Major Sports Events and Regional Development

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ABSTRACT

Modern sport has acquired enormous economic importance, become a medium of the entertainment industry and taken on a role with regard to health and social policies. Almost all countries try to use sport, especially major events, as tools for boosting local development. There are many examples of cities and their surrounding regions profiting from the Olympic Games, the FIFA World Cup and other events. But governments are also finding that such events have costs and risks. For example. several Olympic host cities have suffered financial losses associated with the organisation of the Games. Although research on the benefits of sports events can be guestioned, because it is often commissioned by clients seeking to justify expenditures to political constituencies, it has led to the identification of certain positive effect areas. These are examined with special attention to the Olympics and the most recent summer Games, those in Beijing in 2008. The author then examines major athletics events, focusing on the different levels of public funding for recent editions of the IAAF World Championships in Athletics, and predicts that future events of this nature will require funding from the national (as opposed to city) level.

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Introduction

n the second half of the last century modern sport became a significant feature of everyday culture. This was evident in Europe and the United States as well as in those regions of Asia and South America with high economic growth rates. Even in the developing and newly industrialising countries sport became an important aspect of modern life. As a consequence, it has acquired enormous economic importance, become a major medium of the entertainment industry and taken on a specific role with regard to health and social policies.

When we use the term "sport" here we mean the recognised, internationally governed activities such as athletics, football, boxing, car-racing, golf, swimming or ice skating. Competitions in these activities have proved to be fascinating to large numbers of people; in their totality they are a mass phenomenon

that has become interesting for almost all areas of a society. Sport has entered into intensive reciprocal relations with the business sector, the mass media, politics, the military, educational systems and even churches. Sport has become a motor of social and economic development. Finally, sport is integrated into processes of functional differentiation, able to act as a significant steering instrument in designing human environments and lives. Everywhere, a give and take with sport can be recognised, and cost-benefit calculations can be made for these exchange relationships.

In the face of such comprehensive importance, it is hardly surprising that almost all countries use sport, especially major sport events, as policy tools to boost the development of cities and regions. But they are also finding that the organisation of major sport events has costs and risks.

To choose one example, the positive effects of sport and its major events may have on the development of a region can be seen in the context of the 2006 FIFA World Cup in Germany. On the basis of a public investment balance, interesting results can be shown (see Table 1). We can see that the investments in the 12 stadia where the matches were played totalled €1.5 billion, that approximately a million foreign ticket holders consumed goods worth between €447 and €805 million during the event period and that, according to an "Ex

post" estimate by the German Federal (Reserve) Bank, the revenues from visitors related to the World Cup totalled €1.5 billion for accommodation, food and drink, and transportation, two-thirds of which were spent by citizens of other European Union countries.

Regarding all the related economic impulses, an increase of the gross domestic product of €8 billion has been calculated for the years between 2003 and 2010 and the effects on the labour market are estimated to be 3,850 additional jobs per year on average, resulting in over 30,000 new jobs in total.

The example of the city of Frankfurt shows that the World Cup tourists' consumption is significantly higher than those of other kinds of tourists (see Table 2). World Cup tourists staying overnight spent an average of €400 per person per day, whereas other tourists, also staying overnight, spent only €174 in 2005. The same effect can be seen concerning day tourists. World Cup day visitors consumed about €130 worth of goods per person per day, which is significantly more than the average of tourists not staying overnight in the previous year of about €31 (KURSHEID, 2002).

