The Economic Impact of a Major Sport Event
- An analysis what effect the FIS Alpine Ski World Cup in Levi, Finland has on the local economy

Patrick Suves
Abstract

Aim

The aim of this study has been to determine the economic impact on the local economy of a large scale international sporting event, namely the FIS Alpine Ski World Cup in Levi, Finland. In addition, it seeks to investigate the regional origins of visitors to the event and the relationship between residence and expenditure.

Method

The methodology consisted of two key stages: the estimation of visitor expenditure and the calculation of the economic impact of this. Information about visitor expenditure and background was collected by survey on site during the event. This has been additionally completed with interviews with key persons associated with the event concerning organizational and infrastructure spending.

Results

The results of the survey indicate that the event gives a direct boost of an estimate of six and a half million Euros to the local economy. When taking into consideration the tourism multipliers for the area the total economic impact of the event ranges between 7,5 and 9,5 million Euros. Additionally the results also point out a clear relationship between the residence and expenditure of the event visitors.

Conclusions

The results of the economic impact can be used by the Organization Committee as a tool to show and justify future investments with public funding. Additionally the background and origins of the attendees gives a great deal of information for the people behind the marketing and sponsorship strategies. Further studies regarding the calculation of specific factors within economic impact studies would though be greatly needed.
Foreword

I would here like to acknowledge and give a special thanks to persons close to this project

- Lars Lindqvist, My Supervisor for the Project
- Mikko Saarinen, General Secretary for the Levi Alpine Ski World Cup
- Project manager Roope Ropponen at InFront Finland, who handles the marketing for the Levi Alpine Ski World Cup and also gave me this assignment.
- Katriina Kallio, Sami Järvinen, Juho Juusela and Tomi Haapala, who all helped me gather responses for the survey

Additional thanks to people who has helped this project

- Jussi Töyrylä, CEO for Levin Matkailu Oy and former General Secretary for the Levi Alpine Ski World Cup
- Jouni Palosaari, CEO for Oy Levi Ski Resort Ltd
- Seija Alatalo, Office Manager for Levin Matkailu Oy
- Marko Mustonen, CEO for Oy Levi Restaurants Ltd
- Natalia Lahtela, Chief of Race Office for Levi Alpine Ski World Cup
- Tuomas Nyman, my trusted AD
- Jussi Lindholm, who networked me into contacting InFront Finland
- Jouni Wallin, for all the support
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1 Introduction

1.1 Background to the research

While the specific economic contribution of the Levi Alpine Ski World Cup has not been previously investigated in detail, research of the effects of major sporting events are though widely to be found and have highlighted a wide range of benefits accruing to the local and wider economies. These include:

- Relevant direct spending by the sporting body on wages, infrastructure and promotion.
- Spending by visitors on accommodation, transport, food and drink and shopping.\(^1\)\(^2\)
- Sponsorship and merchandising.
- Public and private investment in infrastructure.\(^3\)
- Long term benefits of a raising the profile of the host city and nation, which encourages future visits as well as indirect tourism multiplier effect of sport events.\(^4\)

As mentioned in the chapter before, the economic impact of the Levi Alpine Ski World Cup has not been previously researched. Both Roope Ropponen from InFront Sports & Media, who handles the marketing of the event and Mikko Saarinen, who is the General Secretary of the event thought it would be valuable to know the economic impact of the event, which is the single most globally televised annual Finnish sporting event\(^5\) and assigned me for the task.

1.2 Aim and main questions of issue

The primary aim of this study has been to determine the economic impact on the local economy of a large scale international sporting event, namely the FIS Alpine Ski World Cup

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1 Richard Coleman, *Measuring Success 2: The Economic Impact of Major Events*, UK Sport
3 Christian Moesch, *Infrastrukturbedarf von Sport-Mega-Events*, Berner Studien zu Freizeit und Tourismus
4 Thomas Junod, *The Economic Impact of the 2005 European Youth Olympic Winter Festival on the Valais Chablais Area of Switzerland*, Institut de recherches économiques et régionales (IRER), Université de Neuchâtel Institut de hautes études en administration publiques (IDHEAP), Lausanne
5 Telephone interview with Mikko Saarinen, 2008-12-04, Notes, In possession of the writer
in Levi. Secondary it seeks to investigate the regional origins of visitors to the event and the relationship between residence and expenditure.

The main questions of issue to reach the aim have been the following:

- How many and what type of visitors does the event itself attract to the area?
- How much money do the visitors spend during their stay?
- How much money has the organization committee of the event spent on the area, which has been financed outside?
- How much money has been invested in infrastructure for the event´s sake?

1.3 Background of Levi

Levi is one of the largest ski resorts in Finnish Lapland. The resort is located in Kittilä municipality and is served by Kittilä Airport and Kolari train station. The Levi fell is 531 meters above sea level. There are 48 skiing slopes (15 of which are floodlit) and 26 skiing lifts in Levi. Levi is another of the two sites of gondola lifts in Finland. The slopes in Levi are mostly suitable for beginners or intermediates, but there are also four black slopes for experts. The highest vertical drop is 325 meters and the longest slope is 2,500 meters long. The longest ski lift is about 1,636 meters long. Levi has one superpipe, one halfpipe, one snow park, 10 children's slopes and seven slope restaurants. The skiing and snowboarding season in Levi is very long, lasting, perhaps, from mid October to the beginning of June.

