, for a vertical drop of 853 meters. Most runs will suit beginners, and the ski area offers excellent off-piste conditions. Five modern groomers are planned in order to maintain runs. The season runs from late December to late March. An all-day lift pass costs about EUR 20. In 2002, improvements to the highway leading to the resort were made to meet with international standards and to improve safety. In addition to being a ski area, the city of Tsakhkadzor is also a spa center.



²⁵ Eastern Europe and Central Asia have been grouped as a single region in this report, as most of the countries concerned are currently developing their ski industry. Even if in most of these countries skiing is nothing new, ski areas have in many places only recently been developed into resorts and marketed internationally. Part of the growth potential for the industry will come from this region and it is therefore interesting to be able to follow its evolution also from an aggregated perspective.



Bosnia & Herzegovina

In 1984, Sarajevo was the host city for the Winter Olympic Games. This proves that skiing already had a history in Bosnia and Herzegovina at the time. However, the war in 1992 left traces that are still visible at ski areas today. It is only recently that major ski areas have started to modernize, either by building new ski lifts or renovating old ones, as well as building new accommodations. Thanks to these infrastructure improvements, skier visits have increased in recent years, and with it the hope that Bosnia and Herzegovina will find its place among international ski areas. However, most resorts do not at this stage have the means to install snowmaking systems.

About 5% of the Bosnian population skis and the country has a total of 11 ski areas, but some are too small to really be considered. Most foreign visitors come from Serbia, Slovenia, Croatia or Montenegro.

Jahorina, Bjelasnica and Igman, the major ski areas of Bosnia and Herzegovina, are located in the Sarajevo region. In addition to these popular places, Mount Vlastic, in the center of the country, also hosts a ski resort. Towards the West, Kupres and Blidinje Natural Park are also two destinations for connoisseurs. All resorts of the country provide alternative activities to skiing, such as cross-country skiing and snowmobile tours. It is also possible to night ski. A small detail, but which could be important for visitors: in Bosnia and Herzegovina the roads are not routinely salted in the winter. Thus, access to ski areas can sometimes be difficult.

Jahorina, which hosted some of the events during the 1984 Olympic Games, presents itself as one of the greatest skiing and tourism centers of the Balkans. Damaged during the war in the 1990's, the area has since been refurbished and new hotels have been built. With its 20 kilometers of runs for skiers of all levels, 5 chairlifts (3 doubles and 2 six-packs), 4 surface lifts and a baby lift, the resort features a total hourly capacity of 11'900 skiers. It is located between 1'300 and 1'880 meters above sea level. Visitors have a wide choice of restaurants and a selection of hostels to four-star hotels. An all-day lift pass amounts to less than EUR 15. It should be pointed out however, that the facilities are ageing and there is no snowmaking. Grooming may be of poor quality and the runs are not always well marked. A large part of the mountain was turned into a national park to preserve the natural beauty of the region.

The neighboring resort, Bjelasnica-Igman, was also a former Olympic competition site. It rounds out its 6 runs of various levels, a total of 11 kilometers of skiing, with 2 ski jumping facilities. Compared to Jahorina, this ski area has fewer runs, but they are better main-

tained. The uphill infrastructure includes 6 lifts, mostly surface lifts, plus 1 chairlift, for a total capacity of more than 6'000 skiers per hour. A number of investments have been made at the resort in recent years. It is now equipped with a snowmaking system. Moreover, hotels have recently been built in the area. The restaurant selection is still limited, although sufficient for the basic needs of the resort. The price of an all-day lift pass is roughly equivalent to those at Jahorina.

Vlasic offers 14 kilometers of runs, from beginner to intermediate, well suited for novice skiers. It has 6 ski lifts with a total uphill capacity of 4'600 skiers per hour. The runs are poorly groomed. Some facilities that hosted 1984 Olympics competitions were damaged during the war and not rebuilt. However, the resort belongs to a private owner who is investing to improve services for the entire area. This modernization aims at gaining the title of second best ski area in the country with regard to popularity and visits. Visitors will find rooms in one of several new or renovated hotels, or at a few private accommodations (cottages or pensions).

The small city of Kupres has a ski area that features 4 runs for a total of 13 kilometers of skiing, 2 chairlifts and 3 surface lifts. The area, which also has 2'000 beds, is especially well-suited for beginners. Risovac, located in Blidinje national park, has 1 chairlift and 2 surface lifts with a total hourly capacity of 2'960 skiers. It has 4.5 kilometers of ski runs and a certified FIS slalom run. The resort offers 700 beds.

A study conducted by the Foreign Investment Promotion Agency of Bosnia and Herzegovina (IFAP) dating from the year 2009 shows that only a fraction of the potential for winter tourism is currently used in the country. The document proposes different investments to improve infrastructure in the Bosnian Mountains, which still lack a sufficient number of lifts, housing and proper ski run maintenance.





Bulgaria

Bulgaria is the highest country of the Balkan region, with an average altitude of over 450 meters above sea level. 8 mountain chains rising higher than 2'000 meters cover one-third of the country. Bulgaria has more than one hundred ski lifts spread across 32 ski areas. Seven of these have more than four ski lifts each.



The robust development of skiing in Bulgaria in the past few years is mainly due to significant investment in mountain resorts and the country's bid to host the Winter Olympics (despite several attempts, the candidacy has never been retained). In addition, the quality of the services and activities offered has also improved. A few resorts possess world-class infrastructure. One of the main assets of Bulgarian ski resorts is their excellent price/quality ratio, much less expensive when compared to the Alps; this attracts a number of international visitors. More than 400'000 foreign tourists from Romania, Macedonia, Serbia, the United Kingdom, France and Israel visited Bulgaria's ski resorts last season. .



Despite the lack of official figures, ski resorts are estimated to attract roughly 1.2 million skier visits per year.

The country's most internationally renowned ski resorts are Bansko, Borovets and Pamporovo. Bansko, often referred to as the *Winter Capital of the Balkans* and said to be the most modern resort of Eastern Europe, contains a wide variety of hotels that range up to 5 stars. The slopes are equipped with a modern gondola and state-of-

the-art detachable chairlifts. Investments of EUR 100 million were made to upgrade the lift system and the ski slopes, which enabled Bansko to gain international recognition by organizing FIS World Cup Ski races. Bansko has over 65 kilometers of ski runs and 14 ski lifts with a capacity of 23'100 people per hour. The resort features many restaurants and a very dynamic après-ski offering, which is highly appreciated by both national and international tourists.

Borovets ski resort claims to be the leader of the Bulgarian ski market and the biggest ski area of Eastern Europe. Its target markets are families, couples and groups. Borovets has 18 ski lifts with a total capacity of 16'750 people per hour. Pamporovo, the sunniest of the

Bulgarian mountain resorts, is nestled in the heart of the Rhodopes Mountains at 1'650 meters above sea level. It is the perfect resort for beginners and it claims to have one of the best ski schools in Eastern Europe. Pamporovo has 14 ski lifts with a total capacity of 15'000 people per hour.



Cyprus

With its forests, the Troodos mountain range stretches across most of the western side of Cyprus, offering a cool sanctuary in summer, and the opportunity for winter sports at the only ski area in the country. It offers skiing under the blue Mediterranean sky!

The ski area is just a one hour drive from the seaside town of Limassol or from the capital city Nicosia. It is located on the slopes of Mount Olympus, which culminates at 1'951 meters above sea level, 2 kilometers away. The ski area itself ranges from 1'800 to 1'920 meters. It features 4 lifts (1 chairlift and 3 T-bar lifts), snowmaking facilities and a total of 2 kilometers of skiing spread over 8 runs for all levels. The ski area also offers cross-country skiing.

The Cyprus Ski Federation organizes an international FIS ski competition every year at Troodos Mountain, on the officially sanctioned, 380-meter long Zeus slalom run. The first race was held in 1969, with participants from 9 countries.

The ski season is rather short, running usually from the beginning of January to the end of March.

Skiing has a history here, having officially started in Cyprus in 1947, with the creation of the Cyprus Ski Club. At that time, the roads were not plowed and the pioneers used to walk to Troodos in order to practice their sport. The first lift was soon built with local means and ingenious ideas from the pioneers. In the late 1950's, 2 portable lifts were installed in the winter. The first modern ski lift started operating in 1967 and is still in use today.



Estonia

With cold and snowy winters, Estonia offers decent conditions for winter sports. The winter climate is one of the most stable in Europe, with few sudden changes that could harm the ski season. However, due to the lack of mountains (the highest elevation is at Suur Mu-

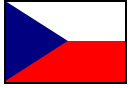


namagi, only 318 meters above sea level) and low altitude, the snow season is short and cross-country skiing and snowshoeing is much more popular than alpine skiing. Cross-country skiing has a long history here as the first competition was held as early as 1921 in Tartu. It later on became a yearly tradition and The Tartu Ski Marathon is well known and highly attended by national and foreign cross-country enthusiasts. Otepää is called the *Winter Capital* of Estonia and has hosted World Cup cross-country skiing events.

However, downhill skiing and snowboarding are becoming more and more popular with youngsters. One hundred meter long low-angle slopes work well for beginners. However, even if they are not very long, there are steeper slopes for more experienced skiers. Several ski areas do not offer any lifts, with some being simply equipped with a magic carpet that may also be used for snow tubing; a few obstacles may be built as a terrain park for snowboarders. Several rental shops next to cross-country trails also offer downhill ski equipment, even if there is just an adjacent unequipped snow hill. More sophisticated hills offer a beginner lift and groomed slopes.

Night skiing is popular, as several ski areas are equipped with lighted slopes. This is also a necessity since the days are very short in winter at these latitudes.

A few more elaborated ski centers are operated in various areas of the country, on natural or artificial hills (mainly from mining waste). There is an adventure park near Kivioli that features some ski runs, and a ski center in the so-called White Mountains next to the city of Tapa. The region of Otepää, south of the city of Tartu, also offers some ski runs spread over several ski areas. This region has the largest ski areas in the country; Kuutsmäe, featuring 5 lifts, and Mu-nakas, equipped with 3 lifts.



Czech Republic

The highest summit in the Czech Republic is the 1'602 meter high Sněžka peak. Despite lower mountains than in the Alps, there is a large number of ski resorts in the Czech Republic (about 170 ski resorts with a total of almost 820 ski lifts), all of them located between 900 and 1'300 meters above sea level. Most of these resorts are easily accessible from Germany or from the country's capital, Prague. Snowmaking enables skiing throughout the entire season, mitigating climate risks.

Over the last 10 years, resort infrastructure has been renewed and expanded. 50 new lifts were delivered by the major manufacturers.

With 25 lifts, Rokytnice Nad Jizerou is the largest resort. Its target public is skiers of all levels, even though it has predominantly blue (easy) slopes. The resort is split into two sub resorts (Horni Domky and Studenov), and has a total of 22.4 kilometers of ski runs. Rokytnice Nad Jizerou is located in the northern part of the country, in the Giant Mountains (Krkonoše) and belongs to *skiregion.cz*, the largest ski area in the country.



Spindleruv Mlyn is another big resort. Like Rokytnice, it is split into several sub resorts (Svaty Petr, Hromovka, Medvědí, Horni Mísečky). Hromovka has the second longest night skiing run (1'500 meters) in the country. In case of lack of natural snowfall, snowmaking covers 85% of the ski area. Svaty Petr hosts World Cup Alpine Ski races, acrobatic ski events and snowboard races. The resort has 16 ski lifts, 25 kilometers of ski runs, 6 of which are black (difficult) trails. Another resort that hosts many events is Horni Mísečky.

A well-known Czech ski resort is Pec pod Sněžkou, located within the National Park of the Giant Mountains. It has 10 ski lifts and a dozen ski runs (10.4 kilometers). The resort is located at the base of the country's highest mountain, Mount Sněžka. The first lift was built there in the 1940's. In 2009, a project to renovate the old chairlift (still in service) between the resort and the ski area was initiated. Unfortunately, the project is now on stand-by as the chairlift goes through the National Park. Pec pod Sněžkou offers approximately 8'500 beds. The season lasts from mid December to mid April.

Another popular resort is Malá Moravka-Karlov, in Moravia near Mount Praděd, in the Northeast. Due to its low altitude (maximum 940 meters above sea level), it often lacks of snow and is not very appealing to experienced skiers. The ski runs are aligned one next to the other and the vertical drop is limited to 150 meters. The resort has 19 ski lifts and 14 ski runs (7 kilometers of skiing), 5 of which are blue (easy). The most popular ski resorts do not have the infrastructure to manage the flow of skiers and on busy days waiting in line can last up to 20 minutes at each lift.



Georgia

Georgia is located on the historic and geographic threshold between Europe and Asia, between the Black Sea and the Caspian Sea. Mountains cover a large part of the country, with the Greater Caucasus Mountains in the North and the Lesser Caucasus Mountains in the South. Some reach impressive altitudes, with the Mount Shkhara, located on the border with Russia, culminating at 5'201 meters above sea level.

Georgia used to be one of the popular winter sports destinations of the former Soviet Union. Winter tourism already developed there in the 1970's. With its huge mountains, there are plenty of opportunities for mountaineering and numerous spots for heli-skiing. Georgia unsuccessfully bid for the 2014 winter Olympics. It however attracts tourists from neighboring countries, as well as from the USA, Germany, Israel and Turkey.

In addition to a few ski areas with limited infrastructure, Georgia has 2 resorts equipped with lifts that also offer heli-skiing: Gudauri is located in the Greater Caucasus Mountains, 120 kilometers from Tbilisi, the capital of Georgia. Gudauri has guaranteed snow from November to May. The average snowpack is about 1.5 meters deep. The resort rises to an altitude of 3'007 meters at the summit of Mount Kudebi. The area benefits from good weather, in spite of it being at such a high elevation. For the time being, accommodations are limited to a few rather simple hotels. The slopes are equipped with 5 chairlifts, which have recently been replaced or retrofitted. Gudauri's slopes are unmatched in the entire Caucasus. They provide ample opportunities for off-piste skiing. Ski mountaineering and heli-skiing are also very popular in Gudauri.

Bakuriani, the second resort, is located on the Didveli slopes of the Lesser Caucasus Mountains, in the southeastern part of Georgia, at an altitude of 1'800 meters. The highest skiable mountain of the re-

sort is Mount Kohta, culminating at around 2'200 meters above sea level. The resort lies 30 kilometers from Borjomi and is located within the Bakuriani Depression. It is connected with Borjomi by an electrified narrow gauge railway line. Bakuriani provides downhill and cross-country skiing for skiers of all abilities. The resort offers accommodations from 3-star hotels to small private hotels and guest-houses. It has 12 ski runs of varying difficulty. A new gondola and chairlifts were recently added. The resort is family oriented, with a year round offering. The forest-covered mountains, the mineral water springs, the roads leading to the spectacular natural or cultural monuments of the Borjomi Valley are appealing for vacations. The Olympic Committee of Georgia nominated the town of Borjomi (along with its main winter resort Bakuriani) as a candidate to host the 2018 Olympic Games. The bid was unsuccessful.