What we see here is merely a long-known phenomenon repeating itself: organising major sport events can generate multi-faceted positive economic effects for the cities and regions where they are held. This applies to the big-

Table 1: Economic impacts of the 2006 FIFA World Cup in Germany

Cost-benefit analysis

- 1.5 billionen Euro investments in stadiums in 12 different locations
- 1 million forgein ticket holders consumend goods between 447 and 805 Mio. Euro

Input-output analysis

8 billionen Euro increase of thr gross docmentics produce (2003-2010)
 3,850 additional jobs per year (30,000 new jobs in total (2003-2010)

Ex post estimate German Federal Bank

 - 1.5 billionen Euro for accommodation, food and drinks, transportalion (2/3 citizen of EU countries

	Tourists staying Overnight (€)	Tourists not staying overnight (€)
All tourists in Frankfurt 2005	174.10	31.10
Tourists visiting for the 2005 FIFA Confederation Cup	257.37	55.65
Tourists visiting for the 2006 FIFA	about 400	about 130

Table 2: Average daily consumption expenses of tourists in the city of Frankfurt

gest events, like the World Cup and the Olympic Games as well as to "medium" sized events like the IAAF World Championships in Athletics and even to the championships and regular competitions of sports that are less high-profile but still attractive to certain audiences. However, there are examples of sport events of all sizes that show no economic effects at all, and there are even cases showing that negative effects are also possible.

Assessing the effects of the Olympic Games, has a long tradition and has generated a confusing diversity of results. If we take an overview, the history of the modern Olympics can be regarded as a success story. An ever-increasing number of athletes take part in competitions in an ever-growing number of sports and disciplines and the world-wide interest in the Games grows continuously. In this context we may very well speak of mass effects. In Sydney and Athens, 7.6 and 5.3 million spectators respectively visited the competitions venues (IOC, 2008). The Sydney and Athens Games were watched on television by 36.1 and 34.4 billion people respectively (IOC, 2008), and for the Games in Beijing a 40 billion TV audience was reached. With these figures it is not surprising that organising the Games has become an object of desire in almost all highly developed nations as, clearly, significant economic gains can be made.

A closer look, however, reveals that organising the Games has not always been successful. On the contrary, quite a few organisers have turned out to be losers. Extremely successful organisers have been the cities of Tokyo, Munich, Los Angeles, Seoul and Beijing. The 1964 Games in Japan are commonly linked to the country's economic take off in the

ensuing years. In 1972, a new, open Germany presented itself to the international public, with model facilities and a pioneering infrastructure. The 1984 Games in Los Angeles can be characterised by the feature of "money turnover" as, for the first time, the organisers succeeded in making significant profits. The Games in Seoul in 1988 and Beijing in 2008 are associated with their nations' transformation processes towards open societies.

Such successes are countered by the Games in Montreal (1976), Sydney (2000) and Athens (2004). In Montreal, the hosts' financial losses were almost a total disaster, Sydney and Athens, despite staging successful Games, had reason to complain about an insufficient coverage of the expenses, and a high degree of uncertainty concerning the sustainable use of the legacy sport facilities.

Thus, the more recent development of the Olympic Games seems to be far from exclusively positive, which, in turn, raises the question of to what extent the applicants' great expectations concerning hosting the Games can actually be met. The same questions can be asked about smaller events.

In this regard, we can refer to a large number of studies that have more or less systematically analysed these aspects and problems (GOUGUET, 2002; KURSCHEIDT, 2004; 2006; FANELSA, 2003; JEANRENAUD, 1999; MAENNIG, 1998; 2007; MAENNIG & DU PLESSIS, 2007; PREUSS, 1999; PREUSS & WEISS, 2003; RAHMANN et al., 1998; SCHNEIDER, 1993; GANS, HORN & ZEMANN, 2002; HEYNE, 2006). The findings of these studies, however, are quite controversial. Scientific research undertaken on someone's behalf is questionable,

as often clients are seeking to justify expenditures to political constituencies, and the presented results are problematic as they can be based on rather weak empirical data.

Still, it is necessary to test the expectations of future host city candidates on the rather fundamental question concerning the impact of major sport events. When asking what the benefits of future events might be, we can find some answers by distinguishing eight effect areas that feature in the existing research on the Olympic Games and highlighting the experience of the most recent summer Games, those of Beijing in 2008. Following that, we will look at the funding of major events with a focus on the IAAF World Championships in Athletics. Finally, we will comment on an important point for ensuring the success of major sports events.