Other possible activities in Levi are cross-country skiing, snowmobile safaris, biking, husky dog safaris, fishing, hiking and canoeing. There are 230 kilometers of cross-country skiing tracks and 750 kilometers of snowmobiling tracks in Levi.6

Even though the nearby ski-centre of Ylläis is bigger by size of the fell, Levi is Finland’s biggest ski-resort when taking into account sold ski-tickets, amount of available accommodation and general services in area. Both are located in rural area in Lapland. Levi, as mentioned before, belongs to the town of Kittilä, which has a population of approximately 6 000.7

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6 http://en.wikipedia.org/wiki/Levi%2C_Finland, 2008-12-04
7 Interview with Mikko Saarinen, 2008-12-23, Notes, In possession of the writer
1.4 Background of Levi Alpine Ski World Cups

FIS Alpine Ski World Cup in November 2008 marked the fifth World Cup held in Levi, including the cancelled World Cup in 2007. In March 2004 and 2006, Levi hosted Alpine Ski World Cups, when only women’s slalom was included. Starting from November 2006, even men’s slalom was included in the program, and Levi got a fixed position as one of the starting events for the annual Alpine Ski World Cup tour. Though due to poor weather and the lack of snow, the 2007 World Cup in Levi scheduled for November, was cancelled some days before the scheduled start. Although cancellation, it didn’t risk any oncoming World Cups and the 2008 Alpine World Cup was put through as planned the 15th – 16th of November. Prior to the World Cups, Levi hosted four Alpine Ski Euro Cups between 2000 – 2003. As these were done and hosted with high quality, they were one of the main factors, why Levi was chosen to host the World Cup. Additionally, the recent success of the Finnish Alpine Ski Team contributed to the bidding process. Even further, the time (November) when the World Cup in Levi is held, is a factor as most of the competing places are unable to host the event due to weather conditions alas the lack of snow.

The International Ski Federation (FIS) has confirmed that Levi will be continuing hosting a World Cup at least for the season 2012-2013, so at least four more Alpine World Cups are going to be held in Levi.

1.5 Definitions

World Cup, Event – The Alpine Ski World Cup in Levi

FIS – International Ski Federation, the governing body of the Alpine Ski World Cup

OC – Organization Committee for the Levi Alpine Ski World Cup

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8 Interview with Roope Ropponen, 2007-02-06, Notes, In possession of the writer
9 Interview with Mikko Saarinen, 2008-12-23, Notes, In possession of the writer
2 Methodology

2.1 Earlier studies

There has been many methodologies calculate the economic impact of a sport event, however no established consensus exist, partly because the characteristics of individual events and regional economies differ substantially. This study follows mainly the guidelines given in Malcolm’s & McQuaid’s *The Economic Impact of a Sporting Event: A Regional Approach*, and Richard Coleman’s *Measuring Success 2: The Economic Impact of Major Events*, the latter which details and compares the economic impact of 16 major sport events based in the United Kingdom between 1997 – 2003. Although it uses the same methodology in the different cases, it only measures visitor expenditure and disregards for the most part both OC expenditure in the area in addition to infrastructure investments and the wide indirect effects by tourism multiplier. All of which I included in this case study about the economical impact of the FIS Alpine Ski World Cup in Levi in November 2009. As this is only a case study in words of evaluating the economic impact of a single event, comparison to other studies, may differ because of different methods.

2.2 Method

The methodology consisted of two key stages: the estimation of visitor expenditure and the calculation of the economic impact of this. The methodology used to estimate the expenditure of the event consisted of two main components.

Firstly an extensive survey of 1 105 visitors was carried out on site during the event on 14th – 16th of November 2008. Event officials and members of the OC, athletes and team officials, VIPs and sponsor guests, media representatives and spectators were all surveyed on site during four days through a combination of face-to-face interviews and self-completion questionnaires designed to maximize response rate. Both of these were available and made both in Finnish and English. To even further increase the rate of people answering in the surveys a VIP-package for the Levi World Cup 2009 was drawn among all those who answered.
Face-to-face interviews were made in the main World Cup area, where the slope, stands and other facilities were located. This was done before, during and after the slalom races on Saturday and Sunday. Additionally face-to-face interviews with the visitors were made on Friday and Saturday evening in the so called festival area, where among others the opening ceremony was held. The self-questionnaire forms and return boxes for them were placed strategically as to reach the different groups (eg. media, athletes etc.) of people attending. These places included all of the athlete’s hotels, two media centers, VIP tent, Sponsor Guest building, event employee tent and the area’s most popular restaurants. These were placed on Thursday before the event and picked away on Sunday. For the face-to-face interviews visitors were picked out randomly, whom all were interviewed except 45 locals, which are not included in the total conducted survey number of 1,105, although they are included in the calculation of percentage of local people on site.

Secondly, information was gathered with interviews with key persons associated with the event concerning organizational and infrastructure expenditure.

To estimate the economic impact, the average expenditure per person was calculated in a number of key areas and scaled up to reflect the size of visitors, provided by ticket sale numbers and by lists of the number of accredited people. The expenditure of local people was not counted for as this would count as deadweight. Furthermore I added the sum of the OC expenditure, which they had financed elsewhere. Moreover a percentage of the sum invested in infrastructure directly connected to this and earlier and future World Cups was reduced from this. Finally appropriate multipliers were then applied to these figures to obtain the total economic impact of the event.

2.3 Reliability

The term reliability means the measurement accuracy and trustfulness of the study. In other words high reliability counts that a study could be repeated and give the exact same results. Even though problematic, I assume the reliability of the study is high as the OC had estimated relatively near the economic loss of the cancelled World Cup in 2007 in comparison to the

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results of this study.\(^{12}\) Additionally the number of surveys of visitors is high (over 1 000), when the total amount of people on site is estimated to be circa 10 000. Therefore over 10 % of the visitors were surveyed.

### 2.4 Validity

The term validity means that you measure it you intend to measure.\(^ {13}\) To increase the validity of this study I have tried to maximize the response rate by different means and have splitted the visitors in the survey results in a multitude of segments to better reflect individual differences in expenditure.