New resorts have also been planned. One is at Goderdzi Pass. The Georgian Department of Tourism has been contracting with a foreign company in order to develop a new ski resort in the high mountains of Adjara. The resort will accommodate about 12'000 tourists. The resort is unique due to its location 2'500 meters above sea level and 90 kilometers from Batumi. It was expected to open by 2012. Another project is located in the remote high-mountain town of Mestia, where officials hope to establish a year round tourist destination, with an initial budget of USD 145 million. Construction on another resort appears to be underway about 15 minutes outside of Tbilisi.



Greece

Skiing in Greece is a unique experience. Surprising as it may sound, although Greece is well known for its warm sunny weather and beautiful beaches, skiing is well developed. This is no secret for Greeks and a handful of other Europeans. But the majority of skiers in Europe, the United States and other countries around the world fail to imagine the numerous possibilities that Greece can offer for skiing. Mountains cover 80% of Greece with a majority of peaks topping out at over 1'500 meters above sea level, thus providing some areas with ideal conditions for the development of winter sports resorts. These resorts are located all over Greece. In central Greece there are the resorts of Parnassos, Karpenissi (Velouchi), Vassilitsa and Pilion. In Northern Greece, in the historical region of Macedonia (not to be confused with the country nearby), there are the resorts of Seli, Triapente Pigadia and Kaimaktsalan. In the Peloponnesus, in Southern Greece, there are the resorts of Kalavryta and Mainalo. Greece has a

total of 21 ski resorts and those mentioned above are the most well-known, and also equipped with modern infrastructure.



During the winter season many Greeks enjoy winter sports and although all skiers are not as well trained as the inhabitants of Alpine countries, the level of skiers, especially children, is progressing considerably every year. Skiing is still trendy in Greece, and most ski resorts are full with skiers and visitors on the weekend.

The largest ski resort is Parnassos Ski Resort, in Central Greece, only 200 kilometers from Athens, and very close to the antiquities of the well known ancient city of Delphi. Runs range from 1'600 to 2'250 meters. The Fterolaka ski area was built in 1975 and in 1981 the Kellaria ski area was ready to function. Today it has 19 runs for a total of 36 kilometers of skiing. Fterolaka and Kellaria have 14 lifts: 1 gondola, 6 chairlifts and 7 surface lifts. The Gerontovrachos ski area nearby offers another 2 lifts. This is the only resort in Greece that has a funitel type gondola lift. It is 1'713 meters long with a vertical drop of 572 meters and a capacity of 2'000 people per hour. The Ermis lift that connects Fterolakka and Kellaria was built in 1988 and offers skiers and visitors unbelievable views. Looking to the North one can admire the Mountain of the Gods, Olympus; looking to the South, the clear blue waters of the beautiful Corinthian Gulf. In Parnassos, one can ski in the morning and bathe in the sea at lunch time. It is usually operated throughout the year, including the summer season when it provides hiking opportunities for residents and tourists. The winter season starts in December and usually ends in April. Parnassos has hosted multiple FIS alpine skiing and snowboarding races at the end of March-April, and foreign racers have always been surprised by the quantity and quality of snow.

In Central Greece, aside from the ski resort of Parnassos, there is the ski resort of Karpenissi (Velouchi), close to the city of Karpenissi. The resort is located at an altitude of 1'750 meters and tops out at 2'000 meters. It has three chairlifts, 3 surface lifts and 12 runs. Another ski resort in Central Greece is Vassilitsa, close to the city of Karditsa. The snow conditions are very good and it has 2 chairlifts and 4 surface lifts of varying lengths, ranging from 900 to 2'000 meters long. The Agriolefkes ski resort (Central Greece) on mount Pilion, near to the city of Volos, is located between 1'178 meters and 1'471 meters elevation. It is one of the oldest ski resorts in Greece and has 3 chairlifts, 3 surface lifts and 5 kilometers of runs.

Another well-known ski resort is Kalavryta on the Peloponnesus (southern Greece). It is located 200 kilometers from Athens in the region of Achaia. It is nestled at an altitude of 1'650 meters, with

runs as high as 2'340 meters. It has 7 lifts and more than 10 runs. The ski resort of Mainalon is also located on the Peloponnesus, near the city of Tripolis, at an altitude of 1'500 meters, with a top elevation of 1'860 meters. It features 4 lifts and 8 runs.

The largest ski resort in Northern Greece, in the region of historical Macedonia, is Mount Kaimaktsalan. Its ski area is located between 2'050 and 2'480 meters above sea level. It features 10 runs for a total of 4 kilometers of skiing. It has 7 lifts, including a chairlift and 6 surface lifts. Skiers can take advantage of 430 meters of vertical drop. It also has a half pipe and snowpark for experienced snowboarders and skiers. Snowmaking equipment includes 4 mobile cannons and 6 snow lances.

Another ski resort in Northern Greece in the historical region of Macedonia is the 3-5 Pigadia, located between 1'430 to 2'005 meters elevation, near the town of Naousa on Mount Vermion. There is 1 chairlift and 5 surface lifts, as well as cross country skiing. This resort is used by many national teams (football – track and field, etc.) as a training camp, and has top-notch equipment. Most of the Super G races in Greece take place in 3-5 Pigadia, as the slope length meets FIS standards. The ski resort is equipped with snowmaking equipment to ensure excellent snow conditions throughout the entire ski season.

The Seli ski resort, where the first ever ski lift in Greece was installed in 1955, near the town of Veroia, is among the most beautiful ski resorts in Greece. Seli is located at an altitude of 1'515 meters, and tops out at 1'874 meters. It has 1 chairlift and 8 surface lifts that serve 14 runs. Cross-country skiing is also quite popular in Seli.

In all the above ski resorts, there are officially sanctioned ski slopes that host FIS alpine and cross country skiing races every year. All ski resorts have restaurants, cafeterias, ski schools, ski shops, ski rentals and medical facilities.





Hungary

Event though only 2% of Hungary is located higher than 400 meters above sea level, a number of small ski areas exist. A mountainous region stretching for over 400 kilometers is located in the northern part of the country next do the Slovak border. It consists of Mount Bakony, Mount Vertes and Mount Kekes (1'014 meters), the highest peak of the country located in the Matra Mountains.



Skiing has become popular in Hungary: about 500'000 of the 10 million Hungarians ski. However, more than 90% of them travel abroad for winter sports, as the Hungarian mountains are not high enough, the ski lifts are somewhat aniquated and snow coverage is insufficient. Thus, skier visits in the country are only estimated to be half a million.

There are 34 ski areas with a total of 70 ski lifts in Hungary. Only 5 resorts have more than 4 ski lifts each. The most important ones are Bánkút – Bükk, Mátraszentistván, Visegrád Nagyvillám and Eplény. Bánkút – Bükk is one of the most popular ski resorts in Hungary. Its summit elevation is 930 meters above sea level. The 8 ski lifts have a capacity of 2'000 persons per hour. Dobogókő, the smallest Hungarian ski area has only 2 ski trails, each about 180 meters long, and is very popular with beginners.



Iran

Modern skiing was introduced in Iran around 1930. Germans, who were in the country to build the national railway, and Iranian students, who studied in Switzerland and France and learned to ski there, helped to introduce the sport. In 1947, the Olympic Federation of Iran and the Iranian Ski Federation were founded. The first lift was installed in 1951. Iran was represented for the first time in history by a skier in the women's competition at the Vancouver Winter Olympic Games in 2010.

Most ski resorts were built during the reign of the Shah. When he was overthrown in the 1979 revolution, the Iranian clergy closed all ski areas as they were considered to be emblematic of the decadent

western lifestyle. In the mid-1980's, growing demand put pressure on the Government to reconsider its position and reopen the ski resorts. Today, there are a dozen in operation, among which the most important are around Tehran in the Alborz mountain range, in the northern part of the country. The highest peak in Iran is located here, Mount Damavand, a giant dormant volcano rising to over 5'600 meters above sea level. Even if several new gondolas were delivered in the 2000's, the infrastructure is rather old and facilities often limited. However, the resorts are located at high altitude and have excellent snow conditions.

The biggest resort in Iran and even in the Middle East is Dizin, north of the capital. Founded in 1969, its ski area lies between 2'650 and 3'600 meters above sea level. It covers 470 hectares and receives about 7 meters of snow per year. With 23 runs for all levels, 3 gondolas, 3 chairlifts and 9 surface lifts, it is the first ski area in Iran to have been officially recognized by the FIS as suitable to host officially sanctioned international competitions. Dizin has 2 hotels, 19 cottages, villas and private apartments. An all-day lift pass is cheap compared to western standards, with a price no higher than EUR 15. Several resorts also offer spring and summertime activities, such as tennis, volleyball, climbing, mountain biking or grass skiing. Although runs are no longer segregated between men and women, the lifts still are. There are two separate lines and it is illegal for a man and a woman to share a gondola.



Shemshak is the second largest ski area of the country. Located northeast of the capital, it opened its doors in 1958 and lies between 2'550 and 3'030 meters above sea level. With 2 chairlifts, 5 surface lifts and 8 runs, it is well-suited for experienced skiers and snowboarders. The resort offers the opportunity to ski at night as well as cross-country skiing. There is only one official hotel, Shemshak Hotel, built in the style of an old Austrian chalet, as the resort has adopted a somewhat Western style.

The Tochal recreation complex, which is connected to Tehran by a 7-section gondola lift, features a ski area at the top. In addition to the gondola, there are 3 chairlifts and 1 surface lift that serve the 4 runs. Ab-Ali is the oldest resort in Iran, where the first lift was built in 1951. It helped to instigate the development of skiing in the country. Recently renovated, it has a few new lifts: 1 gondola and 8 surface lifts for a total hourly capacity of 4'500 people. The 5.5 kilometers of runs at this ski area, located between 2'400 and 2'650 meters elevation, are well-suited for beginners and intermediate level skiers. The newest ski area in the country is Darband-Sar, opened in 1982. De-

signed for beginners and intermediate skiers, it has 4 lifts: 2 chairlifts and 2 surface lifts.

Iranian ski resorts require new investments, as most of them still operate equipment from the late 1970's. However, this would require promoting skiing at a national level to attract more skiers and to increase resort revenues in order to provide the financial means to make any new investments. With regard to foreign visitors, currently, apart from the occasional diplomat, tourists are rare at ski areas around Tehran.



Kazakhstan

Kazakhstan is a big country, ranking 9th in the world in area. It offers a variety of terrain, from desert zones, which cover nearly half of the country, to high mountains in the Southeast. The highest peak of the Tien Shan Mountains rises to 7'439 meters above sea level, and the mountainous chain that continues well into China, starts from the suburbs of Almaty.

In most areas there is a wide temperature difference between summer and winter, which can be very cold. The ski season begins in mid-November and lasts until mid-April.

More and more Kazakhs are discovering the pleasures of skiing. There has been a ski resort next to Almaty for a long time, called Chimbulak. It started to attract skiers by the end of the 1940's, and in 1954 it was established as a ski resort and equipped with its first ski lift. Ski competitions were held there, and until 1962 it had a monopoly on skiing in the Soviet Union. Since 1983, it has operated as an Olympic center for downhill ski training and further lifts were added. The resort has recently been refurbished, with 3 new lifts out of a total of 7. It even has one of the longest gondolas in the world, with a 4'572 meter section that provides easy access to the ski area. The resort is located in the Zailii Alatau Mountains. There are a total of 75 kilometers of runs between 2'200 to 3'163 meters elevation. Some of the runs are FIS certified. The resort hosted the 2011 Asian Winter Games. The famous Medeo ice rink is located at the base of the mountain, where numerous competitions have been held, and 120 world records established.

Another major resort in Kazakhstan is Tabagan / Talgar, recently refurbished with 5 new lifts, and also not far from Almaty.

In addition to these well known resorts there are several other ski areas, located either in the Almaty Region (Enbekshikazaksky resort) or in the eastern part of Kazakhstan. In the latter, ski areas are located in the suburbs of cities such as Ust-Kamenogorsk, Zyryanovsk. The Nurtau resort, Altaï Alps, Edelweiss, Stardust Camp and Eagle ski areas offer a wide variety of runs for all levels of skiing and snowboarding.



Kyrgyzstan

Kyrgyzstan is a small country with just over five million people and is often compared to Switzerland because of its potential for the development of alpine skiing. Indeed, the climate and the significant vertical drop are factors that provide favorable conditions for skiing. Over 90% of the country is mountainous and a majority of the peaks rise to over 3'000 meters high. The highest summit, Pobedo Peak, is at an elevation of 7'134 meters above sea level.

Skiing is however at this stage not widely developed, even though the country has 16 ski areas, many of them near the capital city of Bishkek. They are small, often with only one hotel, but they all feature the usual range of standard services such as equipment rentals or ski schools.

Located 7 kilometers from the town of Karakol, on the slopes of the mountain chain of the same name, the base area of Tian-Shan is located 2'300 meters above sea level. It has a temperate climate and offers views of the second largest mountain lake in the world, Lake Issyk Kul. Most of the 20 kilometers of runs descend through the forest, are of varying difficulty and between 400 and 3'500 meters in length. The highest point of the resort is 3'040 meters above sea level, providing a vertical drop of 800 meters. Karakol features 4 lifts: 2 double and 2 triple chairlifts. The snowfall averages 2 meters per year and offers a sufficient base for the entire ski season due to low temperatures during the night. In addition to downhill skiing, there are also plenty of possibilities for backcountry skiing, mountaineering or snowmobile tours.



Opened in 1967, Orlovka has grown in recent years. A new lift was built, as well as new buildings (cottages, restaurant). Lighting for night skiing was installed and the resort has acquired its first snow-

making equipment, becoming one of the few in the country able to guarantee snow throughout the entire season. The resort has a total of 5 lifts: 4 chairlifts and 1 surface lift, with a total capacity of 4'200 skiers per hour. Skiers have access to 9 runs of varying difficulty and between 150 and 2'900 meters long. Snowmobile rentals are also available.

Norus, about 40 kilometers from the capital, is located at 1'980 meters above sea level. It has 3 lifts and 15 kilometers of trails for all levels. The area is however particularly well-suited for children. There are also drop off zones for heli-skiing.

35 kilometers from Bishkek, the Kashka-Suu ski area is located at 2'000 meters above sea level. Two lifts (1 chairlift and 1 surface lift) serve 6 runs of varying levels for a total of 10 kilometers of skiing. A sauna, an ice rink and conference rooms are also available to visitors.



Latvia

With the highest hill just 311 meters above sea level, Latvia is not a mountainous country. However, snow is an integral part of the winter season, and over recent years, skiing has gained much interest. The short but steep slopes offer a suitable location for quick runs on skis or on a snowboard. While it may seem unusual, alpine skiing is one of the favorite winter-time activities in Latvia, ski runs are located in almost every town, as well as well-marked and well-lit runs where one can cross-country ski. Since vertical drop is always limited (often less than 100 meters), most ski areas are equipped with only one or a few surface lifts, and sometimes a small chairlift. Ski areas are also often limited to one only run.