Eight Effects Areas of the Olympic Games

1) Olympic Games can have psychological effects

First of all, the Olympic Games have a value in themselves. When they take place, they are once in a lifetime events and people of the host city and country put their primary focus on positive feelings, a positive attitude towards life, the expectation of something special, on community and communication. People in the host city make a balance of the days of Olympic sport they can witness live, seeing these days as days of happiness, counter-balancing the strains and pressure they are exposed to every day life. Some consider such days a specific reward; participating in them is motivating for the future. Consequently the Games have a specific psychological quality that can mean a lot to people. This quality of the Games may also become apparent in the athletes themselves, the officials, coaches, volunteers, international visitors and media consumers. For example, the 2008 Games in Beijing had such effects on a lot of Chinese people and their well-developed national consciousness provided fertile ground for these effects. We can expect similar effects to a greater or lesser degree from London 2012 and future editions of the Games.

2) Olympic Games can have social effects

The Olympic Games are always social events, promoting and enhancing opportunities for people to meet each other, providing opportunities for identification and experiencing pleasure with others and about others on a scale that no other event can offer. This is true for active as well as passive participation. Even though as spectators we participate in the Olympic Games rather passively, this participation allows or forces us to become actively committed. Being able to converse about the events makes us experts, fans, or guests of honour. This social dimension is also manifested in the Olympic Village as well as in the scientific, cultural, musical and artistic events taking place on the occasion of the Games. So far, all editions of the Games have had these effects for large sections of the respective societies.

And the positive social quality is not restricted to the interaction between individuals. Assigning the organisation of the Games leads to a process of internationalisation among the populations in all hosting countries or communities. Training programmes for staff and volunteers increase the potential to interact within the host society and new knowledge about the world outside increases the willingness to deal with foreign cultures.

But it must be said that the Games can also be a reason for annoyance and frustration. They may lead people out of their everyday life into a new reality that is much more open, forcing them to face both familiar and strange things. We may be together with friends and acquaintances during the Games, but we must also deal with unusual situations.

3) Olympic Games can make communication possible

The third effect connected with the Olympic Games is based on their provision of opportunities for public communication. Olympic sport provides spectacular performances, which people talk about, and which are presented in words and pictures in the region as well as globally. The Games are characterised by their uniqueness and no other cultural asset is more

publicly presented. For this reason all daily and weekly newspapers report about them, radio stations comment on them, television and the Internet provide pictures and sound to an extent that only the Football World Cup can match. A specific feature of the Games therefore is the opportunity to generate a positive image transfer hardly seen anywhere else in the world of communication. Importantly, not only are the Games themselves the subject of the messages but also the location where they are held. For example, the communicative range of the Beijing Games was of a dimension far beyond human imagination. TV ratings in the most important markets and traffic on the Internet reached top levels; messages and pictures of Beijing and China went around the whole globe, presenting the country and its people, making billions familiar with the nation's culture, art, and music. We can only expect more of the same for London 2012 and future Games.

4) Olympic Games can have economic effects

A further effect triggered by Olympic Games derives from the nature of the event. At the Games, the athletes' performances are offered as goods on the market of the entertainment industry. This applies even if no appearance or prize money is being offered. Only as spectators expect spectacular performances are they willing to pay high admission fees. If the athletes' sporting performances are outstanding, great profits can be achieved; if they are mediocre, they may easily lead to economic losses. But the Games are not only marketing, they are also consumption events. In this respect the spectators on location consume in the same way as those watching or following them throughout the world on TV screens or the Internet. Thus, financial turnover takes place, and a growing number of industries wanting to take advantage of the Games can be observed. Transportation, hotels, the catering trade, tourism and other businesses all profit. And through tax revenues the state also gains.

Partnerships like those between individual

corporations and the organisers of the Games can also be guite important. Thus, the Beijing organising committee, BOCOG, calculated a financial profit of at least \$16 million US dollars just as a result of its contracts with partners, sponsors and suppliers. The sponsoring contracts with business partners (such as Adidas. Bank of China, China Mobile and Volkswagen) generated revenues of over one billion US dollars (KARLE, 2008). Altogether, the revenues from advertising may amount to about five billion US dollars for the 16-month period before and during the Games (DAN, 2008) and experts estimate a total profit exceeding that of the 1984 Games in Los Angeles, which was \$224 million US dollars.

