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EVALUATION OF THE LEGACY OF A SPORTING EVENT: A CASE OF EUROBASKET 2007-2013

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ABSTRACT. *In post-industrial society where the sports industry is expanding and the contribution of sports into the economics is greater, more and more Lithuanian and foreign scientists conduct research in this field. Some authors analyse implementation of the results of the event plans and the feedback received after the event (Jago, Shaw 1998; Preuss, 2011), others focus on the economic, socio-cultural, technological and other benefits after the event (Barget, 2001; Barget et al., 2007; Balciunas et al., 2014; MacAdam, 2011) yet others focus on analysis programs of sporting events (Huang, 2011). However, although it is important to analyse the likely benefits of the event, most benefits are revealed only after the event, when it is possible to assess its legacy. In view of the studies alternatives of the research field, this paper is analysing the evaluation of the legacy of sporting events. The main problem encountered in the analysis of the legacy of sporting events, is a lack of scientifically-based evaluation methods. In view of this problem MacAdam (2011) created the evaluation methodology conception of the economic legacy of a sporting event MERLIN* (Multi sport event legacy return index), which enables the evaluation of the legacy of a sporting event, as a numerical value of the expression for the first time. It is important to note that for existing weaknesses MERLIN* is not popular methodology of evaluation of the legacy of a sporting event but it is recognised as an appropriate methodology concept, which can be developed through additional studies. In view of that, this article explores the MERLIN * methodology concept and analyses its strengths and weaknesses. On the basis of expert interviews, the legacy value of the European Men's Basketball Championship for 2007-2013 in different countries is evaluated and compare . Also based on the expert assessment results, the disadvantages of MERLIN* methodology are observed and suggestions are made on the improvement of its evaluation criteria.*

KEYWORDS: sporting event, legacy, MERLIN, legacy index.

JEL classification: M29; L83; Z20.

Introduction

When analysing the economic legacy of sports, it is very important to distinguish between professional and amateur sport, however, sporting events are another separate field to be distinguished. According to the studies (Kesenne, 2005), today more and more national governments give priority to sporting events. Events are funded in order to maximise the positive legacy of the event and its contribution to the economy.

Analysis of the economic benefits is a very relevant subject of research and topic of discussion in the field of sport and sports event management. This process is very complex and extensive and needs a precise result, substantial financial and human resources (Lee, 2001).

Preuss (2004) admits that it is very difficult and improper to claim that a sporting event brings only profit or loss to the host country. The real benefits of a sporting event include infrastructural, social, cultural and political legacy that cities or countries get from the organised sporting events. According to Hughes (2013), in order to fully assess the benefits of the legacy of an organised sporting event, it is necessary to analyse recent organisation of this event within the period of 2 to 18 years.

However, after analysing the scientific literature (Barget, Gouquet, 2007; Preuss, 2011; Macadam, 2011; Balčiunas *et al.*, 2014; Moreno *et al.*, 2016; Dos-Santos *et al.*, 2014) researching the legacy of sporting events, it was noted that scientists do not hold a unanimous opinion on the evaluation of the methodology of the legacy of a sporting event, thus today there is no universally recognised tool which allows measurement of the expression of the legacy of a sporting event in a numerical value. In view of this problem, MacAdam (2011) created MERLIN* (Multi sport event legacy return index), which is the evaluation methodology conception of the economic legacy of a sporting event that enables evaluation of the legacy of a sporting event to be expressed in a numerical value. It is important to note that for its existing weaknesses MERLIN* is not a popular methodology of evaluation of the legacy of a sporting event but it is recognised as an appropriate methodology concept, which can be developed through additional studies. In view of this, the present article explores the concept of the MERLIN* methodology and analyses its strengths and weaknesses.

On the basis of expert interviews, the legacy value of the European Men's Basketball Championship for 2007-2013 in different countries is evaluated and compared. Also based on the expert assessment results, the disadvantages of MERLIN* methodology are observed and suggestions are made on the improvement of its evaluation criteria.