The ski season usually starts in the first quarter of December and finishes in the last week of March. Most ski runs are equipped for night skiing.

The ski area of Riekstukalns is very close to Riga. It features 8 runs and 11 lifts and some snowmaking equipment. The longest run is 350 meters long.

In the North, the resort of Baili has 7 lifts and 100% snowmaking. The longest run is 180 meters long. In the West, there are the ski areas of Milzkalns, with 8 lifts, and Zviedru Cepure (4 lifts, also equipped with a summer toboggan run). The recreational park of Lemberga Hüte offers a recently refurbished slope on a manmade hill next to Ventspils. Since 2005, this hill has been made higher every year, using construction debris and the old asphalt from repaved streets. It is now 52 meters high and equipped with 3 lifts as well as snowmaking. As with some other ski hills in Latvia, it turns into an adventure park in the summer and is a popular leisure and sporting facility for the inhabitants of Ventspils.

The area around Sigulda has at least 6 ski runs. There is, for example, the recreational center in Kakitis, Korde slope and the leisure complex in Reina Trase, which is located a little bit farther. The only cable car in the country (which by the way is also the only one in the Baltics) is also located in Sigulda and connects both sides of the Gauja River. However, it is not used for skiing.



Next to the city of Cesis, the ski areas of Zagarkalns and Ozonkalns offer various infrastructure, including a chairlift, snowmaking, a snowpark, a beginner and children's zone, ski schools and cafés. The longest run is 500 meters long.



Lithuania

Lithuania is a rather flat country with some gently rolling hills but no real mountains, as its highest point is 294 meters above sea level.

Lithuanians started to show interest in skiing only a few years ago and primarily concentrated on cross country skiing, but there are also a few downhill ski areas. Most of them are limited to snow fields on hills, offering a few hundred meters of slopes, equipped with one or more lifts, where skiers can pay for a 2 hour pass that includes equipment rental. No ski area has more than 4 lifts. The majority are located about 80 kilometers from the capital city of Vilnius. They also do not offer hotel accommodations, but some country houses are available for rental near some ski areas. Some also offer night skiing and have snowmaking systems.

An indoor ski center opened in 2011. At a cost of EUR 32 million, it offers Lithuanians the opportunity to ski year-round. The facility is

one of the very few in the world to feature an outdoor slope during the winter season. As the other outdoor ski areas are rather small in size, this 640 meter-long outdoor slope is one of the longest in the country.

The ski season in Lithuania is a bit peculiar when compared to resorts in the Alps. It begins in September with the first snowfall, and ends in February. However, winters are pretty stable.



Macedonia

Macedonia is a small landlocked country, in the southernmost part of what was once Yugoslavia. Reaching altitudes up to 2'764 meters (Mount Korab), the country's mountainous region boasts snow coverage through the end of May, in spite of its southern location.

Civil war and regional conflicts considerably slowed the pace of ski industry development. Even if the country is emerging as a budget winter destination, with week-long lift passes at EUR 69.00, ski areas are still primarily visited by local Macedonian skiers. Due to the conflict, the country has had a hard time building up a skier population base large enough to support ski resorts and offer state-of-the-art facilities. Lifts, trail marking, grooming and even cleanliness are not yet up to western standards. The ski areas tend to be crowded by locals on the weekends, with long lifts lines, and empty on weekdays, when lifts may even close. The foreign customer-base is currently limited to Albanians, Greeks and Bulgarians.

The Zare Lazarevski ski area, in Mavrovo national park, a one hour drive from the capital city, is the largest in Macedonia. It has 14 lifts, and tops out at 1'860 meters above sea level. The resort features several hotel accommodations, including 4-star hotels. It has FIS approved downhill, super giant slalom and giant slalom runs. However, the lift infrastructure is ageing, with no high-speed detachable lifts.

Popova Sapka, another one of the most popular resorts, is located in the northwestern part of Macedonia, just 35 kilometers from the capital of Skopje. With bars, restaurants and hotel accommodations, it is able to attract foreign customers. The ski area is equipped with 9 lifts. It has hosted both European and Balkan ski championships. One of them, the *Shara Mountain Cup*, dates back to 1947. Popova Sapka was linked to the neighboring city of Tetovo via a 7-kilometer long cable car that was destroyed in the 2001 hostilities. Slopes are locat-

ed between 1'708 meters and 2'510 meters above sea level, and the snowpack lasts 135 days per winter on average.

Located next to the border with Greece, Ski Centar Kožuf is the only ski area in the country recently equipped with new lifts from one of the major manufacturers. Even though it only has 3 lifts, there is a EUR 73 million development plan to extend the resort and add further lifts and accommodations.

Finally, a special mention for the Sharplania ski area, which brings skiers to the top of pristine slopes by using 2 snowcats since the area is not equipped with lifts. 14 freeriders can sit in each snowcat.



Montenegro

Known primarily for its sun-kissed coastline, Montenegro also offers plenty of mountain scenery, lakes and the longest canyon in Europe, through which the Tara River flows. The country has a lot of mountains and valleys. The highest peaks in Montenegro rise to over 2'500 meters above sea level (Maja Kolata, Prokletije Mountain, 2'534 metres; Bobotov kuk, Durmitor Mountain, 2'523 metres). Some winters receive extremely heavy snowfall; during these winters, some places can get inaccessible by car.

There are several winter resorts for both downhill and cross-country skiing. The most popular ones are Kolasin and Durmitor, which are at the foot of beautiful massive mountains.

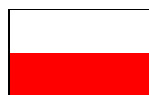
The resort of Kolasin 1450 is the most modern resort in the country. Located in Jezerine, near to the city of Kolasin, it was known in the past under the name of *Bjelasica Ski Centre*. After being acquired in a bankruptcy proceeding, it was renamed, developed and some lifts were replaced. A high-speed 6 person detachable chairlift was recently installed (2010), in addition to 1 other fixed-grip chairlift and 3 surface lifts. The ski area features the only snowmaking system in Montenegro. Kolasin 1450 offers both winter and summer activities. Rustic wooden restaurants and mountain huts make the place a picturesque location, together with two 4-star mountain resort hotels.



Located close to the Durmitor National Park and in the shadow of one of the country's highest peaks, Zabljak is the highest town in northern Montenegro and an epicenter for winter sports. It enjoys snow for 120 days per year, from December to April. The Durmitor resort is made up of several small ski areas for a total of 12 lifts that rise up to 2'313 meters elevation. Some high-quality mountain ski chalets and new hotel ski lodge accommodations have opened in recent years.

Both resorts are trying to increase market awareness and attract more local and foreign customers. Durmitor has hosted international downhill ski competitions. Various entertainment and sporting events are organized by the National Tourism Organization throughout the season, with the slogan, *A hot winter in the mountains*. Ski passes, equipment rental and ski lessons are a bargain here. An all-day lift pass costs about EUR 15.00, a set of ski and boots can be rented per day for EUR 10.00 and one hour of private ski lessons costs EUR 20.00.

As Montenegro only gained independence in 2006, the tourism industry is still thinking about the major developments to invest in. Until now, the country's ski areas have primarily been the domain of locals and a few visitors from the Balkans. In the future, a number of tourism projects will enhance the country's tourism appeal. Mountain centers are a key part of this strategy and 8 resorts have been planned for development. Some are starting from scratch, such as the Zarski, Torine, Jelovica and Komovi ski resorts, others intend to further develop the existing ski area of Kolasin.



Poland

The Carpathian Mountains cross the southern part of Poland and form a natural border with neighboring Czech Republic and Slovakia. In the High Tatras region, the highest part of the Carpathian Mountains, Poland has 70 peaks that are over 2'000 meters above sea level. They culminate with the 2'499 meter high Mount Rysy. The Beskides and the Giant Mountains are Carpathian sub-ranges, with slightly lower altitudes. They all offer winter sports areas. Skiing also exists in the central and northern parts of the country. In these regions, the slopes are gentler and so ideal for beginners or those who want to get in shape before going to the mountains.

Even though skiing has been around for a while in this country, up until recently Poland was not a very popular winter ski destination for international tourists. The opening of Polish air space to low-cost air-

lines and the development of the highway system have given a big boost to tourism in Poland. The relatively low prices and pristine wilderness are other factors that have helped to make Poland popular with tourists.

The climate in Poland provides good conditions for winter sports. The season begins in December and lasts until April at some resorts. However, the best conditions for skiing are from January to March. The country offers more than a hundred ski areas and a total of over 800 lifts. A lot of ski areas are pretty small, with only a few trails and one or a couple of lifts. Most of the time, skiing is consumed on an hourly or pay-as-you-go basis. Snowmaking and night skiing are common.

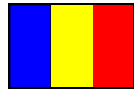
The most famous ski destination in Poland is the town of Zakopane, which attracts 2 million visitors yearly. Nestled in the heart of the Tatra Mountains, it started out as an intellectual center in Poland. Since the 1930's, the place evolved into one of the most popular holiday destinations in the country, with a flourishing winter sports center, as well as year round activities and a busy nightlife. Zakopane already hosted the FIS World Ski Championships in 1929, 1939 and 1962. However, even if it has a total of almost 50 lifts, it is not a ski resort like those of international renown. The fact is that the town is surrounded by several small ski areas that have a few lifts each, which are not interconnected and which do not offer a common lift pass. Most of them have short surface lifts, either running parallel or not connected to one another. Some were installed in the 2000's, but there are still some rather archaic relics. The ski areas are privately owned and require separate lift tickets (usually priced for a specific number of rides). From Zakopane, it is also possible to reach larger resorts.



With 16 lifts, Bialka Tatrzańska is the largest ski resort in Poland. It is 40 minutes away from the city of Zakopane, has recently expanded, and infrastructure was improved with the addition of several new chairlifts. It offers runs for all skiing abilities, and has a number of bars, restaurants and shops.

Another important ski area is Szklarska Poręba in the Giant Mountains. It offers 18 kilometers of ski runs of varying difficulty as well as cross-country skiing. The hotels are currently being upgraded to modern standards, with a particular focus on 4-star wellness hotels. To keep up with the competition, the infrastructure and ski runs are constantly being modernized.

Lately, there has been a revival of ski tourism in Poland. Cross-country skiing and backcountry skiing have become more popular, and there are well-marked itineraries not only in the South of Poland, for example in the Karkonosze - Jakuszyce in the famous Race Piast - and at the foot of the Tatras, but also in other parts of Poland, including the Masurian Suwałki, the lake region in Kashubian, the Cracow-Częstochowa plateau and the mountainous Roztocze.



Romania

The Romanian Carpathian Mountains are the second largest mountain range in Europe. There is snow between November and April and the snow conditions are very good until the end of March or even April, without the temperatures being too cold. The ski resorts have decent infrastructure, the hotels are comfortable and offer interesting specials packages. Nevertheless, the poor condition of access roads is sometimes an issue.

Romania is still a rather unknown and undiscovered winter holiday destination. It features 44 ski resorts with about 150 ski lifts. It is an attractive destination for foreign visitors, as prices are relatively low when compared to most of Europe and some ski runs are lit for night skiing. However, the lift passes are not unanimously considered to be cheap due limited infrastructure and poor grooming. Romanian ski resorts are estimated to attract around 1.2 million skier visits per year.

The main ski areas in Romania are Poiana Brasov, Sinaia, Busteni, Predeal, Azuga in the Southeastern Carpathians, Paltinis in the Southern Carpathians and Borsa, Vatra Dornei, in the Eastern Carpathians.

The popular destination of Poiana Brasov is only 13 kilometers from the medieval city of Brasov. More restaurants, villas and pensions have been built there than anywhere else in the country. The region hosts several sporting events every year. It has 11 ski lifts, several snowmaking machines, cross-country skiing, ice rinks, swimming pools and also many bars, restaurants and discos.

Sinaia, with a maximum altitude of 2'000 meters above sea level, is located 125 kilometers from Bucharest. It is called the Pearl of the Carpathians because of its beautiful landscape. The mountain resort has 10 recently upgraded lifts, cross-country skiing and lots of restaurants, bars and discos. The highest city in Romania is Predeal at

1'000 meters above sea level, 145 kilometers from Bucharest. It is one of the main ski resorts in the country and has 7 lifts.



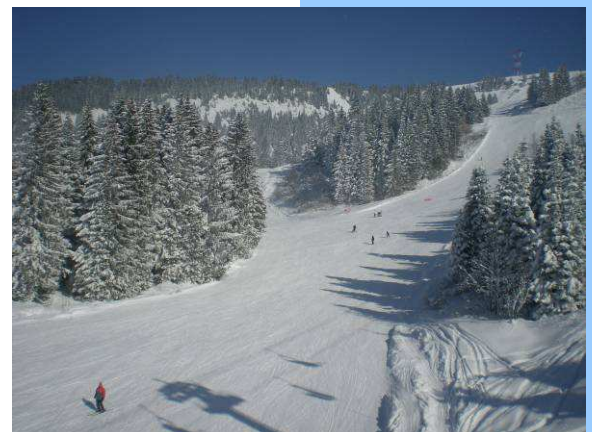
Russia

Russia has about 170 ski resorts, many with little infrastructure or lifts, and that require some refurbishment. The main ski areas in the country are located in the Ural and the Caucasus Mountains. With Sochi hosting the 2014 Winter Olympics, ski resort development has become a hot topic and seems to be a growing market with future potential. Of Russia's 140 million inhabitants, only 2.5% ski. The market should thus expand through an increasing number of domestic skiers.

The Caucasus is a mountainous region that includes Mount Elbrus (5'600 meters above sea level) and one of the snowiest areas in the world. With winters longer than the rest of Europe and the opportunity to ski on glaciers and at high altitudes, it has the natural potential to compete with the Alps. However, the Caucasus is subject to cycles of violence (bombings, explosions, terrorist attacks, etc...). In order to bring the region to more peaceful status, the government's goal is to develop the tourism industry and attract investors. For instance, under the name of *Northern Caucasus Resorts*, a project is being designed to build five resorts through a public-private partnership, distributed among the various semi-autonomous Russian republics of the region. These resorts will have a total of 179 lifts and 879 kilometers of ski runs, and will seek to accommodate 150'000 guests daily. After the multi-billion euro project is complete, over 10 million tourists are expected to visit the mountains annually. The largest of these planned resorts, Arkhyz, will feature 270 kilometers of runs, spread out among three villages. The first lifts have already been delivered there.

A project for a new year-round resort of international standing is also planned in the Nizhny Novgorod region. The infrastructure will be able to accommodate 1'900 people.