Consequently, those corporations that secure for themselves privileged means of communication through the Games are likely to gain in particular. With the help of the media they succeeded in using the Beijing Games to enhance their own recognition, attractiveness and to promote a positive image transfer. The eleven partner corporations paid between \$40 and \$100 million US dollars each and each of the ten sponsors paid between \$20 and \$30 US dollars. Especially foreign companies succeeded in securing better recognition and easier market access for themselves.

Moreover, the BOCOG profited significantly from the sale of marketing and TV rights by the IOC. For example, the 12 top sponsors paid \$866 million US dollars for the period between 2005 and 2008 (the Torino and Beijing Games) to the IOC, which, in turn, gave half of that sum to the BOCOG (40% went to the international federations and 10% remained with the IOC). The IOC gave 49% of the gains from TV rights, which amounted to \$1.737 billion US dollars, to the BOCOG (IOC, 2008).

Furthermore, positive effects for the Chinese business sector in the wider sense can be calculated. It can look back on many years of economic growth, which, to some extent, was also boosted by assigning the Games to Beijing. Consequently, in 2007, China's sport market had already reached a financial volume of \$40

billion US dollars; the state sport lottery had a turnover of three billion US dollars, and in 2008, sport consumption increased to over six billion US dollars. Sport maintained its share of 1% of the gross domestic produce (GDP) (DAN, 2008).

5) Olympic Games can have positive effects on the labour market

With regard to all past Olympic Games it can be maintained that they have had positive effects on the labour market. In Beijing this became evident like in no other place so far, as almost all Olympic sport facilities had to be built new. For this reason. Beijing became a place with thousands of temporary jobs for migrant workers. For the preparation of the Chinese Olympic team, specially trained and competent staff was employed. An increasing number of foreign experts were also hired with contracts over several years, the BOCOG recruited foreign expert personnel to obtain the management know-how of recent Olympic Games. Under the leadership of a central team of 57 people more than 4.000 staff members in 30 departments dealt with the strategic and operative organization of he Games (BO-COG, 2008a). However, the effects of Olympic Games on the labour market should not be over-estimated, as they merely indicate a peak in the period before, during and after the Games, but remain without any further consequences concerning the long-term development of the labour market.

6) Olympic Games can generate positive structural-political effects

Probably the most important effects caused by Olympic Games are the ones we call structural-political. Organising Olympic Games triggers effects that may enhance a positive social development in the respective hosting nation. This applies to the constantly required modernisation of the infrastructure as well as the positive influence on mental and social structures within the population. With regard to the Beijing Games, the new airport, the extension and new development of roads, railways and other means of transportation, the new construction and modernisation of several neigh-

bourhoods, new hotels, the ecological restoration of entire city districts and the provision of leisure facilities are to be mentioned here.

In this context we must not neglect the new awareness concerning active environmental protection triggered by the Games. In Beijing the environmental protection agenda was of particular importance, and the highest priorities were the reduction of pollution caused by industry, the burning of soft coal and road traffic and the provision and protection of safe drinking water sources. But the development and implementation of a national health-protecting sport agenda and the sustainable use of the Olympic sport facilities after the Games was also emphasised (BOCOG, 2008b).

7) Olympic Games can have effects on innovation in architecture, technology, arts and culture

Since the beginning of the Games, architecture, technology, arts and culture have been partners of the Olympic movement. The Games are a show-case for architects and the development of television has gone together with the development of the Olympics; whenever modern Games have take place they have been a stage for music, literature, movies and the most famous artists. This feature has been consistent and Figures 1 to 3 provide a small sample of examples.