Object of the research - legacy of a sporting event.

Aim of the research - to evaluate the legacy of Eurobasket 2007-2013.

Research tasks:

1. To reveal the relation between a sporting event and its legacy.
2. To identify the most appropriate methods of evaluation of the economic legacy of a sporting event and prepare a theoretic model of economic legacy of a sporting event.
3. To analyse the MERLIN* methodology concept, and evaluate and compare the legacy of "Eurobasket 2007 – 2013" sporting events on the basis of this methodology.
4. Following a survey of experts, create a new suggestion which lets it adapt to MERLIN* methodology

Methods applied:

- Scientific literature analysis (in order to reveal the relation between a sporting event and its legacy, identify the most appropriate methods of evaluation of the economic legacy of a sporting event and prepare a theoretic model of the economic legacy of a sporting event).
- statistical analysis (was used to analyse the European Basketball Championships 2007-2013 highlighting the economic aspect which includes investment and budgets related to the analysis of a sporting event)
- expert survey (used to improve the MERLIN* methodology with regards to the European Basketball Championships 2007-2013).

1. The Relationship between a Sporting Event and its Legacy

Benefits of sporting events received by governments of host countries depend on the type of sporting events as different events bring different economic benefits or downturn not only during the event but after the event as well. Before discussing the aspects of short-term and long-term benefits of a sports event, it is important to discuss the concept of a sporting event.

Welsh Assembly Government (2010) notes that sporting events do not have a unified definition, however, a variety of different definitions may be found in the scientific literature. Surginienė (1998) who carried out the analysis of organisation methods of sports events and

highlighted that an event is a uniform combination of words, actions and views, which is limited by time and space, and is dedicated to a particular theme which is expressed by appropriate means and methods. Scientific literature provides different classification of events. Sporting events are distinguished as a separate group of events.

The White Paper on Sport of the European Commission (European Commission, 2007) states that sport plays a crucial role in enabling social phenomena, which is an important contribution to the European Union's strategic objectives of solidarity and prosperity. The Olympic ideal of developing sports is to promote peace and understanding among nations and cultures as well as to promote education of young people. In their analysis of this kind of sporting events, Kerzaitė, Melnikas (2014) claim that a sporting event is a socially-oriented event, which is organized for performance of various sporting activities whilst promoting a healthy and active lifestyle. To conclude, it might be stated that due to ambiguity of the concept of a sporting event there exist different classification of sporting events in the scientific literature (Hughes, 2013; Robinson, France, 2011; Davies *et al.*, 2010; Barget, Gouquet, 2007; Wilson, 2006; Jago, Shaw, 1998).

Jago, Shaw (1998) point out that sporting events can be divided into normal (not planned) and specific (planned) events. Special events can be non-core, mostly involving minor and major events that attract large audience and great attention of the media. They also promote the traditional culture of a country and require large investments and may affect the economic legacy. Robinson, France (2011), having performed the analysis of the typology of sports events claim that most major events are divided into single or international and are held in a permanent location, or they can be recurring, international and changing the location. According to Hughes (2013), the main events can be attributed to the mega-events group (mega-event), because both categories of events attract large-scale interest of an international audience and the media attention. Also, both of these categories of events have social, economic, political, environmental and cultural environment impact on the country which organises sporting events of both types. Such events as the Olympic Games, the FIFA World Cup, Eurobasket etc. are assigned to the category of such events.

According to Barget and Gouquet (2007) who performed the analysis on terminology of sporting events argue that sporting events can be divided into two groups: random (World Cup moto-cross race, the Grand Prix etc.) and regular (national and international championships) events. Both event groups are organised by the sports federations or private groups of a host country. Random events are divided according to their scope into simple, ordinary, traditional, large (mega) and extraordinary events.

With regard to the concept of a sporting event and classification, it can be stated that a sporting event is a special and massive event which attracts large audiences, great media attention and promotes the culture and traditional awareness of the host country. It requires a lot of investment, often repetitive, ongoing international exchange of local events that could affect the economy of the country and the economic legacy.