The building of the Olympic complex is also a major step towards developing the ski industry in Russia. The site is being built on the shores of the Black Sea, in the Caucasus Mountains, near Sochi. This is a huge project between the sea and mountains. Here, as with some other new resorts, everything is being built or rebuilt from scratch, since the hotels and facilities





often date from the Soviet period. Even though the development potential is huge, the question remains whether the local political context and unrest could be an obstacle to tourism development. 70 kilometers from Sochi, the resort of Krasnya Polyana will be the main site for the Olympics. It is spread over four different ski areas: Alpika Service, open since 1993, is the main area for off-piste skiing. It lies between 540 and 2'238 meters above sea level, which offers a vertical drop of over 1'600 meters. Its 5 chairlifts are open all year round, as they are not only designed for

skiing. Indeed, various ski and mountain biking competitions and several festivals are held here. There are a total of about 7 kilometers of ski runs. In view of the Olympic Games, renovation is underway. Laura, whose real name is Gazprom (but everyone calls it Laura because of the name of the river running through it), opened for the 2008/09 season. It offers 8 runs for all levels, including 3 runs equipped for night skiing, for a total of 15 kilometers of skiing. 11 lifts (3 gondolas, 5 chairlifts and 3 surface lifts) have already been built. The resort has a total capacity of 8'000 people. Gornia Karusel is a site that was built specifically for the 2014 Olympics. In the near future, it will be expected to provide 10,000 beds, 36 runs for a total of 70 kilometers of skiing, and 28 lifts. An efficient snowmaking system was also built to guarantee that the problems recently encountered at the Vancouver Olympics will not reappear. By the way, it will also allow them to extend the season further into the spring. Rosa Khutor, currently under construction, will be the Krasnya Polyana area's largest resort and the one that will host the alpine skiing events during the 2014 Olympics. There are 18 runs for all levels, from beginners to future Olympic champions. In the future, Rosa Khutor will have 18 lifts (6 cable cars, 10 chairlifts and 2 surface lifts) and 80 kilometers of runs across 500 hectares, with the highest point culminating at 2'320 meters above sea level. It is also connected to Alpika Service and will have a capacity of 10'000 skiers per day. For now, the resort has 3 8-person gondolas, a 6-seater chairlift and 38 kilometers of runs, 9 that will be used for the Games.

2 other major resorts are located in the Elbrus area, in Elbrus National Park, near the Georgian border: Cheget and Elbrus. They provide the opportunity to ski through August on Mount Elbrus. Together, they have 11 lifts and 21 runs for 35 kilometers of skiing. The two negative points however are that lift lines are long and grooming is substandard.

The most popular resort in the Ural Mountains is Abzakovo. It is also one of the largest in the region. With a spa, the area is both a ski resort and a sports and health complex. For years it was essentially

the resort of choice for residents in the city of Magnitogorsk, 60 kilometers away. But with the construction of a new complex and modern skiing facilities, its popularity has spread throughout Russia. Abzakovo features a dozen runs with a total length of 18 kilometers of skiing, including FIS approved slalom and giant slalom runs. The 5 ski lifts and the baby lift can carry 5'000 skiers per hour. In addition, the resort has a snowmaking system and offers the possibility of renting snowmobiles. Visitors can also enjoy ice skating.

In 2008, drawing on foreign experience for such projects, an in-door ski center opened in Krasnogorsk, in the Moscow province. *snezh.kom* comprises, in addition to a ski slope, an ice skating rink, a fitness center, an aquatic center, conference rooms, restaurants, shops and other entertainment facilities. Snow is produced through the *ice crash* technology, consisting of grinding thin ice plates to produce snow. 3 machines make 90 tons of white powder every day. The advantage of this technique is that it does not increase the humidity inside the complex. 56 chillers, air conditioners and dehumidifiers run constantly to maintain a temperature between -5 ° C and -7 ° C. The slope, 400 meters long for 65 meters of vertical drop, holds up to a meter of snow and requires constant maintenance. 2 groomers are provided for this purpose. A 4-seater chairlift and a baby lift allow skiers to reach the top of the track.

With an important reserve of potential skiers, the Olympics in sight and the huge buildings and renovations coming together, Russia could become a major force in the ski industry. Experts estimate that Russian ski resorts could attract 5 to 10 million visitors a year, compared to 1 million today.



Serbia

If northern Serbia consists mostly of plains, 75% of the country is covered with hills and mountains. The highest peak culminates at 2'169 meters above sea level. There are several mountain ranges, offering good conditions for winter sports, with up to 5 months of snow on the ground per year.

Thus, the mountains in Serbia offer options for winter sports enthusiasts. Among the more than 20 ski areas, the country's most developed and popular ski resorts are Kopaonik, Tornik Ski Center on Zlatibor and Stara Planina, which has FIS certified ski runs and hosts international competitions. They were modernized by the government company, Ski Resorts of Serbia, which is working to build up skiing infrastructure and bring Serbian ski resorts to the level of an

international ski destination. The goal is to make the resorts more attractive to domestic and foreign tourists with a year-round offer.

Serbian ski resorts were popular with Irish and British skiers, when tour operators offered them as destinations. However, some major operators stopped offering these destinations a few years ago. Today, an increasing number of skiers are locals and Russians.

The resort of Kopaonik has taken the lead in Serbia's ski industry. It is located at an altitude of 1'600 meters above sea level, with runs that start from as high as 2'000 meters. It benefits from about 160 snow days per year and offers more than 50 kilometers of ski runs serviced by 23 lifts, including 6-, 4- and 2-seater chairlifts, together with some surface lifts. They can accommodate 32'000 skiers per hour, which ranks Kopaonik among the largest ski areas in this part of Europe. The resort is equipped with snowmaking that covers 97% of its runs and offers one trail equipped with lighting for night skiing and a snowpark. The village base offers various accommodations, from cottages up to 4-star hotels, bars, restaurants and a vibrant night life.

Near the Bulgarian border, located in a high mountain range, the resort of Stara Planina offers a vast potential for tourism development. A few years ago, it had only 2 lifts, but now has 5, featuring the first gondola in Serbia. It will further expand with new chairlifts and runs (to reach a total of 100 kilometers of downhill skiing), accommodations and other infrastructure, and will soon become one of the country's most important ski resorts. The planned Babin Zub base village will offer 8'000 beds.

In the region of Zlatibor, the Serbian capital of mountain tourism, the Tornik Ski area has a modern 6-seater chairlift and 2 surface lifts. In addition to skiing, it also offers tubing runs.

Some other smaller resorts offer limited infrastructure. The Iver Ski Resort, on Mount Tara, has 4 runs 900 to 1'100 meters long, equipped with snowmaking and one lift. Divcibare Ski area, on Mount Maljien, is a place specifically designed for beginners, with several short runs, and one more difficult slope, equipped for night skiing. Several other ski areas are only equipped with one lift. A few even have no lifts but are designated places where people ski.



Slovakia

Slovakia already has a long ski history. Since 1940, lifts have been in the Tatra Mountains. With more than 40 new lifts delivered by the major manufacturers over the last 10 years, there are now close to 100 ski areas in the Slovak Republic, most of them located in the northern part of the country. Approximately 80% of the country is located at an altitude of 750 meters above sea level or more. The highest point is Gerlachovský Peak, 2'655 meters above sea level.

The majority of the ski areas are located in natural reserves. With regards to environmental preservation, their development is limited to some extent. Slovakia has a little less than 500 lifts. Due to the low altitude of many ski areas, snow coverage is not always guaranteed. But Slovakia seems on its way to becoming a popular ski destination in Eastern Europe.

Slovak ski resorts were estimated to have attracted about 4 million skier visits per year at the beginning of the 2000's. This figure is now at about 5 million.



Currently, visitors from Poland, Hungary, Russia, the Czech Republic and the Ukraine come to Slovakia to ski. Thanks to very competitive prices, the Slovak ski resorts are now trying to expand their catchment areas to the Western European market. A group of four ski areas (Snow paradise Velka Raca/Oscadnica, Park Snow Strbske Pleso, Jasna Nizke Tatri and Park Snow Donovaly) have launched an advertising campaign aimed at the French, British and Benelux middle classes. These 4 ski resorts have recently made different investments and are now able to offer infrastructure and services similar to those in Western Europe (64 kilometers of ski runs for all levels, hotels, chalets and guest houses, 6-seater chairlifts, bubble equipped chairlifts ...).

Donovaly is one of the most important ski resorts in Slovakia. It is located in the center of the country between the Low Tatras and the High Tatras. It is popular with Slovaks as well as with foreign visitors. Donovaly has 15 ski lifts and offers 18 kilometers of ski runs. Jasna Nizke Tatri – Chopok North is the largest ski resort in the country. It is located in the Carpathian Mountains, in the Low Tatras. It features 18 surface lifts, 7 chairlifts and 4 gondolas, including a recently installed funitel, with a total capacity of 30'744 people per hour. 27 of the 45 kilometers of ski runs are equipped with snowmaking. The Bystrianska Dolina ski resort is located between 1'216 metres and 2'005 meters above sea level in the Low Tatras. It has 14 ski lifts and

7 ski runs, 2 that are considered difficult. The vertical drop is 789 meters.



Tatranská Lomnica Adds Blue Chairlift to Red

Tatranská Lomnica in the Slovak Republic has added the country's first eight-seater detachable chairlift to its impressive collection of lifts.

What makes the lift particularly unusual is that it has a blue tinted pull down weather protection bubble, believed to be the first in the world in that color. It joins the resort's existing 6-seater detachable chair that has a red tinted pull down weather bubble.

The new 680 meter long lift provides access to the family-friendly slope of Bukova Hora, and climbs 132 vertical meters with an uphill capacity of up to 2'400 people per hour.

The reason for the colored weather bubble is reported to provide lift users with more of an *experience* to increase the marketing value of the lift, rather than just a simple ride to the top.

Source : Snowhunter



Slovenia

Slovenia has 28 peaks over 2'800 meters high. The highest peak, Triglav, culminates at 2'864 meters above sea level. The Alps, including the Julian Alps, the Kamnik-Savinja Alps and the Karavanke mountain range, dominate Northern Slovenia along its long border with Austria and Italy. In the 17th century, skis were already used there as a means of transportation. Today, hiking and trekking are among the most preferred sports in Slovenia. Thanks to attractive winter resorts such as Kranjska Gora, Rogla and Krvavec, skiing has developed into a major sport in the past decades, even though other European winter sport destinations are strong competitors due to

their higher altitudes and the guaranteed snow. Tourism is the highest growing economy in Slovenia and is increasingly competitive. The Ministry of Economy encourages modernizing infrastructure, and 36 projects have received public funding for a total amount of EUR 50 million. For the period from 2001 to 2013, some EUR 145 million has been guaranteed to develop tourism.

Indeed, the growth in skier visits shows considerable dependency on snow conditions. After a substantial growth in the beginning of the 2000's, the last few seasons have shown less than favorable skier visit figures.

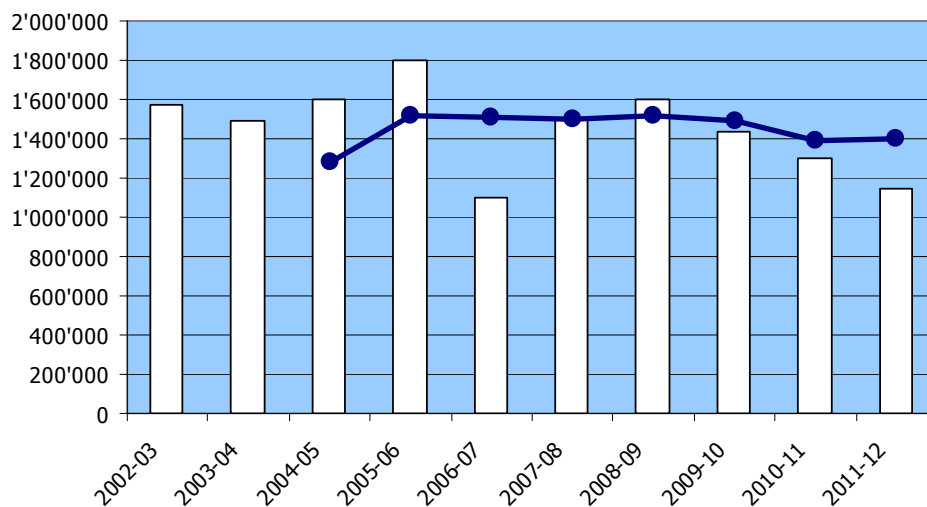


Figure 16 : Slovenia, evolution of skier visits

Slovenia has 44 resorts with a total of over 200 ski lifts. It offers a very good price/performance ratio, modern ski runs, cross country skiing, good infrastructure, snowmaking, and well-equipped holiday apartments and hotels.

Mariborsko Pohorje is one of the most well-known resorts. It hosts an Alpine World Cup ladies's downhill competition every year. 43 kilometers of ski runs, modern spas, beautiful landscapes and being near the city of Maribor make this a very attractive destination. The resort guarantees 100 snow days per season. Another popular ski resort is Kranjska Gora. It hosts an Alpine skiing World Cup event every year and has trails for every level, from beginners to expert skiers and snowboarders. The highest winter resort in Slovenia is Kanin, which is connected with the Italian resort of Sella Nevea. It offers 30 kilometers of ski runs, 13 modern lifts and snow through early spring. Cerklno is the most modern family ski resort in Slovenia, located on the slopes of the 1'291 meter high Črnivrh peak. This ide-

ally situated ski area is 100% covered by an extensive snowmaking system, which guarantees a minimum of 70 ski days per winter.



Turkey

Turkey, in addition to its beaches, is also a very mountainous country with some of the highest peaks in the region. The Turkish Ski Federation was founded in 1936, the year when the Turkish Olympic team first participated in the Winter Olympic Games. This was the impetus to develop skiing in Turkey and build ski resorts, especially Uludag (the highest mountain in Western Turkey, topping out at 2'543 meters above sea level, about 30 miles from Bursa), Erciyes (the highest point of Central Anatolia at 3'916 meters) and Elmadag (in the province of Ankara). Internationally sanctioned competitions were first organized in Turkey as early as 1944. To increase participation in the skiing, ski training courses and holiday camps are organized every year. Turkey now has 16 ski resorts, but only 6 of them have more than 4 lifts. Hotels provide approximately 15'000 rooms throughout the ski resorts of the country.

The most famous resort in Turkey is Palandoken, which hosts FIS competitions. It lies in the eastern part of Turkey, near Erzurum and has one of the colder climates in the country. It therefore offers the best snow conditions. In addition to 1 gondola, the resort features also 7 chairlifts, 1 surface lift and 2 baby lifts. The ski area is located between 2'200 and 3'176 meters above sea level. The 21 groomed runs for all different levels offer 28 kilometers of skiing. The resort has no snowmaking system. Palandoken was on the verge of doing business with Western European tour operators when the war in Iraq, only 200 kilometers away, erupted in 2003. This prevented new development at that time. However, thanks to the February 2011 Winter Universiade, the resort is going to be the driving force to bring the Turkish ski industry to new heights. In preparation for the events, Palandoken invested nearly USD 100 million.

Kartalkaya, located west of the Balkan Sea, in the Koroglu Mountains, built the first professional snowpark in Turkey. The ski area lies between 1'850 and 2'250 meters above sea level and has 18 lifts for 12 runs of all levels. Kartalkaya has 3 major 4-star hotels with a total capacity of 2'250 beds. The resort hopes to acquire international fame by hosting international competitions in the future. Since it snows a lot, the ski season lasts an average of 120 days.