Figure 1: Olympic Stadium Munich 1972



Figure 2: Pablo Picasso

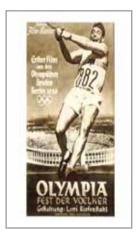


Figure 3: Movie Arts

8) Olympic Games can stabilise political systems

It may be understandable in that the respective hosting cities and, in most cases, the related political systems, have tried to represent themselves at an international level through the Olympic Games and therefore the Games have always also been connected with efforts to gain political benefits. At the same time, organising the Games has almost always been connected with diverse negative effects. Scandals, abuse of Olympic ideals, boycotts and boycott attempts, corruption and financial impropriety, criminal acts and, above all, political abuse of the Games have become a part of their history. Therefore, we have to make a balance of the political benefits a host can expect.

Examining the case of the 2008 Games in Beijing in detail we see that, first of all, the government of China certainly succeeded in profiting from the Games. It used the Games to demonstrate Chinese power, efficiency and productivity and it managed to present itself as a legitimate partner of the international community of nations. The result was a manifestation of the government's political claims towards the world as well as its own people. It accomplished this by influencing the organisation of the Games significantly in terms of funding, personnel and the programme. The preparation of the Games indicated that there were few if any financial limitations for government and that a financially profitable event was not the supreme priority. The focus was clearly on using the world-wide media coverage of the Games for a positive image transfer. The government is, of course, closely tied to the Communist Party, which claims the leading role in politics and thus the Games had an important internal legitimacy function towards the Chinese people, as both material progress and China's international recognition can be presented as the party's achievement.

However, the political and economic effects China wished for were questioned even before the Games and whatever was achieved was diluted by the unrest in Tibet and the subsequent international protests, which caused a lot of damage for both the Chinese hosts and the IOC.

A second important political function of the 2008 Games was the positive effects they had on sport in China. High-performance sport received enormous financial, material, personal and programmatic support from the government with the aim of laying the foundations for the Chinese athletes to be able to become the most successful team at the Games. For 17,000 selected squad athletes large investments were made; one Chinese gold medal costing about €70 million. It has to be assumed that government grants in favour of high-performance sport were much higher than in the countries competing with China. It also has to be kept in mind that, prior to the awarding of the Games to Beijing in 2001, only a few Olympic sports (for example, Badminton and table tennis) had been popular in China.

However, although the Chinese sport federations probably profited from the government's increasing attention regarding Olympic sport, we can only speculate about the exact financial and personal support they and sport science have received, as no precise figures have been published. And such an assessment is made even more difficult by the fact that the federations as well as sport science are formally and officially independent, even if, as a matter of fact, they are closely connected to the government's general administration for sport in personal union (Digel, Miao & Utz, 2003). To what extent these uncalculated positive effects for sport in general and the federations in particular will remain cannot be foreseen today.

Chinese science, and especially sport science, has profited significantly from the increasing social importance of high-performance sport. Various scientific disciplines having contributed to the Chinese athletes' success in Olympic sports have been recognised as relevant for society and have been supported accordingly (Digel, Miao & Utz, 2003).

Finally, in view of Beijing, which, beside Shanghai, is the most important province within the People's Republic of China, equalling in size a European Union member nation like Spain, we can recognise a number of additional political benefits. In the so-called "Beijing Olympic Action Plan" political areas were defined in great detail that were to be influenced by means of hosting the Olympic Games: the introduction of a national sport and health-protecting agenda, the improvement of the standard of living among Beijing's population, a sustainable use of the Olympic sport facilities, control of environmental pollution, development and management of public transportation systems as well as the creation of a positive environment for cultural tourism, all these are examples of this action plan (cf. BOCOG, 2008d).

The Case of Athletics

When looking at the selected positive effects of the Olympic Games, it is hardly surprising that today many modern regional development policies are characterised by aims to integrate major sport events and attempts to bind these events to the area in focus. For this reason, more and more cities all over the world are willing to bid for and make enormous investments in order to host the Olympics. Since 1984 the number of applicant cities for the Games has steadily increased and the investments made has risen to quite significant levels. Something similar can be observed in football with regard to the FIFA World Cup and UEFA's European Championships and to a lesser degree in athletics.