Balciunas *et al.* (2014), based on Lee (2001) claim that the analysis of economic benefits is a relevant object of the researches and a subject of discussion in the spheres of sport management and sport event management as it is a very complicated and extensive process requiring large financial and human resources to determine its final result (see *Table 1*).

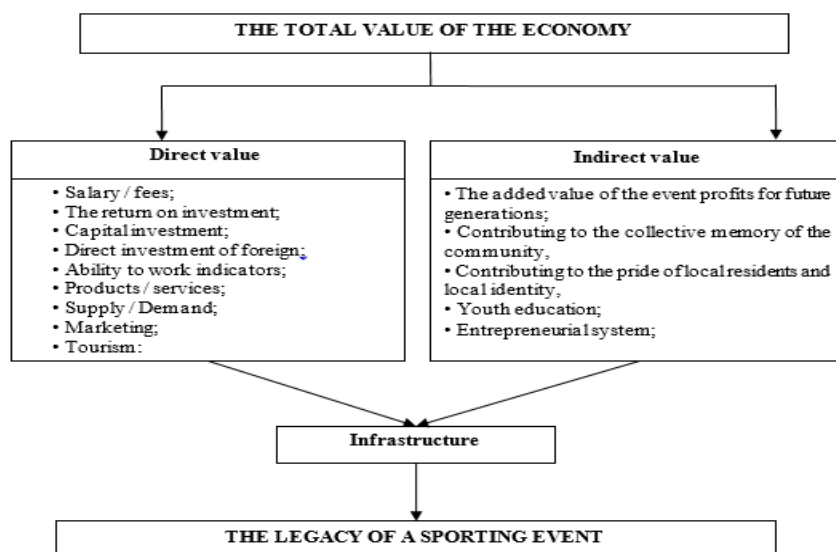
Table 1. Terms and interpretation of the legacy of a sporting event

Author	Year	Terms and interpretation
Hughes	2013	The “Legacy” meant the “Heritage“ in the French state language while in English “Legacy” meant the “Legacy” However, in French, “Legacy” includes a value greater than the contribution of the past to the present while in English “Legacy” includes more contemporary contribution to the future.
Cashman	2006	The “Legacy” includes the economy, infrastructure, information and education, social life, politics and culture, sports, symbols, memory and history.
Gratton & Preuss	2008	The “Legacy” is planned or not planned, positive or negative, tangible or intangible phenomenon which is felt after a sporting event. The “Legacy” is divided into the three categories: planned legacy, positive legacy and negative legacy.
Horne	2007	Legacy can be social, cultural, environmental, political, economic, sports and known or unknown.

Source: created by authors.

According to the Olympic Congress, the “Legacy” concept has been used in two languages. In French the “Legacy” meant the “Heritage” and in English the “Legacy” meant the “Legacy”. Both values are associated with past events, phenomena, aspects that determine the present and the future at the same time. However, in French, the “Legacy” includes the contribution of the past to the present, while in English the “Legacy” includes present contribution to the future (Hughes, 2013).

As previously mentioned, as the term “Legacy” has many meanings, it is necessary to provide categorisation of the legacy. Cashman (2006) said that legacy can be identified as six categories: the economy, infrastructure, information and education, social life, politics and culture, sports, symbols, memory and history. Preuss (2004) believes that the “Legacy” should be distributed more widely and he states that legacy can be divided into three sub-categories: planned legacy, positive legacy and negative legacy. Gratton, Preuss (2008) said that the “Legacy” is planned or not planned, positive or negative, tangible or intangible phenomenon which is felt after a sporting event. Horne (2007) believes that there can be social, cultural, environmental, political, economic or sports legacy.



Source: created by authors referring to Hughes, 2013; Preuss, 2011; Barget, Gouguet, 2007; Balciunas *et al.*, 2014; Cashman, 2006.