With its gondola, 12 chairlifts and 11 surface lifts, Uludag is the largest resort in Turkey. Its facilities have an uphill capacity of 16'300 people per hour, and the resort offers 20 kilometers of runs. Snowfall generally averages 3 meters per winter. In addition to alpine skiing, the area enjoys favorable conditions for cross-country and heli-skiing. Located in a national park, the ski area also has swimming pools, fitness centers and a well-developed night life. With its 27 accommodations for all levels of expectations (some are State properties), Uludag offers 3'000 beds.

There are several current projects to develop Turkey's winter tourism. At present, although resort capacity is on the rise, they are not yet at a stage to compete with foreign resorts in attracting an international clientele²⁶. The potential for the Turkish mountains is not yet fully exploited. The Minister of Sports has announced the willingness of the government to promote winter sports among children, in a country where only an estimated 1% of the population participates in skiing. In this light, Turkey plans to open 30 new resorts starting in 2011, and plans to invest USD 400 million. Over the last 10 years, at least 35 new lifts were installed in the Turkish mountains.



Currently, foreign skiers primarily come from Russia, the Ukraine or Iran. Thanks to the 2011 Winter Universiade, which brought together 58 nations, the country has hopes of attracting more Europeans. In addition, many Turks still travel abroad to enjoy winter holidays. Improvement in local infrastructure will increase their retention within the country.



Ukraine

The Ukraine's ski resorts have considerably improved in the last ten years, but they are still not well-known. Most resorts are located in the Carpathian Mountains. In the past few years, several small hotels, holiday houses and apartments were built and some resorts have upgraded their ski lifts to European standards, even if ground transportation is still problematic to access to the resorts. The Ukraine also has other winter sports such as cross country skiing, ice

²⁶ A project aims at developing the resort of Erciyes to create the biggest ski region in Turkey, with 160 kilometers of runs and 21 lifts, and an uphill capacity of 34'000 skiers per hour. This would raise the resort to international standards. For the time being, 6 lifts have been installed and the resort has only 45 kilometers of ski runs.

skating and snowboarding. The highest peak in the Ukraine is How-
erla peak which culminates at 2'061 meters above sea level.

There are 41 winter sports areas in the country with a total of about
100 ski lifts. Attendance is estimated at fewer than one million skier
visits per year. The price for lift passes, ski rentals and ski lessons
are relatively cheap compared to European standards. In early De-
cember and in April, only Drahobrat, Bukovel and Mount Trostyan
are open. The other resorts are open from mid December to mid
March. The resorts in the Carpathian Mountains have the best infra-
structure in the Ukraine and have years of experience welcoming
foreign guests.



The newest and most modern ski resort in the Ukraine
is Bukovel. The mountains around the resort protect it
from the cold wind. It has 14 lifts, 50 kilometers of
runs and good ski and snowboard instructors. To at-
tract more tourists, Bukovel reduced prices for ac-
commodations, lift passes and ski rentals.

The resort of Sklavske is located in a picturesque vil-
lage at 600 meters above sea level, surrounded by
mountains that protect the resort from strong winds.
The resort offers 9 lifts.

The highest ski resort in the Ukraine is Drahobrat, located at 1'360
meters above sea level. The resort features 8 lifts, 8 ski runs and
claims to satisfy the requirements for Olympic competition. It is very
popular with skiers and snowboarders because of its snow guaran-
tee. The natural landscape in and around Drahobrat, and the view
from most hotels are appealing.

The Ukraine has now considered bidding for the 2022 Winter Olym-
pics. The infrastructure will be concentrated in the region of Lviv, in
the western part of the country. The investments needed are esti-
mated at around USD 10 billion.



The Americas



Argentina

23% of Argentina is covered with hills and mountains. The longest mountain chain in the world, the Andean Cordillera, runs all the way down the western side of the country for more than 3'000 kilometers, with the highest summit, Aconcagua, topping out at 6'960 meters above sea level. However, in spite of the high summits of the



Andes, the ski resorts are located at lower altitudes, primarily between 1'000 and 2'000 meters elevation. At the southern end of the country, ski areas are located even lower. Typically for a Southern Hemisphere location, the ski season in Argentina starts in June and lasts up to mid-October.

Before skiing became a leisure activity, and due to the mountains and the presence of snow, skis were already used in the 19th century as a means of transportation by foreigners who brought the activity over from Europe. It developed as a recreational

activity in the 1930's, mostly concentrated in the area of San Carlos de Bariloche under the control of ski clubs and promoted by some European pioneers. Ski areas developed even before being equipped with lifts. The first lift was installed in Catedral, Bariloche's ski area, in 1939 and ski races started to be organized in Argentina in the 1940's.

The South American ski resorts have experienced new growth and development over the last decade. With nearly unlimited off-piste possibilities and good powder snow on pristine slopes, they offer attractive conditions, in a season opposite that of the resorts in the European Alps and North America. Skiing has until now remained fairly exclusive, as Argentineans do not have the mountain culture of the Alps, and it remains an expensive activity. General interest is rising, with an annual dedicated exhibition, *Expo Nieve*. Visits to ski resorts are not limited to nationals. Skiers from Brazil, Chile and even Mexico come to Argentina and some resorts are crowded with this international clientele in July and August, the middle of the ski season.

Argentinean ski areas are estimated to generate around 1.5 millions skier visits per year, mostly concentrated in the top 7 resorts.

The biggest resort in Argentina is Cerro Catedral, which stands for *Mount Cathedral* in Spanish, due to its summits resembling the towers of a medieval cathedral. It is located in a national park near San Carlos de Bariloche, whose name may be more familiar to foreigners. The majesty of the place is well-known by skiers from all around the world. The resort was a pioneer in South America. It operates as a 4-season resort and is today the most international and fully-equipped in the country. It continues to update facilities in order to provide visitors with the most advanced infrastructure. It is considered to be the *Chamonix* of South America. With 53 runs, 39 lifts, a snowmaking system covering 10 hectares, it offers 600 hectares of skiable terrain, which rises to 2'180 meters above sea level. For years Catedral has hosted the most important international competitions and snow festivals in Argentina.

Las Leñas is among the most popular ski resorts in Argentina due to snow quality, runs for all levels, and the outstanding off-piste descents and cross-country skiing. The resort is located a few kilometers from the City of Mendoza. It is the highest in the country. With a vertical drop of 1'200 meters, the area is located between 2'240 meters and 3'430 meters above sea level. Due to its dry climate, the snow quality for the 230 hectares of skiable terrain and 40 runs is famous worldwide. The terrain is served by 13 lifts and, if necessary, supported by a snowmaking system.

Another spot close to Mendoza is Penitentes. With views of Mount Aconcagua, it is also very close to Chile. Inaugurated in 1979, the resort occupies more than 300 hectares of skiable terrain and offers 25 runs. Several runs are FIS approved and are the stage for various competitions. The hotel infrastructure, with a capacity of nearly 2'000 beds, includes all kinds of accommodations, from pensions to 4-star hotels.

Among the other major ski areas of the country, Chapelco, in Patagonia, offers fantastic scenery from its 1'980 meter high perch. It is advertised as combining adrenaline pumping activities and beautiful landscapes. Cavihue is located at the foot of the Copahue Volcano on the shores of a lake with the same name, at 1'647 meters above sea level. With over 1'000 hectares of skiable terrain, and 20 runs, it offers the longest season in the southern hemisphere. The 8-kilometer long off-piste descent from the volcano's crater to the base of the resort is legendary. Appreciated by families, La Hoya, located in a forest, lakes and waterfall landscape, was opened in the 1950's. The first lifts were installed in the 1960's and the resort was subsequently modernized in the 2000's. It now features 10 lifts, 24 runs and snowmaking equipment. For those who like skiing at the far reaches of the planet, Cerro Castor, the newest resort in Argentina

and the southernmost on Earth, is close to the capital of Tierra del Fuego, where the sea and the mountains meet. The base of the ski area is only 195 meters above sea level and the summit rises to 1'057 meters. Cerro Castor enjoys very good weather and quality powder snow. Due to stable temperatures, it has one of the longest seasons in South America. Opened in 1978, Mount Bayo ski resort is located within a beautiful natural landscape. Surrounded by forests and with a majestic view of a lake, it offers 200 hectares of terrain for alpine skiing, with a 700 meter vertical drop. It has 22 marked trails and 12 lifts.



Canada

Skiing in Canada is located in the Rocky Mountains of the West and in the Québec, Ontario and Atlantic²⁷ provinces of the East. While the Rockies have ski resorts that can compete with the Alps in terms of vertical drop, skiing in the East takes place on lower altitude mountains and hills.

With a long ski history, Canada has a mature market, with serious concerns about an ageing clientele and the ability to renew the customer base, featuring also interesting ethnic issues. Skier visits have been flat for the last decade, mostly due to weather conditions. Last year's ski season in Canada was heavily affected by poor snow conditions that impacted the industry throughout all of North America. The beginning and end of the season had little to no snow and warm weather caused early or temporary resort closures. Attendance totaled 18.15 million skier visits.



Market studies show that the number of skiers continues to decline. The purchasing behavior of most skiers has been influenced by the crisis. They have more actively sought out deals or to ski close to

²⁷ Prince Edward Island, Newfoundland, Labrador, Nova Scotia and New Brunswick

home. Some still say that weather and poor snow conditions are the prevailing cause.

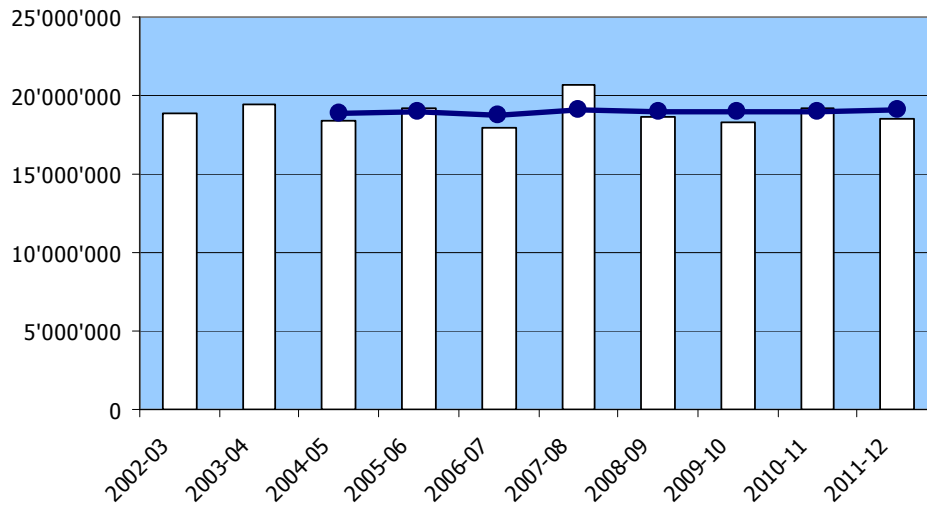


Figure 17 : Canada, evolution of skier visits

The Canadian ski resorts depend on a domestic and U.S. customer base. It is interesting to stress that some of the well-known resorts, such as Whistler Blackcomb, Banff and to a lesser extent Tremblant, also attract some overseas skiers, even if the proportion of foreign visitors is relatively low. Furthermore, some very small resorts also appear to attract British tour operators. Intrawest is the only significant multi-resort operator. Otherwise, operators are mostly local.

Due to weak growth in recent years, the Canadian ski industry has conducted detailed studies about the demographics, implementing the *Model for Growth*. Several operators have also diversified their activities and some of the major resorts now offer numerous summer activities that enable them to balance out visits for both seasons. The idea of a year-round resort has been highly developed and promoted. Some resorts near metropolitan areas have developed water rides and other such summer activities, which even allow them to use some of the lifts during the summer, as well as to sell year round passes.



Chile

The country is located all along the Andean Cordillera, which runs over 4'000 kilometers in Chile. 80% of the country is covered by mountains, reaching very high altitudes in the North, with year round snow coverage on summits over 4'800 meters high. In the South, after having reached its highest point, the Andes are a bit lower, with most peaks topping out in the 3'000 meter range. Most ski resorts are typically located at these altitudes. Further south, Patagonia offers huge glaciers that plunge into the sea, where the coastline is cut up by numerous fjords.

The first Andean skiers were already identified in 1887, when investigation work started for the construction of a railway from Valparaiso to Santiago, crossing the mountains into Argentina, from Mendoza to Buenos Aires. With snowfall of up to 8 meters in the high passes, the most efficient way for the European engineers to travel was on skis. Skiing was for instance the only realistic way for workers to reach Uspallata Pass, which is near the present-day Chilean resort of Portillo. During the construction of the Trans Andean Railroad, skis were then used by engineers to travel around in winter. There are also historical records of skiers hired to transport mail across the mountains in the winter of 1889. Finally, after the inauguration of the railway, in 1910, recreational skiers began to use the railway as a ski lift.

In the 1930's, a rudimentary lift was built in the Portillo area (so called because it was a small pass between the mountains) and adventurers from Europe and North America became the first ski tourists. Ski instructors were brought from Europe and a rustic mountain lodge served as the first hotel. In 1946 Portillo installed a chairlift, the first on the continent. In 1949, the Gran Hotel Portillo was inaugurated. In 1960 the Chilean government, who had owned and operated the ski area up to that point, decided to sell Portillo, making it one of the first state-owned companies sold to the private sector in Chilean history. In 1966 the World Alpine Ski Championships were held in Portillo, which focused international attention on Chile's emergent ski industry, and also increased national interest in the sport. Over the years, three speed records were set on Portillo's slopes, including the 1978 record for U.S. skier Steve McKinney, who exceeded 200 kilometers/hour for the first time in skiing history. During the 1960's, top international ski racers began to train during the northern hemisphere's summer on Portillo's slopes and later on, also in El Colorado, La Parva and Valle Nevado.

During the 1950's and 1960's, the sport expanded rapidly with new ski areas being built in the central Andes near Santiago and in south-

ern Chile, largely on the slopes of volcanoes. During the 1980's, improvements to infrastructure included new ski lifts, increased and better hotel capacity, and improved roads. With fewer tourists than in Europe and the United States, the ski industry in Chile remained in a quiet state until the 1990's. Improvements such as new ski lifts, added capacity to hotels, saunas and swimming pools served to provide Chile's ski resorts with a world-class reputation.