From the point of view of the event right holders, this development is to be regarded as positive. From the point of view of the bidding cities and countries, however, it is also attached to many risks and it is to be recognised that the willingness to take these risks differs extremely widely from place to place. This can be illustrated with a very recent example, the application for the 2011 IAAF World Championships in Athletics. A look at the budgets of the four applying cities (Barcelona, Brisbane, Daegu and Moscow) reveals significant differences in public financial support (see Table 3).

A comparison of these budgets with the one passed by the city government of Berlin for the organisation of the 2009 Championships, or putting the Berlin budget in relation with that of the 1993 Championships in Stuttgart and that of the 2002 European Championships in Munich clearly indicates that identical big sport events may draw on extremely diverse forms and levels of political commitment.

The question why public spending differs so significantly from one organising city to another certainly requires more precise analysis. Certainly we know that priorities for integrating major sport events into a comprehensive concept of regional development vary greatly. But there are apparently nations where it is

Table 3: Budgets of the IAAF World Championships in Athletics between 1997 and 2013, including unsuccessful candidates for 2011 and 2013, and the 2002 European Championships (in million \$ or € as indicated)

Host City	Public funds or grants	Total Cost	Proportion of public funds of total cost
	\$	\$	
Stuttgart 1993	2.0	8.0	25.00 %
Athens 1997	21.2	31.1	68.17 %
Seville 1999	6.4	21.8	29.36 %
Edmonton 2001	33.3	57.5	57.91 %
Paris 2003	28.5	66.1	43.12 %
Helsinki 2005	5.3	35.8	14.80 %
Osaka 2007	34.4	80.0	43.00 %
Berlin 2009	20.0	35.0	57.14 %
Moscow 2011	56.8	75.0	75.75 %
Brisbane 2011	67.1	89.2	75.28 %
Deagu 2011/2013	44.9	70.1	64.07 %
Barcelona 2013	44.0	70.1	62.77 %
European Champions	hips	€	
Munich 2002	0	7.23	0 %

common to make enormous financial investments in favour of such events. In some cases, existing tax laws are, at least temporarily, cancelled in order to make the organisation of these events possible. Other nations, however, are not willing to make investments of this kind, consequently risking no longer being able to compete with the others and thereby realise the possible benefits in the future.

Table 3 contains the budgets of the World Championships in Athletics between 1997 and 2013. The share of public grants comprises tens of millions of US dollars, sometimes making up to 75% of the total budget. This leads us to predict that in the future such big events will require funding from the national (as opposed to city) level.

Conclusion – Ensuring the Success of Major Sport Events

Hosting major sport events, and in particular the Olympic Games, is increasingly an element of city and regional development policy but is attached to great risks. Unsuccessful Olympic Games and the related losses are certainly possible. A large number of causes, varying from case to case, can be identified. One of them is of particular importance and shall be emphasised here.

Major sport events will become a success only if the process of identification of both the national and the international spectators with the sporting competitions is strong. This requires that spectators in the stadium and the world-wide media audiences identify with the athletes. In a world undergoing the current

processes of globalisation, this identification will still have national features for the foreseeable the future. If, however, national identification is doubtful and uncertain, declining spectator interest will have to be expected as a consequence.

The process of identification in sporting competitions also depends on basic conditions of the event. If these cause conflict prior to the competition period if the public's attention is not primarily focused on the sport but rather on an environment dominated by con-

flicts. This is particularly true for the Olympic Games, because of the amount of media attention they attract. If the Olympic Movement fails to present the peace-enhancing character of the Games, then the Olympics may turn into an activity with dangers too great for potential hosts to accept.

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REFERENCES

BOCOG (2008a). *About us.* Access on April 15, 2008, under http://en.beijing2008.cn/47/66/column211716647.shtml.

BOCOG (2008b). *Beijing 2008 Green Olympics: Progress v. Challenge*. Access on April 15, 2008, under http://en.beijing2008.cn/12/12/greenolympics.shtml.