\(^{12}\) Telephoneinterview with Roope Ropponen, 2008-12-04, Notes, In possession of the writer

\(^{13}\) Ibid.
3 Results

3.1 Survey results

3.1.1 Overview

The breakdown of visitors surveyed is given in Figure 3.1.1 below.

Figure 3.1.1: Surveys conducted

3.1.2 Profile of visitors – How many and what type of visitors does the event itself attract to the area?

The comparatively large scale of the survey ensured that the data gave a good indication of the characteristics of those who attended the event. The response rates differed for different questions, therefore the totals will not always sum to the same amount in all the tables below.

Figure 3.1.2a and Table 3.1.2 show the origin of the people interviewed. The numbers in the figure reflect the number of people on site, after been converted from surveys conducted. The number for amount of Event officials and members of the OC, athletes and team officials, VIPs and sponsor guests and media representatives on site has been taken from the OC
accreditation list. For spectators the number of people on site is estimated as the total in ticket sales does not give the amount of unique spectators on site.

**Figure 3.1.2a**

![Map of Finland showing Lapland, Oulu, Eastern Finland, Western Finland, Southern Finland, Åland, and Abroad]

**Table 3.1.2**

<table>
<thead>
<tr>
<th></th>
<th>Lapland</th>
<th>Oulu</th>
<th>Eastern Finland</th>
<th>Western Finland</th>
<th>Southern Finland</th>
<th>Åland</th>
<th>Abroad</th>
<th>Total</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland’s Population / % Total</td>
<td>187 000</td>
<td>459 000</td>
<td>583 000 11.2%</td>
<td>1 848 000 35.4%</td>
<td>2 117 000 40.6%</td>
<td>26 000 0.5%</td>
<td>5 219 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total People on Site</td>
<td>2 732</td>
<td>2 082</td>
<td>239</td>
<td>1 753</td>
<td>2 206</td>
<td>0</td>
<td>798</td>
<td>9 810</td>
<td></td>
</tr>
<tr>
<td>Spectators</td>
<td>2 149</td>
<td>1 736</td>
<td>186</td>
<td>1 384</td>
<td>1 787</td>
<td>0</td>
<td>258</td>
<td>7 500</td>
<td></td>
</tr>
<tr>
<td>Athletes and Team Personnel</td>
<td>10</td>
<td>6</td>
<td>1</td>
<td>14</td>
<td>16</td>
<td>0</td>
<td>377</td>
<td>424</td>
<td>*1: Justed</td>
</tr>
<tr>
<td>Media</td>
<td>31</td>
<td>41</td>
<td>0</td>
<td>26</td>
<td>46</td>
<td>0</td>
<td>96</td>
<td>239</td>
<td>*2: Justed</td>
</tr>
<tr>
<td>VIP and Sponsor Guests</td>
<td>84</td>
<td>62</td>
<td>18</td>
<td>159</td>
<td>194</td>
<td>0</td>
<td>53</td>
<td>569</td>
<td></td>
</tr>
<tr>
<td>Event Officials and Members of the OC</td>
<td>459</td>
<td>238</td>
<td>34</td>
<td>170</td>
<td>163</td>
<td>0</td>
<td>14</td>
<td>1077</td>
<td>*3: Justed</td>
</tr>
</tbody>
</table>

*1 = Justed to reflect that 90 % were abroad.
*2 = Justed to reflect that 40 % were abroad.
*3 = Justed to reflect that 40 % were local.
The most common size of party travelling to Levi was two, which accounted for 28% of respondents.

Figure 3.1.2b

The age group with the most representation within both males and females was 35 – 44, with 29% and 27% respectively. Women accounted for 48% of all answers in this survey.

Figure 3.1.2c  Figure 3.1.2d

Figure 3.1.2e
Family or friends was the most typical type of group people were coming to Levi, 1/3 made the trip with friends and some 39% with family. Little over one fourth of was in Levi with work related people, either with co-workers or clients.

**Figure 3.1.2f**

### 3.1.3 Visiting Levi and Finland

**Reason for Visit**

Visitors on site were asked for the main reason why they were in Levi. Vast majority (93%) of Spectators and VIP and Sponsor Guests came to Levi specifically for the event or if not, they had planned their holiday/work trip so they could attend the event.
Details of Overnight Stay
The most common length of stay was three days and two nights followed by four days and three nights.

Visitor Attitudes to Levi and Lapland
An important impact of major sporting event that attracts visitors is that it may encourage repeat visits, possibly for longer stays. Overall the results are positive – 98% would return on holiday and even recommend the place for a friend.

Additionally visitors were asked to give a rating to the World Cup event in Levi and to Levi itself. Even here the results were positive as both the event and Levi got a near excellent 4.4 as a mark.
Earlier visits to Levi and Lapland

Visitors were also asked to estimate the number of visits to Levi and Lapland. The results of those who answered in both parts were that in average it was their 11th visit to Levi and 23rd to Lapland. Circa 10% of all visitors visited Levi for the first time.

3.1.4 Visitor travel

Visitors were asked how they travelled to Levi from elsewhere in Finland. Majority (69%) came by car, followed by plane (22%).

Figure 3.1.4a

![Form of Travel to Levi (within Finland)](image)

Visitors coming from outside of Finland were also asked how they travelled to Finland. Plane was the most popular form of travel, accounting for near 60% of all those travelling from abroad to Finland.

Figure 3.1.4b
Visitors were also asked an estimate of how much they used on Traveling to Finland and to Levi. As mentioned earlier plane was the most popular form of travel to Finland, but also the most expensive as seen in Figure 3.1.4c. One should also be noted that while ferry travel seems like a cheap option, the ferries only arrive in the cities of Helsinki and Turku, which both lie some 1 000 kilometers away from Levi.

Also as mentioned before, car travel was the most popular method of transfer within Finland, as well as the cheapest form (Figure 3.1.4d) as carpooling probably have occurred for the majority of travelers by car.
3.2 Visitor Spending – How much money do the visitors spend during their stay?