There are three principal geographic ski regions in Chile. The Central Chilean Andes, where ski resorts are located between 2'800 and 3'000 meters, on wide-open mountains, above tree-line. The snow is generally dry and the terrain varied, providing slopes for skiers and boarders of all abilities. The main resorts are El Colorado, La Parva, Valle Nevado, Portillo, Lagunillas, and Chapa Verde. Portillo is the oldest ski resort in South America. It is surrounded by snowy peaks that rise to 5'000 meters above sea level. The resort has some peculiar 5 person T-bar lifts, unique in the world. The resort offers 23 runs and features 14 lifts and claims to limit access to only 450 guests, offering a unique experience. Tres Valles, with an interconnect between El Colorada, La Parva and Valle Nevado, is the largest ski area of South America, with a total of 48 lifts and about 120 kilometers of groomed runs. The area, located 40 kilometers from Santiago, tops out at 3'630 meters. In addition, the Valle Nevado base area, nestled at 3'025 meters above sea level, is recognized as the highest in the world.

In the Southern Andes, where the mountains are lower on average, precipitation is much higher, and as a result there is both more and heavier snow. The resorts are largely located on the lower slopes of volcanoes, many of which are active, and provide terrain with dense native forests. The views of lakes, forests, and distant volcanoes are exceptional. The major resorts are Termas de Chillán, Villarrica, Antillanca, Lonquimay, Las Araucarias, and Corralco.

Patagonia has ski infrastructure at Cerro El Fraile and at Cerro Mirador in Punta Arenas, where one can ski and enjoy spectacular ocean views. Because of the latitude, these resorts have the longest ski season of anywhere in Chile. Cerro Mirador is the southernmost ski area in Chile. It



was equipped in 1947 with its first lift, in spite of the fact that it was already considered a ski resort as early as 1938. Still today, the area features one unique lift, but 14 runs, which allow skiing from mid-June to mid-September with spectacular scenery of the Straits of Magellan.

Chilean ski resorts are estimated to attract about 1.25 million skier visits per year.

Chile's First Gondola in the Valle Nevado Ski Resort

Valle Nevado has announced construction of a new gondola, Chile's first, which opened for the resort's 2012 ski season in June, along with other upgrades.

The 1.2 kilometer long gondola will feature 70 six-passenger cabins and will be able to transport 2'000 passengers per hour. Traveling at a speed of 7.5 meters per second, it will provide riders with a quick and convenient way to reach mid-mountain from the new day visitor parking lot and service center below.

The new parking lot and service area can accommodate 500 vehicles for day visitors. It is aimed at dispersing traffic and making it easier to get on the slopes. The adjacent new center will offer ticket sales, ski and snowboard equipment rentals, a ski and snowboard lesson sign up area, and a new restaurant.

In addition to the gondola and parking area, the resort will open a gymnasium as a new sports and entertainment center for hotel guests, offering a climbing wall, skate ramp, ping pong, and other activities.

The resort's new meeting room will open at the Hotel Tres Puntas, and where there will be wine tasting and live music every Thursday afternoon.

All of this is part of Valle's USD 150 million master plan to transform the base area into a complete mountain village.

Source : Snowhunter



United States

The United States represents the largest ski market, with a high number of resorts and the highest attendance figures on average. The industry is dominated by several big players, operating several mostly integrated resorts. In addition, it has numerous independent ski areas of varying sizes. Nevertheless, due to closures and other misfortunes, the number of ski areas has been steadily decreasing over the years. At the beginning of the 1980's, there were over 700 ski resorts in operation, whereas there are only about 480 ski areas still in operation today.

The United States ski industry has been the most closely analyzed ski industry over the years. There is a substantial history of statistical data available. It was the first in the industry to raise issues in the discrepancies between population growth and skier visits, especially since it primarily depends on domestic participation. In spite of its huge population, the participation rate is estimated at only 3% to 4%.

Aside from the 2008 crisis, weather conditions have shaped, more than anything else, the change in skier visits over the years. Skier visits through the beginning of the decade reinforced the trend of a mature market since the end of the 1970's. However, things began to change over the last 5 years, with 3 very good seasons, leading to a recent growth trend up to the 2011/12 season.

After having set a new all-time record of 60.5 million skier visits for the 2010/11 season, the 2011/12 winter saw a drop in attendance figures unheard of since 1991/92. With only 51.0 million skier visits the industry experienced a nearly 16% decline from the season before. Low snowfall – 41% down on average from the prior season - and record warm temperatures in all regions caused a decline in visits for 83% of the ski areas in the United States.

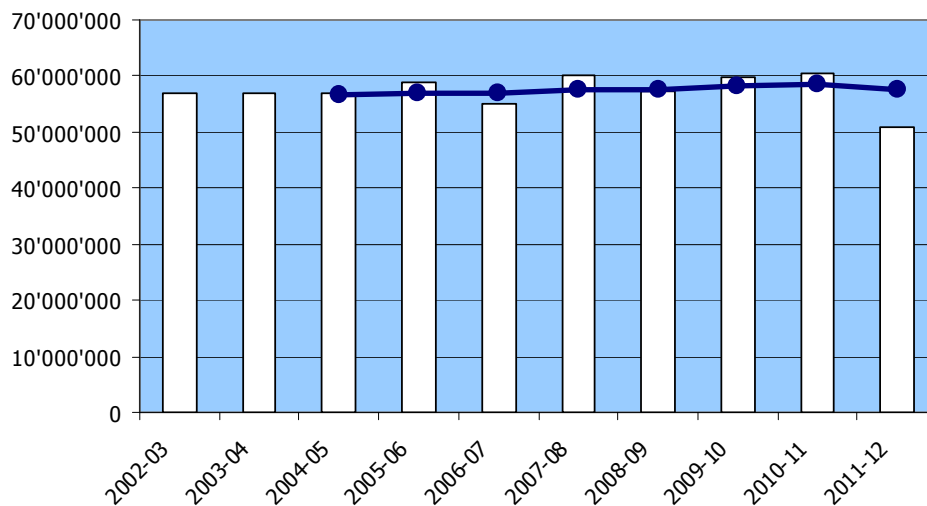


Figure 18 : USA, evolution of skier visits

Further to the acknowledgement of the demographic issue, the U.S. ski resorts industry monitors closely the yearly results of its *Model for Growth*. It aims at addressing the aging population, the increasing proportion of minorities and skier retention rates (increasing the



interest of beginners, converting them into lifelong skiers and preventing regular skiers from abandoning the sport). For several years now, measures have been taken in order to implement this *Model for Growth*, even if some drawbacks appeared and the U.S. industry still continues to have difficulty in growing its customer base. The results show that continuous efforts are required and their benefits are limited, so they need to be multiplied. With a market as big as Europe but only one third of the number of skier visits, the U.S. industry still seems to have some potential. The good

news for the U.S. ski industry is that the number of skiers continues to grow, with an average increase of 1.2% over the last ten years.

New Ski Area For Utah?

Plans for a new ski resort in Utah appear to be moving forward after the local Planning Commission gave the go ahead for the ski area's land use permit, rejecting opponent's appeals.

The Cherry Peak Ski Area would include four ski lifts, a ski lodge, terrain park, tubing hill and zip-line at a site covering just over 200 acres. It would be able to accommodate up to 1'000 skiers and boarders per day.

Opponents listed potential damage to local wildlife habitat, reducing the likely success of hunting in the area and possible local tax increases to pay for road maintenance from higher traffic among other things, but commissioners for the local Cache Valley area said these matters had already been thoroughly investigated before the initial go-ahead had been given.

Opponents are reported to now be considering taking their appeal to the local district court.

Source : Snowhunter

Asia and Pacific



Australia

Skiing has already a long history in Australia. Miners are said to have begun skiing already in the 19th century. Records indicate that they founded the first ski club in 1861. The 1920's saw an explosion of winter sports. The industry organized and Australia's first ski lift was opened in 1937. On-slope lodging facilities remained limited through the 1950's. Then skiing became more popular and resort development increased, with strong influence from the United States, Canada and Europe. However, some ski areas are located in Natural Parks and their expansion has been under tight control. The boom of the ski industry lasted through the 1970's and then entered a consolidation phase, with skier visit figures flattening. They have been stable for the past ten years, with occasional good years such as 2004, alternating with average and poor years, such as 2001 and 2006. The 2012 ski season was the best in the last 10 years, with an increase of 24% over the previous season.

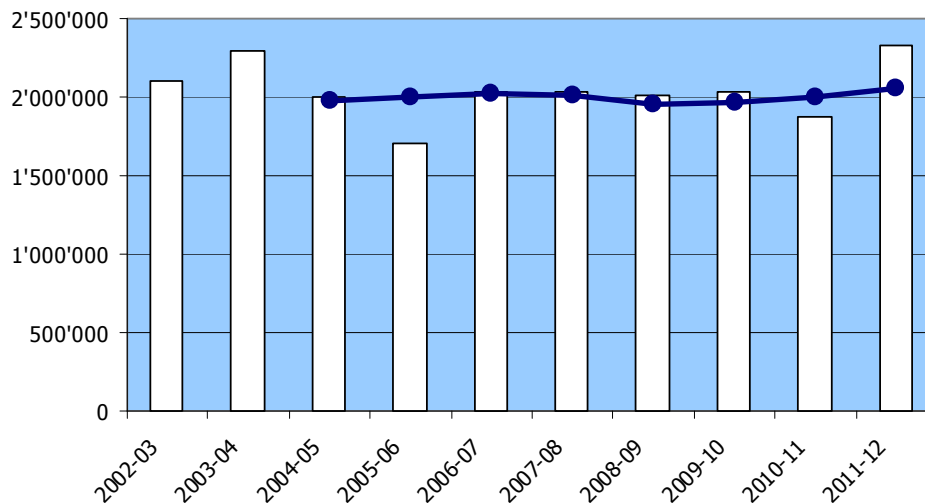


Figure 19: Australia, evolution of skier visits

Downhill skiing and snowboarding primarily take place at 8 resorts of the New South Wales and Victoria states, in the region called the Australian Alps, located between Melbourne and Canberra. There are also two small ski resorts on Tasmania Island, located in National Parks, where snowfall is not always sufficient to enable skiing every year.

Apart from one big resort, most of the ski areas are rather small with limited vertical drop. Most areas have snowmaking capabilities. Some resorts have a vibrant night life, but they are perceived as expensive and even luxurious.

With foreign visitors representing less than 2% of skier visits, Australian resorts are clearly not very appealing to international customers, and since New Zealand offers a close alternative with much greater vertical drop, lower prices and are at least as much fun. It even competes for domestic customers, who in part also prefer to go skiing in New Zealand.

Thredbo, built on the European ski resort model with its shops, nightlife and accommodations, is an example of the kind of resorts that exist in Australia, with 50 runs serviced by 14 lifts. The resort also offers the longest run in Australia, 3.2 kilometers long with a vertical drop of 670 meters. Thredbo is located on the slopes of the highest mountain in Australia, which culminates at an altitude of 2'228 meters and is in the Southern Snowy Mountains. Another example is Perisher Blue, located in the Snowy Mountains of New South Wales. This is the largest ski resort in Australia, with four villages (Perisher, Smiggin Holes, Blue Cow and Guthega) and seven summits (including five of the highest in the country) served by 49 lifts. There are 99 kilometers of runs for all levels, but 60% are intermediate.

New Australian Lift is Bonza

The only new chairlift to open in Australia this year is the Bonza quad chairlift at Mt Buller, which is scheduled to open in June.

The new chairlift spearheads improvements for 2012, which include a revitalized north side area, more snowmaking, and a new look to the Village.

The AUD 3.1 million Bonza chair is a fixed-grip quad which will boost Mt Buller's lift network opening up access to the popular area between the Burnt Hut Spur and the Summit. The new lift replaces the old Burnt Hut Chairlift lost to lightning damage in early 2010.

The lift has been affectionately named the Bonza Chairlift and is a celebration of Australian skiing and boarding and all about injecting fun back into the northern slopes of Mt Buller this winter, said a resort representative.

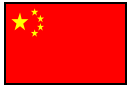
The lift improves the flow on the northern side of the mountain and is eagerly anticipated by skiers and boarders keen to get into the rolling tree-runs and stashes that have been hard to access in recent years.

The Howqua Chairlift has also been upgraded for this winter with 91 new chairs. The lift has been mechanically overhauled in recent years. These comfortable new chairs, complete with special *Kid Stop* safety bars, are the final flourish.

It's been a busy summer that has been all about making Buller better. I think guests will be excited by the big changes they are going to see all over the resort said Buller Ski Lifts General Manager, Laurie Blampied.

In addition to the lift, additional snowmaking and the reshaping of our North side Discovery Area the new B-TAG lift passes and automated access system we've rolled out this year will take the mountain to a new level in technology and convenience. Not since the merging of the two lift companies back in 1985 will Buller skiers experience such a significant improvement to their access and freedom to move around the mountain.

Source : Snowhunter



China

Skiing and snowboarding are primarily in the northeastern part of the country, in the Harbin region, which houses most of China's ski areas. However, spots in the Northwest and the Middle-south also provide for some snow sports. Most ski areas are still poorly equipped. While there are about 350 ski areas in China, most of them are only ski fields for beginners (which still represent 80% of the business). Only 20 are approaching western standards, but often without accommodations, and a limited number can be considered to be genuine ski resorts. However, in recent years, this restricted circle has been growing and now includes the well-known Yabuli, Beidahu and Changbaishan ski areas. The recently added Genting Resort Secret Garden is hoping to become a new 4-season destination. There are also 3 ski-domes (in Beijing and Shanghai) and a dozen snow stadiums around Beijing with 100% snowmaking and a maximum vertical drop of a few hundred meters.

Temperatures can be extremely tough but skiing in China is a unique experience. There is no culture of skiing in China. The first ski areas emerged in the 1980's, mostly designed for the training of ski racers, with usually only one slope and poor accommodations. Since Yabuli was awarded the 1996 Asian Winter Games, interest in skiing has developed quickly. Besides building the necessary infrastructure to host the Games, ski areas suddenly began to develop around major cities. The pace of growth increased in the 2000/01 winter, when the first snow stadium near Beijing was built.

Most Chinese skiers do not ski more than once per season. The average level is very low, so there are a lot of beginners. Some ski areas even have paid employees to help skiers get up after they fall and to retrieve their equipment! Most ski areas offer packages for 2 hours of

skiing, including equipment. Skiing is considered as a kind of entertainment product rather than a sport that requires repeated practice. For the time being, ski areas are considered more as ski playgrounds than as mountain resorts, and one-time skiers are a considerable portion of skier visits. Skiing is nevertheless becoming more and more popular among wealthy Chinese between the ages of 25 to 35. About 80% of the skiers are under 40. Growth has been dramatic since the beginning of the decade. Rates of 50% per year have been announced and skier visits were expected to reach 10 million in 2010. However, this did not turn out to be the case in the last few years. One estimates that there are currently less than 5 million domestic skiers, totaling about 7 million skier visits (which for some experts is an optimistic figure). Even if growth did not follow the expected path, the market potential remains untapped. It was estimated at 27 million by the WTO in 2003, and recently revised by another study to 120 million. However, the moment when this figure will be reached is still anyone's guess.