BOCOG (2008c). Registration of Gamestime volunteers winds up. Access on April 28, 2008, under http://en. beijing2008.cn/volunteers/news/latest/n214290309.shtml.

BOCOG (2008d). *Beijing Olympic Action Plan.* access on April 29, 2008, under http://en.beijing2008.cn/59/80/col-umn211718059.shtml.

DAN, Z. (2008). *The olympic effect?* SportBusiness, 132 (3), 62-63.

DIGEL, H.; MIAO, J. & UTZ, A. (2003). *Hochleistungssport in China*. Weilheim/Teck: Bräuer.

FANELSA, D. (2003). Regional wirtschaftliche Effekte sportlicher Großveranstaltungen: Die Internationalen Galopprennen Baden-Baden. Baden-Baden: Nomos.

GANS, P.; HORN, M. & ZEMANN, C. (2002). Alternative Konzepte zur Erfassung regionalwirtschaftlicher Wirkungen von Sportgroßveranstaltungen. In M.-P. Büch, W. Maennig & H.-J. Schulke (Hrsg.), Regional- und sportökonomische Aspekte von Sportgroßveranstaltungen. Köln: Sport und Buch Strauss.

GOUGUET, J. J. (2002). Economic impact of sporting events: what has to be measured? In C. Barros, M. Ibrahimo & S. Szymanski (Hrsg.), *Transatlantic sport: the comparison of North American and European Sports* (pp. 152-170). Cheltenham; Northampton: Edward Elgar.

HEYENE, M. (2006). Die ökonomischen Effekte von Fußballweltmeisterschaften: das Beispiel Fußball-WM 2006. Eine Kosten-Nutzen-Analyse und Contingent-Valuation-Studie zur WM 2006. Marburg: Tectum.

IOC (2008). Olympic Marketing Fact File 2008. Lausanne: IOC.

JENRENAUD, C. (Ed.) (1999). The Economic Impact of Sport Events. Neuchâtel: Editions CIES.

KARLE, R. (2008). Die Firma mit den goldenen Ringen. *Horizont Sport Business, o. J.* (1), pp 8-11.

KURSCHEIDT, M. (2004). *Erfassung und Bewertung der wirtschaftlichen Effekte der Fussball-WM 2006*. Bochum: o. V. 2004.

KURSCHEIDT, M. (2006). The World Cup. In W. Andreff & S. Szymanski (Eds.), *Handbook on the Economics of Sport* (pp. 197-213). Cheltenham, UK & Northampton, MA: Edward Elgar.

MAENNIG, W. (1998). Möglichkeiten und Grenzen von Kosten-Nutzen-Analysen im Sport. *Sportwissenschaft*, 28 (pp 3-4), 311-327.

MAENNIG, W. (2007). One year later: A re-appraisal of the economics of the 2006 soccer World Cup. *Hamburg Working Paper Series in Economic Policy*, 10.

MAENNIG, W. & DU PLESSIS, S. (2007). World Cup 2010: South African economic perspectives and policy challenges informed by the experience of Germany 2006. *Contemporary Economic Policy*, *25* (4), pp 578-590.

PREUSS, H. (1999). Ökonomische Implikationen der Ausrichtung Olympischer Spiele von München 1972 bis Atlanta 1996. Kassel: Agon-Sportverlag.

PREUSS, H. & WEISS, H.-J. (2003). Torchholder Value Added. Der ökonomische Nutzen der Olympischen Spiele 2012 in Frankfurt Rhein/Main. Eschborn: AWV Verlag

RAHMANN, B.; WEBER, W.; GROENING, Y.; KURSCHEIDT, M.; NAPP, H.-G. & PAULI, M. (1998). Sozioökonomische Analyse der Fußball-Weltmeisterschaft 2006 in Deutschland: Gesellschaftliche Wirkungen, Kosten-Nutzen-Analyse und Finanzierungsmodelle einer Sportgroßveranstaltung. Köln: Sport und Buch Strauß.

SCHEIDER, U. (1993). Stadtmarketing und Großveranstaltungen. Berlin: Duncker & Humblot.