In order to estimate the economic impact of visitor activities, visitors were asked to estimate their expenditure on a number of activities, including travels to Levi, which is examined separately in 3.1.4 and is not included in the economic impact calculation.

Table 2.2 gives the overall average expenditure reported. The figures include those who reported spending nothing on one or more of these.

<table>
<thead>
<tr>
<th></th>
<th>Travels within Levi</th>
<th>Food &amp; Beverages</th>
<th>Accommodation</th>
<th>Ski Lifts</th>
<th>Entrance Tickets</th>
<th>Shopping &amp; Souvenirs</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Groups Combined</td>
<td>22 €</td>
<td>300 €</td>
<td>160 €</td>
<td>33 €</td>
<td>16 €</td>
<td>89 €</td>
<td>60 €</td>
<td>680 €</td>
</tr>
<tr>
<td>All Spectators</td>
<td>19 €</td>
<td>281 €</td>
<td>168 €</td>
<td>30 €</td>
<td>19 €</td>
<td>76 €</td>
<td>53 €</td>
<td>646 €</td>
</tr>
<tr>
<td>Athletes and Team Personnel</td>
<td>19 €</td>
<td>289 €</td>
<td>102 €</td>
<td>16 €</td>
<td>14 €</td>
<td>128 €</td>
<td>48 €</td>
<td>616 €</td>
</tr>
<tr>
<td>Media Representatives</td>
<td>26 €</td>
<td>263 €</td>
<td>184 €</td>
<td>7 €</td>
<td>7 €</td>
<td>120 €</td>
<td>41 €</td>
<td>649 €</td>
</tr>
<tr>
<td>VIP and Sponsor Guests</td>
<td>40 €</td>
<td>479 €</td>
<td>237 €</td>
<td>95 €</td>
<td>16 €</td>
<td>115 €</td>
<td>119 €</td>
<td>1 101 €</td>
</tr>
<tr>
<td>Event Officials and Members of the OC</td>
<td>18 €</td>
<td>213 €</td>
<td>50 €</td>
<td>2 €</td>
<td>4 €</td>
<td>98 €</td>
<td>44 €</td>
<td>429 €</td>
</tr>
</tbody>
</table>

3.2.1 Spectator Expenditure

As already discussed in chapter 3.1.2 spectators were broken down into segments regarding their places of origin. This was done to found out if there were a correlation between expenditure and place of origin. As seen in Table 3.2.1 the people coming from greater distance to Levi spent more money than the people living nearer. The reasons most likely being purely economical as the differences were mainly in the categories ‘Food & Beverages’ and ‘Shopping & Souvenirs’ and the people being from ‘wealthier’ parts of Finland. As for people from Lapland they most likely made only daytrips. The reason why those travelling from abroad had less than average expenditure might be because of the reason that they already spent a great deal of money on travels to Finland as seen in Figure 3.1.4c.
Table 3.2.1

<table>
<thead>
<tr>
<th>Breakdown</th>
<th>Travels within Levi</th>
<th>Food &amp; Beverages</th>
<th>Accomodation</th>
<th>Ski Lifts</th>
<th>Entrance Tickets</th>
<th>Shopping &amp; Souveniers</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Spectators</td>
<td>19 €</td>
<td>281 €</td>
<td>168 €</td>
<td>30 €</td>
<td>19 €</td>
<td>76 €</td>
<td>53 €</td>
<td>646 €</td>
</tr>
<tr>
<td>Locals</td>
<td>10 €</td>
<td>133 €</td>
<td>106 €</td>
<td>18 €</td>
<td>7 €</td>
<td>56 €</td>
<td>36 €</td>
<td>367 €</td>
</tr>
<tr>
<td>Oulu</td>
<td>4 €</td>
<td>34 €</td>
<td>0 €</td>
<td>7 €</td>
<td>2 €</td>
<td>5 €</td>
<td>40 €</td>
<td>92 €</td>
</tr>
<tr>
<td>Eastern Finland</td>
<td>11 €</td>
<td>133 €</td>
<td>176 €</td>
<td>25 €</td>
<td>19 €</td>
<td>63 €</td>
<td>34 €</td>
<td>571 €</td>
</tr>
<tr>
<td>Western Finland</td>
<td>92 €</td>
<td>147 €</td>
<td>233 €</td>
<td>8 €</td>
<td>9 €</td>
<td>51 €</td>
<td>82 €</td>
<td>622 €</td>
</tr>
<tr>
<td>Southern Finland</td>
<td>10 €</td>
<td>267 €</td>
<td>212 €</td>
<td>35 €</td>
<td>24 €</td>
<td>105 €</td>
<td>79 €</td>
<td>733 €</td>
</tr>
<tr>
<td>Åland</td>
<td>39 €</td>
<td>509 €</td>
<td>173 €</td>
<td>42 €</td>
<td>31 €</td>
<td>86 €</td>
<td>63 €</td>
<td>943 €</td>
</tr>
<tr>
<td>Abroad</td>
<td>0 €</td>
<td>0 €</td>
<td>0 €</td>
<td>0 €</td>
<td>0 €</td>
<td>0 €</td>
<td>0 €</td>
<td>0 €</td>
</tr>
</tbody>
</table>

3.2.2 VIP and Sponsor Guest Expenditure

VIPs and Sponsor Guests were segmented into their own group to find out if their expenses were greater than those of ‘regular’ spectators. As seen when comparing Table 3.2.2 and Table 3.2.1 VIPs and Sponsor Guests did indeed spend more money in average than the ‘regular’ Spectators.