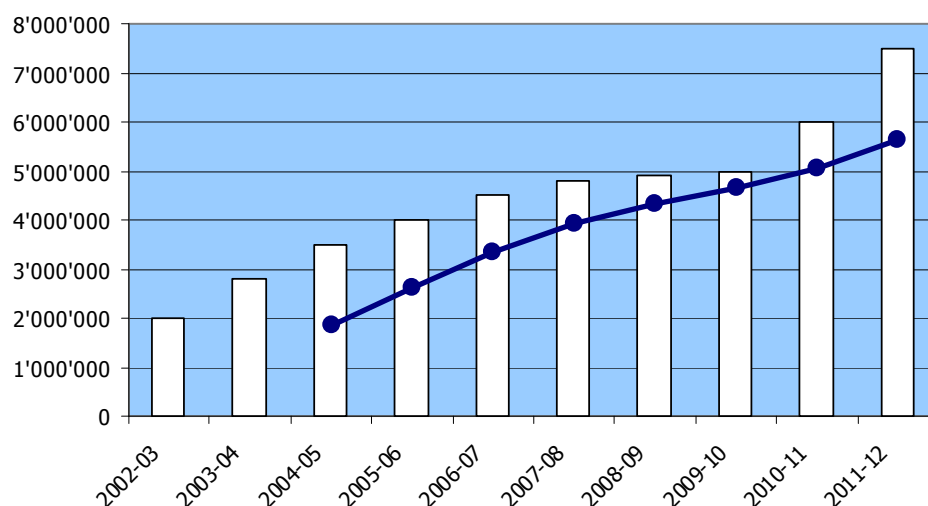


Figure 20 : China, evolution of skier visits

The best equipped resort in China is Yabuli in Heilongjiang Province, close to Harbin. Recent developments have brought it close to European and Japanese standards in terms of infrastructure quality, although not yet in terms of ski area size. Some of the accommodations are now managed by a famous international hospitality & leisure operator. Located in the far North of China, temperatures can be very cold. It is now the largest ski resort and training center for winter sports.

The ski resort of Changbaishan offers a combination of hot springs and snow. Located in the Jilin Province, the resort has views of 16 peaks in the Changbai Mountains. It is located at an altitude of 1'640 to 1'820 meters above sea level.

Beidahu is also located in the Jilin Province. It is surrounded by mountains with summits over 1'200 meters and that are covered in snow for half of the year.

Further southwest, the mountains are much higher. Dagu Glacier Ropeway, installed in 2008 in the Sichuan Province, is the highest gondola in the world. The summit station is located at 4'843 meters! Xiling Snow Mountain, in the same Province, currently features a gondola lift and several 2- and 4-seater chairlifts. Surrounded by mountains more than 5'300 meters high, the resort has the largest ski area in Southern China and has the best facilities.



India

Northern India is a mountainous area with several peaks over 7'000 meters high. Skiing was introduced here by Europeans in the early 1970's and has become increasingly popular with foreign skiers. Even if some Indians love skiing, most are not yet trained for this discipline. Operators are beginning to develop more modern ski areas, which are also the least expensive in the world.

Skiing takes place in the Manali Valley, located in the State of Himachal Pradesh, in Northwest India. This region, in the foothills of the Himalayas, concentrates most of the country's few ski areas. The lift infrastructure remains modest, but some reach impressive altitudes, as the region is located between 4'500 and 7'000 metres above sea level. There is also skiing in Kashmir, a neighboring region of the Himachal Pradesh. This region of the Indian subcontinent is disputed between India and Pakistan, giving rise to armed conflict from time to time, which may cause access restrictions in some places.

There are two major ski areas in the country. The largest one is Gulmarg, in the State of Jammu and Kashmir. It is one of the most famous in this region of Asia. Runs range from 2'600 to 3'200 meters long. The ski area got equipped a few years ago with a 2-section gondola, famous for carrying skiers to an alti-



tude of nearly 4'000 meters above sea level at its top station, a world record. A quad chairlift at the same high-altitude was recently added, also making it the highest in the world. The area offers more than 1'000 meters of vertical drop, with pristine slopes. The village of Gulmarg lies at 2'500 meters above sea level. The ski area is dominated by the 4'124 meter Mount Apharwat. This gives the place a magical feel for skiers. The resort is one of the few places on Earth where there may be 2 continuous weeks of snowfall. Furthermore, it offers a variety of runs: skiers will enjoy the high slopes of Aparwath, which offer magnificent views of K2 during good weather, or the runs in Kongdori. The best time to come to Gulmarg is from mid-January to mid-February, especially for skiers looking for a balance between a stable snowpack, combined with the powder snow down to Gulmarg, in the valley.

Auli is the most select resort in India, offering the best possible infrastructure. It hosts the Indian national ski Championships and an Indian ski festival. It is nestled in a collection of snow covered Himalayan peaks (the Garhwal Mountains). Auli offers 2'000 meters of slopes, equipped with modern lifts.

The ski area of Manali is located at the northern end of the Kullu Valley. It is best known for heli-skiing but also offers a few lifts. It has a multi-season sport offering. Among the country's other ski areas, most usually have only one lift. The small Kufri ski area is nestled in the hills of Himachal Pradesh. It is one of the best destinations for skiing in this State and a destination easily accessible for anyone in northern India. This quiet town becomes a winter paradise as soon as the snow begins to fall. Kufri is home to an annual festival of winter sports in February. Narkanda resort is located 65 kilometers from Shimla. At 3'143 meters above sea level, it is one of the oldest resorts of India. The ski season is concentrated between late December and early March. Narkanda offers beautiful landscapes and splendid views of the Himalayas. Dayara Bugyal is another ski area, located at an elevation of 3'050 meters.

Decade Old Luxury Indian Ski Village Project Moves Forward

A near decade old plan to build a luxurious ski resort in the Indian province of Himachal Pradesh by the long established year-round tourist destination of Manali has taken a step forward, several years since it was last in the public eye.

The Ski Village was proposed by a group led by Alfred Ford, the great grandson of Henry Ford, and envisioned a luxurious resort development beneath a world class ski area designed by Vail resort designers, and at a cost of several billion dollars, to attract skiers and boarders from around the globe. The ski development proposal was for development to comply with the highest environmental standards and experts were flown in from London Universities to advise during the early planning stages. The resort was due to have been completed for the 2009-10 ski

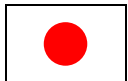
season.

Initially from approximately 2004-7, the project moved forward and the resort's planners sought to win the hearts and minds by bringing in instructors from Ruka in Finland to train locals to teach skiing. But a change of government in 2008 and a range of local opposition from farmers to religious leaders led to the development being rejected and several separate but similar proposals by Indian developers were also rejected.

Nothing had been heard about the proposals over the past three or four years until the Himachal Pradesh High Court *suddenly* cleared the development to move forward. Some commentators have heard a rumor that the interest in switching the development over the provincial border in to neighboring Kashmir may have been a factor.

Whether the group led by Alfred Ford still wants to go ahead with the project is unknown and there has been no public comment from them for the project for several years.

Source : Snowhunter



Japan

Japan is one of the countries with the highest number of ski areas. Resorts are located all along the Japanese islands, from the northern island of Hokkaido to the main southern island of Kyushu. Almost the entire population is only a couple hours away from a ski area. With its high number of inhabitants, this represents a huge potential.

The Japanese ski industry experienced a tremendous boom in the years from 1970 – 1990, when skier visits reached record figures. In the eighties, resort development was dramatic, with several new, expanded or fully rebuilt ski areas. The country offered the finest and most modern facilities in the world. Skiing became very fashionable and the most popular sport among young people. The resorts were busy and crowded to such an extent that it was sometimes difficult to actually ski! There were long lift lines and crowded slopes. This surely contributed to skiing becoming less appealing. Furthermore, Japan experienced a significant economic downturn at the beginning of the 1990's and real estate was affected. Many resorts then had difficulty financing their huge investments. Skier visits began to decrease significantly.

In the past, Japan was also the country with the most indoor snow centers and the world's first such center (the first one opened in 1959). However, in recent years, several of these facilities have

closed. This seems to be a further sign of the loss of interest in skiing.

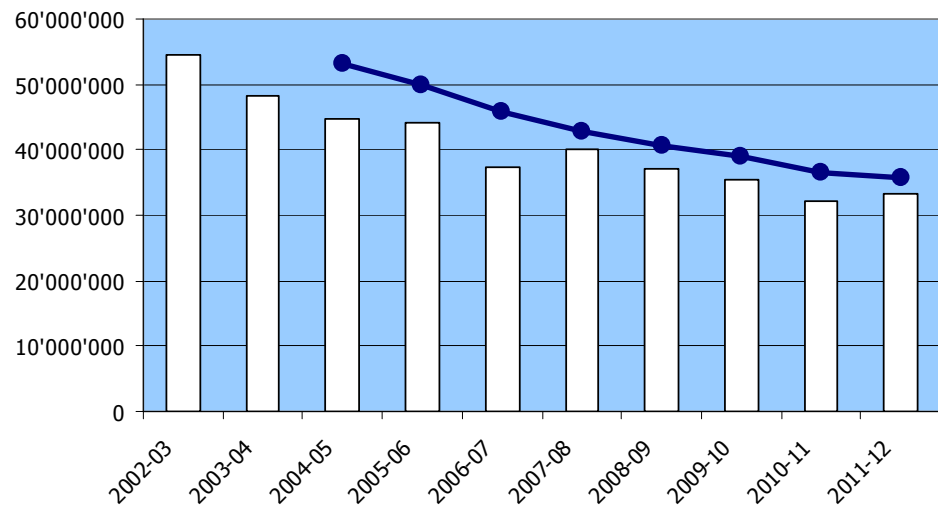


Figure 21: Japan, evolution of skier visits

Today, skier visits are under 40 million per year, about half of what they were in the 1980's. The slopes are no longer overcrowded. However, the industry is trying to recover and attract new clients. Some ski areas have turned into big resorts where skiing is only one of many activities to choose from. Investments are directed to make these places attractive to both skiers and non skiers. True mountain base villages have been developed, offering housing and multiple facilities. Some are even afraid of a almost *Disneylandification* of the mountain.

With these changes, the Japanese ski areas also attract more and more foreign visitors. 10 years ago, there were nearly no foreign visitors who came to Japan to ski. Today, the country attracts skiers from abroad. It is now common to see skiers from Australia and East Asia, but the focus is now on attracting Europeans and Americans. Efforts have been made to produce trail maps, sign and menus in English, Korean and Chinese.



New Zealand

New Zealand is a major destination in the Southern Hemisphere for skiing and snowboarding. The resorts are well equipped and fairly evenly spread out over the two main islands that make up the archipelago. Snow conditions are good, even if the powder is not as light

as in the Alps or the Andes, due to the maritime climate. Only a few resorts have more than 500 meters vertical drop. The others have shorter slopes. The season starts in late May and ends in early November.

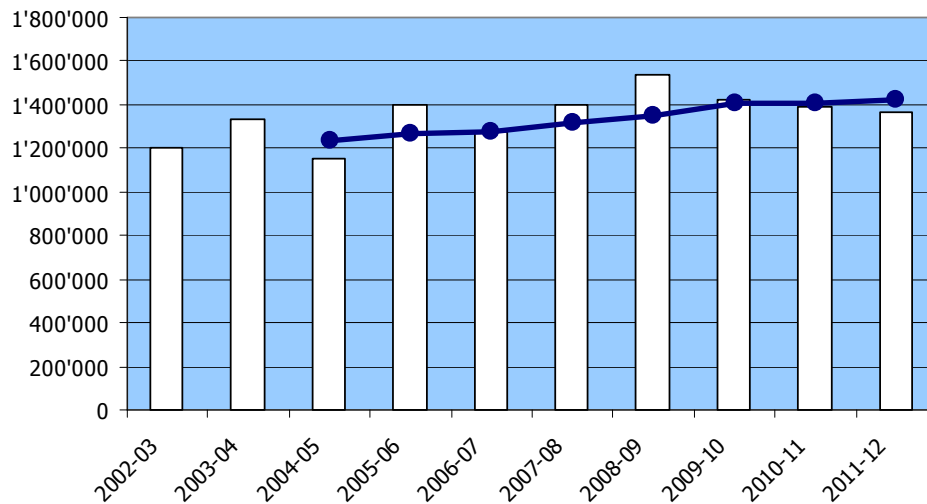


Figure 22: New Zealand, evolution of skier visits

In addition to 14 commercial ski areas, New Zealand has a dozen private ski clubs and heliskiing is also highly developed, with numerous possibilities and departures from 10 different bases. Over the last decade, skiing was growing. Before the 2000's, only exceptional seasons saw more than one million skier visits. Since the early 2000's this has been the rule.

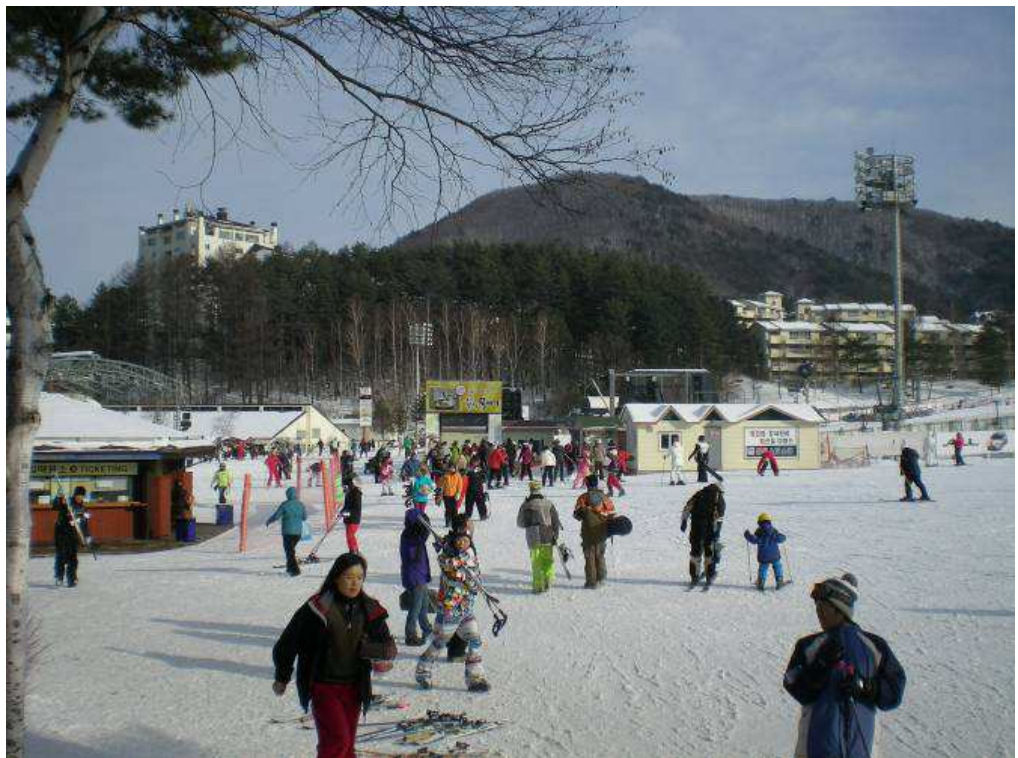
The southern part of the country offers the best ski resorts in New Zealand. Near Queenstown, the Remarkables mountain range boasts a vast ski area of about 220 hectares that rises to 1'935 meters above sea level. There are 4 ski resorts on the northern Island. Whakapapa and Turoa are the most popular ski areas, topping out at 2'300 meters above sea level on the northeast side of Mount Ruapehu, a still-active volcano. They merged recently and attract many skiers and snowboarders every year. Despite being the largest resort in the country, it is small when compared to other international destinations. It has only 43 trails and 16 lifts spread out over 400 hectares.