Figure 1. Theoretical Model of the Evaluation of the Legacy of a Sporting Event

With regard to the categories of legacy proposed by different scholars, 3 main groups of the legacy can be distinguished:

- 1) economic legacy (directly felt in the value), the measured material gain or decline, which party gets in organising an event (rate of return on investments);
- 2) social-cultural legacy (intangible benefits received by local residents);
- 3) infrastructure legacy (event required level of infrastructure and its utilisation) (see *Figure 1*).

In order to properly assess the legacy of a sporting event it is highly important to perform a detailed analysis and evaluation of the event revenues, expenses resulting from the return on investment, foreign direct investment benefits (Balciunas *et al.*, 2014), the employment indicators, imports and exports of goods and services, supply and demand statistics (Barget, Gouguet, 2007). It is also important to assess marketing tools of the host country (Preuss, 2011) undertaken in order to promote the event so as to determine their effectiveness in the present. It is even important to assess the tourism situation of the host country and the impact that the event had for present of tourists.

Also, in order to measure the legacy of a sporting event it is important to analyse the indirect value of the socio-economic impact, such as the added value of the event profits for future generations, contributing to the collective memory of the community, the pride of local residents and local identity, youth education and entrepreneurial system development (Hughes, 2013).

The third segment of the evaluation of a sporting event is the legacy of its infrastructure. It is one of the most important criteria of the legacy of a sporting event. In order to properly evaluate the event, it is important to review investments of the host country infrastructure, and the efficiency of investment. It is also important to assess for what purpose sports infrastructure is in use today, as well as its profitability, whether the infrastructure meets the needs of users (Cashman, 2006).

To sum up, it can be said that the model of evaluation of the legacy of a sporting event will be of benefit to the foreign and Lithuanian sports federations and associations, municipalities and cities of Lithuania and will create opportunities for better exploitation of sports infrastructure.

The developed model of evaluation of the legacy of a sporting event is theoretical and is recommended to be applied in practice. Depending on the context in which the model will be used (type of a sporting event, its forms or categories), different dependency relationships between variables are likely to be given in the model, and the importance of different variables should be distinguished. It can be assumed that the model structure may vary in terms of the economic legacy of sporting events, for example those of basketball and swimming.

2. Research Methodology and Arrangement

The study was applied to a single-stage expert evaluation. Experts were sent an electronic questionnaire. The questionnaire consisted of three question blocks (see *Table 2*). The 1st question block was intended for the expert identification. It comprised 4 questions, including 1 closed question and 3 open questions. The 2nd question block was intended for identification of criteria necessary to properly evaluate the European Men's Basketball Championship. It comprises 11 questions taken from the MERLIN* methodology. By means of Likert scale, the experts had to evaluate the event criteria in the scale of "unimportant" to "very important" in terms of the economic legacy. The third block was prepared in the same

manner as the second block. It was also comprised of 11 questions taken from the MERLIN* methodology. Experts had evaluated the Legacy of Eurobasket organised in their country by evaluating each of the criteria according to the scale 0 – very low level, 3 – average level, 5 – very high level. (Legacy value -max = 55).

Table 2. Characteristics of the questionnaire items

Block	Purpose of questions	Number of questions	Form of a question	Source
1st question block	Identification of the experts	4 questions	1 closed question; 3 open questions;	Baležentis and Žalimaitė (2011)
2nd question block	Identification of criteria, necessary to properly evaluate the European Men's Basketball Championship	11 questions - MERLIN*	Likert scale – 1 completely unimportant, 5 very important	MacAdam (2011)
3rd question block	Evaluation of the European Men's Basketball Championship 2007-2013 according by MERLIN* index	11 questions - MERLIN*	MERLIN* scale 0 – very low level 3- average level 5- very high level	MacAdam (2011)

Source: created by authors referring to Baležentis, Žalimaitė, 2011; MacAdam, 2011.