Table 3.2.2

<table>
<thead>
<tr>
<th>Breakdown</th>
<th>Travels within Levi</th>
<th>Food &amp; Beverages</th>
<th>Accomodation</th>
<th>Ski Lifts</th>
<th>Entrance Tickets</th>
<th>Shopping &amp; Souveniers</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIP and Sponsor Guests</td>
<td>40 €</td>
<td>479 €</td>
<td>237 €</td>
<td>95 €</td>
<td>16 €</td>
<td>115 €</td>
<td>119 €</td>
<td>1101 €</td>
</tr>
</tbody>
</table>

3.2.3 Event Official and Members of the OC Expenditure

There were around 1 100 Event Officials and Members of the OC on site, so they were also broken down into their own segment to find out if their expenses differed from the other groups. As shown in Table 3.2.3 and when comparing to the other groups in Table 3.2 this group had the lowest average expenditure during the event. Preferably because they got most of their expenses paid, at least some of their meals and specially accommodation, which was by far the lowest of any groups.
Table 3.2.3

<table>
<thead>
<tr>
<th>Breakdown</th>
<th>Travels within Levi</th>
<th>Food &amp; Beverages</th>
<th>Accomodation</th>
<th>Ski Lifts</th>
<th>Entrance Tickets</th>
<th>Shopping &amp; Souveniers</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Officials and Members of the OC</td>
<td>18 €</td>
<td>213 €</td>
<td>50 €</td>
<td>2 €</td>
<td>4 €</td>
<td>98 €</td>
<td>44 €</td>
<td>429 €</td>
</tr>
</tbody>
</table>

3.2.4 Media Representative Expenditure

As near 40 % of the ca 250 Media Representatives were coming from abroad, they were further broken down into two segments – namely domestic and international media representatives – to find out if their expenses differed. As shown in Table 3.2.4 foreign media representatives spent almost the double when compared to Finnish media representatives. Biggest difference in expenses was in accommodation, where foreigners spent almost five times the sum of their Finnish counterparts. This could be explained by the fact that Finnish Media Representatives were larger by number by a certain media unit and they split the expenditure among themselves. Also the booking and expenditure on accommodation by Finnish Media Representatives was probably taken care of by their superiors and therefore they wouldn’t have knowledge of the sum spent on accommodation, which was in the case of foreigners probably done by the people who also attended the event.\(^{14}\) Also shopping and souvenirs was bought by foreigners almost the double.

Table 3.2.4

<table>
<thead>
<tr>
<th>Breakdown</th>
<th>Travels within Levi</th>
<th>Food &amp; Beverages</th>
<th>Accomodation</th>
<th>Ski Lifts</th>
<th>Entrance Tickets</th>
<th>Shopping &amp; Souveniers</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media Representatives</td>
<td>26 €</td>
<td>263 €</td>
<td>184 €</td>
<td>7 €</td>
<td>7 €</td>
<td>120 €</td>
<td>41 €</td>
<td>649 €</td>
</tr>
<tr>
<td>Media Representatives (Finland)</td>
<td>28 €</td>
<td>275 €</td>
<td>94 €</td>
<td>9 €</td>
<td>5 €</td>
<td>94 €</td>
<td>34 €</td>
<td>539 €</td>
</tr>
<tr>
<td>Media Representatives (Abroad)</td>
<td>21 €</td>
<td>219 €</td>
<td>525 €</td>
<td>0 €</td>
<td>13 €</td>
<td>218 €</td>
<td>69 €</td>
<td>1 064 €</td>
</tr>
</tbody>
</table>

3.2.5 Athlete and Team Official Expenditure

As near 90 % of the ca 425 Athletes and Team Officials were coming from abroad, they were further broken down into two categories as shown in Table 3.2.5 to find out if their expenses differed. Although no clear distinction was to be found between these two sub-segments.

\(^{14}\) Telephoneinterview with Mikko Saarinen, 2008-12-10, Notes, In possession of the writer
### Table 3.2.5

<table>
<thead>
<tr>
<th>Breakdown</th>
<th>Travels within Levi</th>
<th>Food &amp; Beverages</th>
<th>Accomodation</th>
<th>Ski Lifts</th>
<th>Entrance Tickets</th>
<th>Shopping &amp; Souveniers</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes and Team Personnel</td>
<td>19 €</td>
<td>289 €</td>
<td>102 €</td>
<td>16 €</td>
<td>14 €</td>
<td>128 €</td>
<td>48 €</td>
<td>616 €</td>
</tr>
<tr>
<td>Athletes and Team Personnel (Finland)</td>
<td>16 €</td>
<td>304 €</td>
<td>103 €</td>
<td>13 €</td>
<td>11 €</td>
<td>126 €</td>
<td>47 €</td>
<td>620 €</td>
</tr>
<tr>
<td>Athletes and Team Personnel (Abroad)</td>
<td>32 €</td>
<td>232 €</td>
<td>95 €</td>
<td>29 €</td>
<td>24 €</td>
<td>135 €</td>
<td>51 €</td>
<td>598 €</td>
</tr>
</tbody>
</table>

### 3.3 Other Event related Spending

In addition to the visitor expenditure, there is direct expenditure by the Organizing Committee and investments on infrastructure.