South Korea

South Korea is a mountainous country with relatively cold winters. Ice skating or gliding over the snow was already familiar to part of the population before the advent of skiing. When the first ski resort was developed in 1975, it rapidly became popular. A few years later it was followed by several new openings. Even if the financial crisis that hit South Korea in 1998 slowed down new developments for years, they resumed after 2002. The country now has 18 ski resorts, mostly equipped to international standards.

Korean resorts are based on the North American model, very capital intensive. They are generally built on land that must be fully or partially acquired by the operator, who then controls the entire business. As they are all created from scratch, resorts require significant investment in roads and utilities, not to mention the need to build the entire base area infrastructure. Accommodations are almost exclusively concentrated in condominiums. The peculiarities of the terrain also create the need for a lot of civil engineering work. This generally limits ski resort operation to powerful financial groups. Several ski areas are owned by large, typically Korean, conglomerates, like Hyundai and LG. The smaller developers have often suffered financial difficulties or gone bankrupt to be taken over by a big investor.



All resorts offer year round activities. Most have at least one golf course, an indoor swimming pool and shops. Indoor malls are filled with recreational activities like bowling, ping pong, video games, movies, karaoke, and of course restaurants, bars, clubs and night-clubs, as many of the resorts are active both day and night. 3 resorts even offer a water park and a theme park.

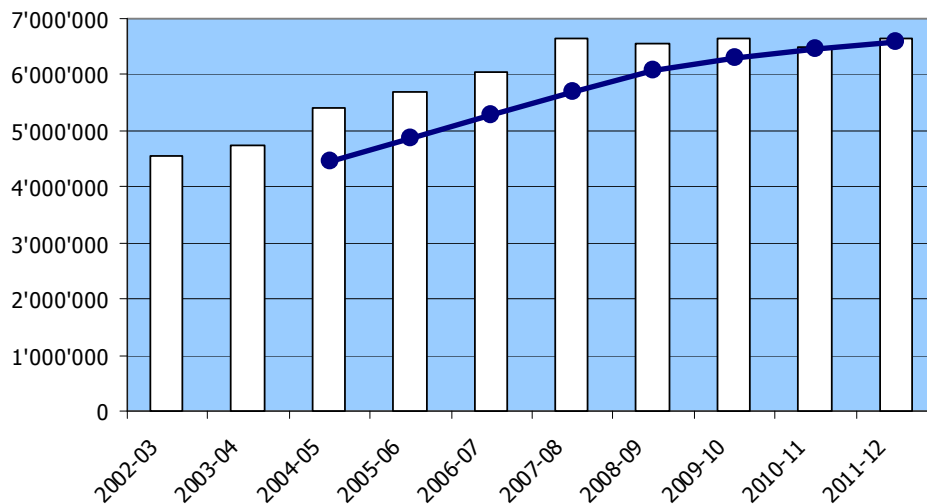


Figure 23 : South Korea, evolution of skier visits

Starting at the beginning of the 2000's, attendance records grew steadily through 2008. Since then skier visits have flattened to around 6.5 million per year, and in spite of several new high-quality resorts that have opened in recent years. It was expected that this would stimulate demand. South Korea also expected an increase in foreign customers, boosted by promotional efforts made by the government. The reason for this stagnation might have more to do with economic conditions and a depressed market, both nationally and in Asia²⁸.

With the significant increase in supply in recent years, some resorts have been losing market share as the market has become much more competitive. In light of the huge investments, some may have to fight to survive in the short term.

Over the long term, demand should continue to grow. The winning bid for the PyeongChang 2018 Winter Olympic Games will certainly contribute to an increase in the popularity of skiing. Resorts may look forward to the excitement that this event will create. With 2.5 million

²⁸ South Korea is maybe the country where attendance is the less depending on the climate. With a lot of snowmaking and relatively cold temperatures, snow is nearly granted. Furthermore, part of the ski consumption is done at night, with little care about sunny sky.



skiers for a population of more than 48 million inhabitants, in other words a participation rate of about 5%, the potential for the Korean market is still partially untapped and demand should grow. In addition, the high-quality equipment at Korean ski destinations, meeting the high international standard, offers an attractive alternative to European resorts for skiers throughout the entire Asian continent. Prices are also more attractive than in Japan, and Korean ski areas offer a great deal of fun, with several ski resorts operating their lifts nearly round the clock.

The ski season is peculiar in Korea. It is relatively short, but very dense. The school year matches the calendar year, so students have their annual holidays in December and January, which is followed by mid-February and spring holidays. The ski season begins in late November / early December and ends in March, but has virtually no lag time.

Various



Lesotho

Surrounded entirely by South Africa, 66% of Lesotho's land area is mountainous. Its lowest elevation is 1'000 meters above sea level, and the highest peak is 3'600 meters. With some natural snowfall, the country almost brings together all the criteria necessary to operate a successful ski resort. This was enough to motivate a few entrepreneurs to start Afriski Mountain Resort.

It is located in the arid Mahlasela Valley, 3'222 meters above sea level, in the Drakensburg-Maluti Mountains. The ski area features a 1 kilometer long T-bar as well as 2 beginner lifts and a magic carpet for kids and beginners. The resort is not always covered with natural snow during the winter months. In general, snow falls 3 to 4 times per winter season, but is quite unpredictable: it can snow 10 out of 12 months a year at the resort's altitude. The ski area is equipped with a snowmaking system, which guarantees skiing from June to the beginning of September.

The ski area is far from any urban area. The nearest city is located 110 kilometers away, and it takes four-and-a-half hours to drive there from Johannesburg, South Africa. The ski area offers winter and summer activities. Various chalets and group accommodations provide for 250 beds at the resort. Since Afriski is an alliance of individual companies and private homeowners that work in cooperation with each other, similar to a European ski resort, there is a central booking office that services the rooms available at the resort. Winter and summer activities, including equipment rental and meals, can also be booked through this agency.

The ski area hosts around 12'000 skiers per season, with a good portion of them being foreign visitors. 90% are South Africans, who come up primarily from Johannesburg. There are also skiers who travel from farther away, such as Germans, the Dutch and North Americans.



South Africa

The country has only one single commercial ski resort, even if it is possible to ski in different areas in the mountains. Located near the border with Lesotho, on the highest mountain in the region, Ben McDhui Peak, the Tiffindell ski area tops out at 2'720 meters elevation. Built in 1993, it was originally a single ski run. An area for beginners was subsequently developed in addition to the main trail and lift. Capacity is limited to 300 people per day. Substantial investment was made in the 2000's to renovate the bar, to increase the length of the trail, to purchase new equipment for snowmaking and to upgrade maintenance services in order to improve its offering. Although the location of the area on the southern face of Ben McDhui Peak receives enough natural snow, the ski area is equipped with a snow-making system that covers its 2.3 hectares. In addition to the infrastructure dedicated to skiing, the area has a snowpark, ski and snowboard instructors, and organizes the South African skiing and snowboarding Championships every year. Daily entertainment programs are offered to children and adults. Tiffindell also has an attractive after-ski scene, with mountain-themed bars to relax after a day on the slopes. The hotel offering is somewhat limited, and the resort's various category rooms, more or less luxurious, can only accommodate 148 guests. Packages that include overnight stays, meals, and ski equipment rentals are available.

The ski season extends from late May to early September (Southern Hemisphere). Skiing in South Africa is of course a completely different experience than skiing in Europe. The number of runs and infrastructure is limited, as is the snow quality. In spite of such a limited offer, the country has a ski association. Founded in 1990, the South African National Ski Association is affiliated with the FIS and recognized as an official organization for everything relating to skiing in South Africa. It serves to coordinate and promote the development of skiing in the country and to garner both national and international recognition. A special effort is made in order to learn the latest international techniques.

The resort was shut down in 2010 and put up for auction in the summer of 2012. A new company acquired the area and intends to restart operations.

Tiffindell Re-Opening For 2013

South Africa's only ski area, Tiffindell (tiffindell.co.za), is set to re-open.

South Africa's first truly commercial ski center opened 20 years ago, in 1993, thanks in large part to snowmaking technology and a determined and innovative

management team. There's around a kilometer of runs, served by several surface lifts, with about 100 meters of vertical drop located between 2'720 and 2'820 meters above sea level.

Natural snowfall of up to a meter in 36 hours has been recorded in recent years but the season stretching from mid-May (one of the earliest to open in the Southern Hemisphere) through mid-September is largely due to the ever-improving snowmaking system. The current system can produce a 20 centimeters deep snowpack across the 2.3 hectare site in 24 hours when conditions are right.

The ski area did not open in 2011 or 2012, reportedly due to financial problems of the previous owners, but last September local businessman and skier Lew Campbell bought the resort at an auction for 5.5 million Rand (about GBP 400,000), vowing to restart resort operations, and reservations are now open for the coming Southern Hemisphere 2013 winter season .

Source : Snowhunter

Conclusion

Nearly everywhere, the industry is facing the challenge of generating long term growth. In many places, the market is more than mature. The baby-boomers represent the majority of participants. This generation will progressively exit some of the mature markets without being adequately replaced by future generations with the same enthusiasm for skiing. The need to stimulate the market is extremely important and not always sufficiently addressed.

As already experienced by ski areas that have been actively looking for solutions, gaining new customers by attracting non-skiers and converting them into loyal participants is far from a done deal. It requires a significant effort to create a situation that only improves very slowly. Innovation and customer relationship management is the key. The first not only concerns lifts (much has already been done in this area), but everything that is related to the mountain experience, and in some countries this starts with lodging. It is difficult to attract clients for one week of wonderful skiing, using state-of-the-art lifts, grooming and snowmaking, if guests have to spend the time they are not skiing in substandard hotel rooms and restaurants. The newcomers to the industry are often well integrated and capable of offering modern facilities for every aspect of the product, and are also fun places to vacation. Thus, if traditional destinations still want to compete, they need to manage quality for infrastructure, equipment and services throughout the entire resort. CRM will help operators to closely monitor the needs and desires of their customers and to put together customized offers. In this globalized world, everyone appreciates personalized service. Technology, and especially the Internet, now makes it possible to offer *one-stop shopping* where clients are able to take care of all their needs.

Even though the Internet is a powerful sales and promotion tool for the existing customer base, and even though most ski areas recognize the need to be present on social networks²⁹, it has failed up to this point as a tool to help grow the global ski market. There has simply been a swap in the promotional channels. Marketing operations have changed some, but this has not enabled new market development. The Internet certainly has its strengths, but they are currently limited and mitigated by its weaknesses.

²⁹ The world's most popular and well-known ski resorts are barely able to attract 100'000 friends to their facebook pages, even though they host over 1 million skier visits per year!

The web enhances communication, facilitates bookings and travel arrangements, facilitates daily package sales and makes snow conditions more transparent for skiers.

The latter already presents some drawbacks. Both direct and indirect competition has increased, and has been enhanced by the Internet, as has communications. The web is itself a competitor, such as when young people choose to spend time in front of their screens instead of heading to the slopes! The benefits of the Internet are also available to all competing industries. Finally, the web has failed to provide the ability to reach non-skiers on a massive scale and transform them into enthusiastic participants; it does not teach one to ski nor help one to practice!

Independent from the potential benefits that the industry can gain from the web, the customer experience will only be complete when the virtual purchase turns into a reality. At this stage, careful attention should be paid to maximize guest satisfaction. Quality services and human interactions are required to truly produce an exceptional customer **experience**. This has become the reality in tourism and for ski resorts as well. The potential for improvements still leaves the future wide open for those players in the industry that clearly understand these issues.



Sources and acknowledgments

As comprehensive information is not available globally for the industry, and even quite poor for some countries, the present report compiled data from numerous sources. Various attempts have already been made to gather information about the industry at an international level. Unfortunately, figures published were often only partially correct.

A lot of effort has therefore been focused on presenting the data as accurately as possible. The data has been cross checked numerous times. If however a reliable source has been missed or the data insufficiently updated, the author would very much appreciate being informed for future reference. Please address any comments to vanat@vanat.ch.

Besides the personal historical database assembled by the author, and in addition to conducting extensive web research, the following sources of data were used:

- Reports from national associations: RMS (Remontées Mécaniques Suisses), DSF (Domaines Skiabiles de France), NSAA (National Ski Areas Association), Fachverband der Seilbahnen Österreichs, ASSQ (Association des Stations de Ski du Québec), VDS (Verband Deutscher Seilbahnen und Schlepplifte), ASAA (Australian Ski Area Association), ANEF (Associazione Nazionale Esercenti Funivari), SHKY (Finnish Ski Area Association), SLAO (Swedish Ski Area Association), and others
- 2008-2009 Canadian Skier and Snowboarder Facts and Stats
- ADAC Ski Guide 2011
- Chiffres clés du tourisme de montagne, 7e édition, ATOUT France
- CIA 2008 Yearbook
- CNUCED-annuaire statistique 2009
- Doppelmayr, Leitner and Poma, reference lists and annual reports
- Etude Atudem, balance temporada 2008-09
- Etude HERMES Aoste 2005
- Ökonomische Bedeutung des alpinen Wintersports in Österreich
- Kottke reports
- Rapport Rolland
- Snow business, Simon Hudson
- Snow Hunter's World Weekly Snow News, Snow24
- Statistique des téléphériques OITAF 2009
- STRMTG
- Tourism Association of Bosnia and Herzegovina
- Tourism Management 2010
- UNWTO World Tourism Barometer
- Wintersportanalyse in Europa, Manova, Octobre 2010

Furthermore, many thanks to Benny Wu, Christoph Schrahe, CK Lee, Francisco Troncoso, Gord Ahrens, Ivo Marinov, Melita Tsoutrelis, Miles Davidson, Nina Lindren, Patrick Thorne, Paul Mathews and his team from Ecosign, Sid Roslund, Sylvain Audet, Thomas Zukal and all

those I have not mentioned who contributed to and helped in gathering information.

Thank you as well to Gérald Imfeld, the International Tourism Symposium, HES-SO Valais and the Ecole Suisse de Tourisme for their initial support for the project.

Finally, Darin Reisman should also be mentioned and thanked for his proof reading of the 2013 issue.

Photos: Laurent Vanat and courtesy of Melita Tsoutrelis



**Laurent Vanat
19, Margelle
CH - 1224 Geneva
Switzerland**

Tel / fax / voicemail: +4122 349 8440

E-mail: vanat@vanat.ch

Website: www.vanat.ch