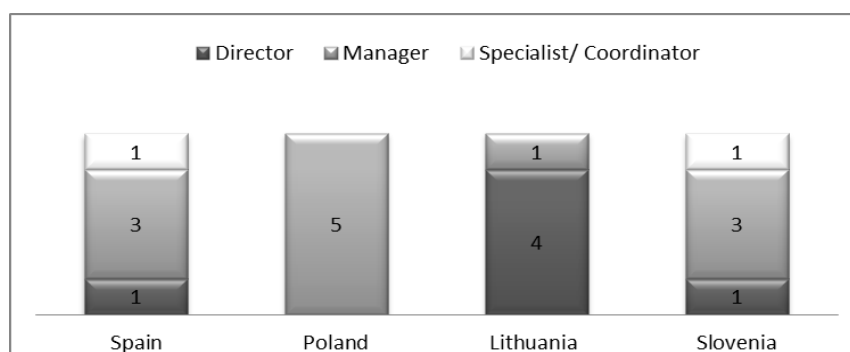
MERLIN* criteria: event equipment before the event, legacy capital in the country, event program implementation results, increased partnership, equipment legacy, search, employment and training of volunteers, programs implementation for target groups, sponsorship/ support maintenance and event publicity, country rating, intangible assets, government investment.

According to the statistical calculations, Cronbach's Alpha of the questionnaire, prepared for the research, equals to 0.686, thus indicating that the questionnaire has been prepared properly and that all questions reflect the research concept.

Reliability was assessed by *Cronbach alpha coefficient*, which calculated correlation basis of the questions constituting the questionnaire (Čekanavičius, Murauskas, 2009). According to the authors, the obtained *Cronbach's alpha* value of a well-composed questionnaire should be greater than 0.7

The questionnaire was sent by email to Basketball Federations of 4 different countries (Spain, Poland, Lithuania, Slovenia) which organised the European Men's Basketball Championship. 30 expert assessments were received, but only 20 assessments were chosen for the research. Some assessments were not included in the study because they were provided by persons who did not meet the requirements of the expert. In this paper an expert is considered to be a person who:

- Has a degree and experience of at least 3 years in the sports industry sector;
- Occupies the position of a director, manager or administrator / coordinator;
- Contributed to the organization of European Men's Basketball Championship.



Source: created by authors.

Figure 2. Distribution of Experts by Country and Occupied Position

Figure 2 shows that during the research, 20 experts were surveyed in total. The 5 most experienced experts who best met the evaluation criteria were selected from each country. 5 experts were chosen from the Spanish Basketball Federation – 1 expert who holds the position of the head of the basketball federation, 1 expert who holds the position of a marketing specialist and 3 experts who hold positions of communication, publicity and event organisation managers. 5 expert evaluations were received from the Slovenian Basketball Federation, all of them met the sampling criteria. 3 experts from Slovenia held different managerial positions: they were managers of arena fan zones, volunteers and sales, while 1 expert occupied the position of arena CEO and another expert held the position of an event coordinator. 5 expert evaluations were also received from the Polish Basketball Federation, all of them met the sampling criteria. Polish experts held positions in the spheres of ticket sales, arenas availability, event management, office (sports federation) administration and publicity. 5 experts who best met the sampling criteria were chosen from the Lithuanian Basketball Federation – 4 experts held the positions of directors and 1 expert held the position of a manager/organiser. The results revealed that the average working experience of all experts in the sports sector was 13 years.

3. Results and Analysis

According to statistical data, the experts concordance over the importance of MERLIN* evaluation criteria was **0.131**. This result revealed the fact that the experts who participated in the study could not reach a strong consensus on which evaluation criteria were most important in measuring the economic legacy of the European Men's Basketball Championship. Such a result could have been determined by certain factors, such as demographical indicators of the experts. First of all, the uneven distribution of results was determined by the fact that experts were from different countries and thus they were influenced by sociocultural indicators, geographical and economic situation of the represented country, as well as different work experience and different positions during the European Men's Basketball Championship. To sum up, it might be claimed that the lack of agreement among the experts over the importance of MERLIN* evaluation criteria confirms the scientific hypothesis that there is no universally accepted and applied methodology for the evaluation of sporting events. Therefore, it is acceptable that opinions about this issue are different. In this regard, it might be concluded that MERLIN* methodology proposed by MacAdam (2011) is a good basis for the development for the adaptation of new methodologies of evaluation of the economic legacy of contemporary sporting events.