#### 3.3.1 OC Expenditure – How much money has the OC spent on the area?

The OC budget for the event was 1.2 million Euros and it was completely financed outside Levi. Of this budget some 40% was invested in Levi.\(^{15}\)

#### Table 3.3.1

<table>
<thead>
<tr>
<th>Total Income</th>
<th>1 200 000 €</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Revenue</td>
<td>360 000 €</td>
</tr>
<tr>
<td>Sponsorship</td>
<td>600 000 €</td>
</tr>
<tr>
<td>VIP and hospitality</td>
<td>120 000 €</td>
</tr>
<tr>
<td>Entrance tickets</td>
<td>120 000 €</td>
</tr>
</tbody>
</table>

#### 3.3.2 Infrastructure Investments – How much has been invested for the event’s sake?

In the past few years the company Oy Levi Ski Resort Ltd has invested in infrastructure required to get and keep the World Cup in Levi. It has been calculated that these investments last about 20 years before the need for a new investment.\(^{16}\)

About one million euros were invested in infrastructure that can be directly attributed to the World Cup. These include among others extra lightning that the races during the World Cup

\(^{15}\) Telephone interview with Roope Ropponen, 2008-12-04, Notes, In possession of the writer

\(^{16}\) Telephone interview with Mikko Saarinen and Jouni Palosaari, 2008-11-26, Notes, In possession of the writer
require, spectator stands, a new snowcannon system and other procedures that directly link to the World Cup slope.17

Additionally about twenty millions have been invested in building the World Cup area, which includes the slope itself, the ski lift and couple other of buildings among them restaurants.18 As these benefit not only the World Cup event, but the area year-around in general, it is harder to decide which percentage should be attributed as costs of the World Cup. I have taken the conservative approach and not included any of it in the economic impact calculation.

3.3.3 Tourism multipliers

To get the total economic impact of the event I used appropriate multipliers.

The multiplier indicates how many times that the injection of original spending circulates through a local economy. As a result of respending, it benefits the local people. Tourists’ expenditures in a destination create new incomes and outputs in the region which, in turn, produce further expenditures and incomes. Below is an example to illustrate the economic concept of multiplier effect.19

The income multiplier considers three levels of impact created by the change in tourist expenditure, which includes direct spending, indirect spending and induces spending.

- Direct impact:
  A tourist stays in a hotel and eats at the food establishment there. The tourist pays for the hotel accommodation, food and beverages. (This is the tourist’s initial spending in a hotel, which creates direct revenue to the hotel).

- Indirect impact:
  Upon receipt of the tourist dollars, the process of respending begins. The hotel makes payments to its employees, suppliers, and so on. (This is the indirect effect of the

17 Ibid.
18 Ibid.
tourist’s initial expenditure, which creates additional income and employment for the local economy).

- Induced impact:
  The employees receive incomes and consume on goods and services. The supplier replenishes its stock makes payments of wages to their employees etc. (This is induced effect of the tourist’s initial expenditure, which creates further economic activities.\textsuperscript{20}

The multiplier in indirect income of tourism has been said to range between 1,2 – 1,5 in Finland.\textsuperscript{21}

\textbf{3.4 Economic Impact}

Table 3.4 shows a detailed overview of the economic calculation. Visitor expenditure on Entrance Tickets for the World Cup was excluded from the calculation as these are already included in the OC budget.

Average expenditure by each group as discussed in chapter 3.2 was multiplied by the amount of persons estimated to belong to that group as already discussed in chapter 3.1.2. To this sum was added the amount the OC had invested in Levi as discussed in chapter 3.3.1. From this was subtracted the yearly amount of the investments (3.3.2), which could directly be accounted to the event. Finally the total direct economical impact, which was some six and one quarter of a million of Euros, was multiplied by 1,2 – 1,5 as discussed in chapter 3.3.3 to get the total economic impact. Hence the total economic impact of the FIS Alpine Ski World Cup in Levi in November 2009 ranges between 7,5 and 9,5 million Euros.

\textsuperscript{20} Ibid.
### Table 3.4

<table>
<thead>
<tr>
<th>VISITORS</th>
<th>Travels within Levi</th>
<th>Food &amp; Beverages</th>
<th>Accommodation</th>
<th>Ski Lifts</th>
<th>Shopping &amp; Souveniers</th>
<th>Other</th>
<th>Total/Person</th>
<th>Persons</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletes and Team Personnel (Finland)</td>
<td>16 €</td>
<td>304 €</td>
<td>103 €</td>
<td>13 €</td>
<td>126 €</td>
<td>47 €</td>
<td>620 €</td>
<td>47</td>
<td>29 140 €</td>
</tr>
<tr>
<td>Athletes and Team Personnel (Abroad)</td>
<td>32 €</td>
<td>232 €</td>
<td>95 €</td>
<td>29 €</td>
<td>135 €</td>
<td>51 €</td>
<td>598 €</td>
<td>377</td>
<td>225 446 €</td>
</tr>
<tr>
<td>Media Representatives (Finland)</td>
<td>28 €</td>
<td>275 €</td>
<td>94 €</td>
<td>9 €</td>
<td>94 €</td>
<td>34 €</td>
<td>539 €</td>
<td>143</td>
<td>77 077 €</td>
</tr>
<tr>
<td>Locals (1,5 %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>539 €</td>
<td>5</td>
<td>-2 695 €</td>
</tr>
<tr>
<td>Media Representatives (Abroad)</td>
<td>21 €</td>
<td>219 €</td>
<td>525 €</td>
<td>0 €</td>
<td>218 €</td>
<td>69 €</td>
<td>1 064 €</td>
<td>96</td>
<td>102 144 €</td>
</tr>
<tr>
<td>VIP and Sponsor Guests</td>
<td>40 €</td>
<td>479 €</td>
<td>237 €</td>
<td>95 €</td>
<td>115 €</td>
<td>119 €</td>
<td>1 085 €</td>
<td>569</td>
<td>617 365 €</td>
</tr>
<tr>
<td>Locals (1,5 %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 085 €</td>
<td>9</td>
<td>-9 260 €</td>
</tr>
<tr>
<td>Event Officials and Members of the OC</td>
<td>18 €</td>
<td>213 €</td>
<td>50 €</td>
<td>2 €</td>
<td>98 €</td>
<td>44 €</td>
<td>425 €</td>
<td>1 077</td>
<td>457 725 €</td>
</tr>
<tr>
<td>Locals (10% of the other 700 Members)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>425 €</td>
<td>70</td>
<td>-29 750 €</td>
</tr>
<tr>
<td>Locals (70% of the 400 man voluntary workforce)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>425 €</td>
<td>280</td>
<td>-119 000 €</td>
</tr>
<tr>
<td>Spectators Lapland</td>
<td>10 €</td>
<td>133 €</td>
<td>106 €</td>
<td>18 €</td>
<td>56 €</td>
<td>36 €</td>
<td>367 €</td>
<td>2 149</td>
<td>788 683 €</td>
</tr>
<tr>
<td>Locals (31 %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>367 €</td>
<td>666</td>
<td>-244 492 €</td>
</tr>
<tr>
<td>Spectators Oulu</td>
<td>11 €</td>
<td>244 €</td>
<td>176 €</td>
<td>25 €</td>
<td>63 €</td>
<td>34 €</td>
<td>571 €</td>
<td>1 736</td>
<td>991 256 €</td>
</tr>
<tr>
<td>Spectators Eastern Finland</td>
<td>92 €</td>
<td>147 €</td>
<td>233 €</td>
<td>8 €</td>
<td>51 €</td>
<td>82 €</td>
<td>622 €</td>
<td>186</td>
<td>115 692 €</td>
</tr>
<tr>
<td>Spectators Western Finland</td>
<td>10 €</td>
<td>267 €</td>
<td>212 €</td>
<td>35 €</td>
<td>105 €</td>
<td>79 €</td>
<td>733 €</td>
<td>1 384</td>
<td>1 014 472 €</td>
</tr>
<tr>
<td>Spectators Southern Finland</td>
<td>39 €</td>
<td>509 €</td>
<td>173 €</td>
<td>42 €</td>
<td>86 €</td>
<td>63 €</td>
<td>943 €</td>
<td>1 787</td>
<td>1 685 141 €</td>
</tr>
<tr>
<td>Spectators Abroad</td>
<td>10 €</td>
<td>220 €</td>
<td>161 €</td>
<td>43 €</td>
<td>88 €</td>
<td>21 €</td>
<td>539 €</td>
<td>258</td>
<td>139 062 €</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 838 006 €</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ORIENTATION COMMITTE**