Experts disagreement over the MERLIN* evaluation criteria confirm the scholars' (Bob, Swart, 2011; Huang, 2011) hypothesis that there is no universally accepted methodology for the evaluation of all sporting events. Therefore, it is acceptable that expert opinions on the matter are different.

Table 3. MERLIN* criteria evaluation by experts from different countries and grand mean of evaluation, N=20

MERLIN* criteria	Expert evaluation means by country				AVERAGE VALUE	Ran-king
	Spain	Poland	Lithuania	Slovenia		
Event equipment	4,4	4,0	3,2	4,4	4,0	2
Legacy capital of the country	4,3	4,4	4,2	5,0	4,5	2
Event programme implementation results	4,0	3,2	2,8	3,8	3,6	3
Programme implementation for target groups	3,7	4,4	3,6	4,0	3,9	3
Increased partnership with other countries	4,4	3,8	3,4	4,6	4,1	2
Search, employment and training of volunteers	4,1	4,6	3,0	4,6	4,1	2
Sponsorship/support maintenance	4,7	4,6	4,8	4,2	4,6	1
Event promotion	5,0	4,4	4,6	4,4	4,6	1
Country's rating	3,0	3,6	4,0	4,2	3,7	3
Intangible assets	4,7	4,2	3,6	4,2	4,2	2
Government investment	4,9	4,2	4,8	5,0	4,7	1

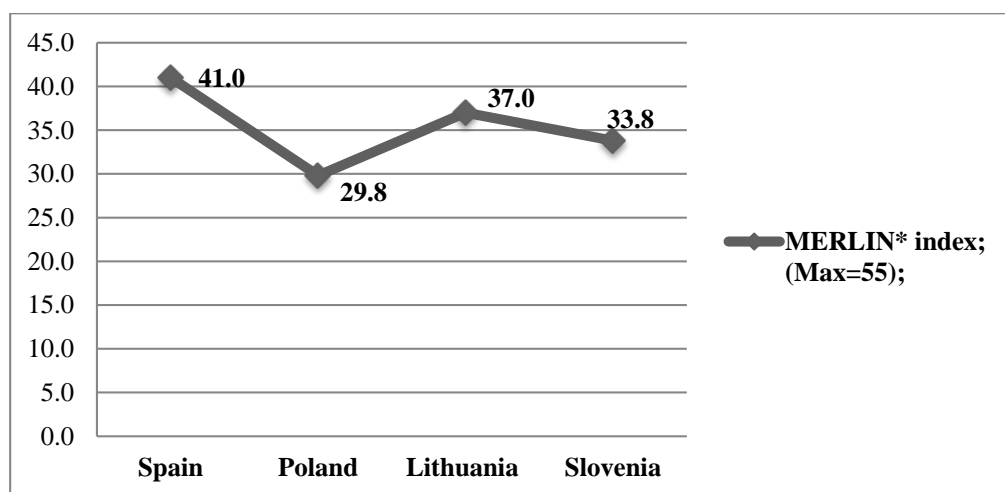
Notes: *Statements evaluated in points 1- completely unimportant, 2- unimportant, 3- neither important nor unimportant 4- important, 5- very important.

Source: created by authors.

Based on the research results (see *Table 3*), it might be presumed that all criteria proposed in the MERLIN* methodology are important when evaluating the economic legacy of a sporting event, however they are not equally important. Out of eleven criteria, which were proposed to be evaluated by MacAdam (2011), the basketball experts noted the 4 most important criteria, which have the greatest influence on the economic legacy of a sporting event, that is: Government investment (M=4,7), Sponsorship/support maintenance (M=4,6), event promotion (M=4,6), legacy capital of the country (M=4,5). Less important criteria that also have influence on the legacy evaluation of the European Men's Basketball Championship are as follows: increased partnership with other countries (M=4,1), search, employment and training of volunteers (M=4,1), intangible assets (M=4,2), event equipment (4,0).

In the expert evaluations MERLIN* criterion correlation relationship is inconspicuous and ranges from 0.112 to 0.518. Even though there is a moderate statistical relationship, which shows that all the MERLIN* evaluation criteria of the legacy are linked and nondescript from the overall concept of the study, however, not all criteria are equally important for estimation of the legacy of the event.

Having evaluated the importance of the evaluation criteria of the legacy of European Men's Basketball Championship, the experts were asked to answer the third block questions in order to evaluate the legacy level of Championships in Spain, Poland, Lithuania and Slovenia, where 0 – very low level, 1 – low level, 3 – average level, 5 – high level. (MAX=55).



Source: created by authors.

Figure 5. Evaluation of European Basketball Championships according to MERLIN* Index

On the basis of basketball experts' evaluations, *Figure 5* provides evaluation according to MERLIN* index (Multi Sport Event Return Legacy Index), which shows the legacy level of European Men's Basketball Championships in different countries (Spain, Slovenia, Poland and Lithuania). As shown in *Figure 5*, the highest level legacy is considered to be in Spain 8 years after "Eurobasket 2007" (41.0 points out of 55 points). According to MERLIN* results, the legacy value of the championship in Spain is of the highest level as compared with Poland, Lithuania and Slovenia. Lithuania is in the second place by the legacy value. MERLIN* results confirm that the legacy value of the championship, which took place in Lithuania, is the second highest (37.0 point of 55), whereas the legacy of the championship, which took place in Slovenia, is very similar to that of Lithuania's. Slovenia is in third place by the legacy as compared with other analysed countries, which organised the European Men's Basketball Championship (33.8 points out of 55). The obtained results showed that the lowest level legacy is considered to be in Poland. According to MERLIN* index calculations, the championship in Poland is evaluated by 29.8 out of 55,0 points. Taking into account the results obtained, it might be claimed that while evaluating championships that took place in Spain, Poland, Lithuania and Slovenia according to MERLIN* indexes, the rank of a country that organised European Men's Basketball, Spain is in first place, Lithuania – in second place, Slovenia is in third place and Poland is in fourth place.

Summarising these results, it can be said that all MERLIN* criteria proposed by MacAdam (2011) are important in assessing the legacy of Men's Basketball Championships from 2007 to 2013, but by varying degrees and not enough for the optimal assessment of the legacy of the European Men's Basketball Championship. According to MERLIN* calculator, the highest level of the legacy is felt in Spain, followed by Lithuania, Slovenia is in third place and Poland is fourth place. However, although MERLIN* is considered an appropriate methodology for the assessment of the concept of sporting events in the past, it is not widely recognised as a reliable tool for evaluating the legacy. MERLIN* is not a reliable tool for assessing the legacy of a sporting event as most of the proposed legacy evaluation criteria are vague and do not fully meet all criteria for measuring the legacy of the event, and the evaluation criteria are not of equal importance. In this context, it can be said that the MERLIN* methodology could be improved by including additional evaluation criteria related to the sports infrastructure, human resources and their exploitation.

The study reveals MERLIN* deficiencies and confirm MacAdam (2011) findings that the MERLIN* methodology provides a practical assessment tool for checking a series of variables, which ensures the quantification of the legacy of major sporting events. However, although an attempt was made to assess the variables that make up the index, it was observed that additional adjustment of the legacy evaluation criteria is required by reducing the subjective elements in order to create a more reliable legacy measurement tool, not only for the country's cultural, social and political, economic legacy, but also for the legacy of infrastructure development. The legacy of sporting events is not measured by objective criteria, thus it is likely that the methodology is incomplete and with variable results.