| OC Expenditure Budget                  | 1 200 000 €  |
| OC Expenditure Financed Outside (100 %)| 1 200 000 €  |
| OC Expenditure on the area (40 %)      | 480 000 €    |
| TOTAL                                  | 480 000 €    |

**INFRASTRUCTURE SPENDING**

| Direct investments on World Cup         | -50 000 €    |
| Indirect investments on World Cup      |             |
| TOTAL                                  | -50 000 €    |
| TOTAL                                  | 6 268 006 €  |

**ECONOMIC IMPACT AFTER MULTIPLIERS**

| Tourism multiplier (high 1.5)         | 9 402 009 €  |
| Tourism multiplier (low 1.2)          | 7 521 607 €  |
4 Comprehensive Discussion

The above results clearly answer the main questions of issue raised and therefore the aim of the study is fulfilled. Below is a summary of the main questions of issue.

The question *How many and what type of visitors does the event itself attract to the area?* is answered 3.1.2. As seen in table 3.4 all in the entire event attracts near 10 000 visitors to the site of which 9 000 come from elsewhere than Levi. Further on in 3.1.3 and 3.1.4 one could look and generalize that a typical visitor is near 40 year old Finnish male or female, travelling with one companion by car to Levi and staying three days and two nights.

Further on the question *How much money do the visitors spend during their stay?* is answered in 3.2. In average the typical visitor spends some 650 Euros in Levi.

Questions *How much money has the organization committee of the event spent on the area, which has been financed outside?* and *How much money has been invested in infrastructure for the event’s sake?* are answered in part 3.3. The OC has invested some 40 % of its 1,2 million euro budget into Levi and on infrastructure there has been large-scale and long term investments in the size of over ten million Euros.

As the main questions of issue are answered, the aim – to calculate the economic impact of the FIS Alpine Ski World Cup in Levi on for the region – is fulfilled and calculated in detail in part 3.4. The immediate benefits in terms of direct income are in the amount of over six million Euros. After tourism multipliers the sum is even more substantial and in the range of 7,5 and 9,5 million Euros.

What was a little bit surprising with the study was both that visitor expenditure was relatively high and that amount of local spectators was smaller in percentage as perceived. This only didn’t surprise me but the General Secretary of the event aswell. Regarding the amount local spectators, the results may slightly vary, because even though face-to-face interviews were even made with locals, self questionnaires may have been filled by locals at a slightly lesser extent. But even this does not accumulate for that big of difference as perceived beforehand.
As I already brought up in the method part of this paper, this is only a case study in words of evaluating the economic impact of a single event, comparison to other studies, may differ because of different methods. The ultimate would be to be able to repeat the research with the same method with different events as done with Richard Coleman’s *Measuring Success 2: The Economic Impact of Major Events*, to be able to get a better comparison.

What I would also like to see is research into how to calculate the expenditure of locals done during a sport event, as now the standard, which both Junod and Coleman follow, is that local expenditure is calculated as deadweight. Meaning with this, they would have made the expenditure in the area sooner or later. I like to question this fact with, that wouldn’t there been a leakage in the region income if they would (and probably will) find a substitute somewhere else? Although even with general research, this would most certainly differ case to case and from urban and rural host regions. Best guess being that x percentage of these locals would contribute with extra expenditure comparing to a ‘normal’ eventless time. With the case of this study as Levi or the town Kittilä is relatively small the result is insignificant for the big picture. But taking an example of the festival crowded summer months of Finland, the locals would without a doubt find another town and substitute to use their money on ‘without that special event in their hometown’ during their short holiday break.

Also further research about calculating how to economically share and attribute infrastructure investments between sport events and the general good of the region they are based, would be needed. Christian Moesch in his *Infrastrukturbedarf von Sport-Mega-Events* gives one approach to the dilemma.

With the case of Levi another economical approach would be both fascinating and crucial, namely the global TV coverage of the event and its value for Levi, Lapland and Finland, as a reported 100 million people follow the event via TV coverage. The monetary value of the TV coverage is humongous and the potential could be maximized with further place-marketing.

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22 Coleman Richard, *Measuring Success 2: The Economic Impact of Major Events*, UK Sport

23 Junod Thomas, *The Economic Impact of the 2005 European Youth Olympic Winter Festival on the Valais Chablais Area of Switzerland*, Institut de recherches économiques et régionales (IRER), Université de Neuchâtel Institut de hautes études en administration publiques (IDHEAP), Lausanne
and other means. It is not only value to Levi, nor for Lapland, but for Finland as whole as the pictures of a white, snowy Finland stream out internationally to millions of TV sets, with potential tourists sitting in front of them.

As for the aim of this study, the results most clearly answer to the main issues and questions. Only a background question about general income would have additionally completed the profile of spectators and have suited the study to examine consumer behavior during the event even more. But as a whole the study gives an answer both to the economic impact of the event as well as profiles the visitors to it.

The results of the economic impact can be used by the Organization Committee as a tool to show and justify future investments with public funding. Additionally the background and origins of the attendees gives a great deal of information for the people behind the marketing and sponsorship strategies of the event.
References

Non-printed Sources

Notes, In possession of the writer

Oral Sources

Interviews with Roope Ropponen, Project Manager for InFront Sports & Media Finland and Head of Marketing for Levi Alpine Ski World Cup (January 2007 – December 2008)
E-Mail: roope.ropponen@infrontsports.com

Interviews with Mikko Saarinen, General Secretary for Levi Alpine Ski World Cup (January 2007 – December 2008)
E-Mail: mikko.saarinen@levi.fi

Interview with Jouni Palosaari, CEO for Oy Levi Ski Resort Ltd (2008-11-26)
E-Mail: jouni.palosaari@levi.fi

Printed Sources

Coleman Richard, Measuring Success 2: The Economic Impact of Major Events, UK Sport

Greig Malcolm S. & McQuaid Ronald W., The Economic Impact of a Sporting Event: A Regional Approach, 43rd European Regional Science Association Congress, Jyväskylä, Finland, August 2003

Junod Thomas, The Economic Impact of the 2005 European Youth Olympic Winter Festival on the Valais Chablais Area of Switzerland, Institut de recherches économiques et régionales (IRER), Université de Neuchâtel
Institut de hautes études en administration publiques (IDHEAP), Lausanne


**Electronic Sources**


### Attachment 1

**SOURCE- AND LITERATURE SEARCH**

### WHAT?

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Synonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports event</td>
<td>Kittilä, Lapland</td>
</tr>
<tr>
<td>Economic impact</td>
<td></td>
</tr>
<tr>
<td>Levi</td>
<td></td>
</tr>
<tr>
<td>Alpine Skiing</td>
<td></td>
</tr>
<tr>
<td>World Cup</td>
<td></td>
</tr>
</tbody>
</table>

### WHY?

*I have chosen the above keywords because they have given me relevant information and data.*

### HOW?

<table>
<thead>
<tr>
<th>Database</th>
<th>Search String</th>
<th>Amount of hits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport Discus</td>
<td>economic impact</td>
<td>691</td>
</tr>
<tr>
<td></td>
<td>economic impact + alpine</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>economic impact + world cup</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>economic impact + sports event</td>
<td>58</td>
</tr>
</tbody>
</table>

### COMMENTS:

*There is loads of material written about calculating the economic impact of sports events. I chose Sport Discus because of it being in a good reputed database and also mainly in English. I also ran into bunch of literature, internet sites and other oral sources about calculating the economic impact of a Sports Event. Most of these sources didn’t make it into this study.*
SURVEY QUESTIONNAIRE

SURVEY of your visit to Levi

www.worldcuplevi.com The results of the survey will be published in a study about the economic impact of the Levi Alpine Ski World Cup.

1. What was the primary reason for your visit to Levi?
   - [ ] The Alpine World Cup
   - [ ] Holiday (e.g. Skiing)
   - [ ] Business
   - Other

2. If your answer was other than the Alpine World Cup, did you plan your trip to Levi so you could attend the Alpine World Cup?
   - [ ] Yes
   - [ ] No

3. In which of the following groups do you see yourself belong to?
   - [ ] Athlete or Team Official
   - [ ] Event Official or Member of the OC
   - [ ] Media Representative
   - [ ] Spectator
   - [ ] VIP or sponsor guest

4. In what kind of group are you traveling with and how many persons belong to your party?Persons
   - [ ] Family
   - [ ] Friends
   - [ ] Co-workers
   - [ ] Other

5. How many days and nights are you staying?Days _____ and Nights _____

6. What was the form of travel and how much money did you use on?
   - I traveled by _________________ to Finland _______________ €
   - I traveled by _________________ to Levi _______________ €
   - Travels within Levi (e.g. Taxi, bus) _______________ €

7. During your visit estimate how much money are you going to spend on…?
   - Food and drink ___________ €
   - Accommodation ___________ €
   - Tickets ___________ €
   - Ski-lifts ___________ €
   - Shopping & Souvenirs ___________ €
   - Other ___________ €

8. Give a rating from 1 – 5 for the World Cup event and for Levi itself?
   - World Cup 1 2 3 4 5
   - Levi 1 2 3 4 5

9. Was this your first visit to Levi or Lapland?
   - This was my _____ visit to Levi and _____ Lapland.

10. Considering your recent visit to Levi, are you going to revisit the area again and would you recommend it to a friend?
    - [ ] Yes
    - [ ] No, because

11. Background Sex: [ ] Male [ ] Female  Age: _____
    - Hometown and –land ____________________________
    - Email: ________________________________