Conclusion

1. A Sporting event has a significant impact for economic legacy. Direct economic benefits of the legacy manifests itself through infrastructure and its utilization, return on investment and added value to the state budget. Indirect economic benefits of the legacy manifests itself through social and cultural aspects. Negative sporting events economic legacy benefits manifests itself through not pay back investment in the short term after the event, and the lack of mega-events, which creates little added value to the country's budget.

2. An analysis of the scientific literature suggests that the main Assessing the methodology is based on theoretical models. According to a sporting event on the local sector and its importance to the economy, sports events of general economic valuation and the European basketball championship economic contribution of increasing opportunities "models were created theoretical sporting event the legacy model, which consists of three variables: felt good value, do not feel value and after the sporting event the rest of the infrastructure. The theoretical sporting event economic the legacy the assessment model has been applied in the preparation of a sports event empirical economic the legacy valuation model that has been used in MERLIN * modification techniques.

3. To sum up the results, it might be concluded that MERLIN* (Multi Sport Event Return Legacy Index) provides insufficient evaluation of the legacy of a sporting event. The evaluation of the Spain, Poland, Lithuania and Slovenia European Men's Basketball Championships, show that the highest level of heritage value is felt in Spain, the average level of perceived value of the inheritance Lithuania and Slovenia, and the lowest value of the inheritance is felt in Poland.

References

- Balčiunas, M., Jasinskas, E., Koiso, E. (2014), "Economic Contribution of Sports Event: Analysis of Eurobasket 2011 Example", *Transformations in Business & Economics*, Vol. 13, No 32, pp.42-55.
- Barget, E. (2001), "L'evaluation economique des spectacles sportifs", *Unpublished doctoral dissertation, Limoges*, [Economic evaluation of sporting event, in French].
- Barget, E., Gouguet, J.J. (2007), "The total Economic value of sporting Events", *Theory and Practice. Journal of sport economics*, Vol. 8, No 2, pp.165-182.
- Bob, U., Swart, K., (2010), Sport Events and Social Legacies. *Alternation*, pp,72-95.
- Cashman, R. (2006). *The Bitter- Sweet Awakening: The Legacy of the Sydney 2000 Olympic Games*. Sidney Walla Walla Press, pp. 311
- Čekanavičius, V., Murauskas, G. (2009), "Statistics and its applications" (3), Vilnius, TEV, [Statistika ir jos taikymai, in Lithuanian].
- Commission of the European communities (2007), "White paper of sport", Brussels, SEC 934.

- Davies, L., Coleman, R., Ramchandani, G., (2010), "Measuring attendance: issues and implications for estimating impact of free-to-view sports events", *International Journal of Sports Marketing and Sponsorship*, Vol. 12, No 1, pp.11-23.
- Dos-Santos, M.A., Vveinhardt, J., Calabuig-Moreno, F., Montoro-Ríos, F. (2016), "Involvement and Image Transfer in Sports Sponsorship", *Engineering Economics*, Vol. 27, No 1, pp.78-89
- Gratton, C., Preuss, H. (2008), "Maximizing Olympic Impacts by Building Up Legacies", *International Journal of the History of Sport*, Vol. 25, No 14, pp.1922-1938.
- Horne, J. (2007), "The Four Knowns of Sports Mega – Events", *Leisure Studies*, Vol. 26, No 1 pp.81-96
- Huang, L., (2011), "Research on Effect of Beijing Post-Olympic Sports Industry to China's Economic Development", *Energy Procedia*, Vol. 5, pp.2097-2102
- Hughes, K.H. (2013), *Sport mega event and a legacy of increased sport participation: An Olympic promise or an Olympic dream?*, Metropolitan University for the degree of Doctor of Philosophy.
- Jago, L., Shaw, R. (1998), "Special Events: a conceptual and differential framework", *Festival Management and Event Tourism*, Vol. 5, No 2, pp.21-31.
- Kerzaitė, M., Melnikas, B. (2014), "International sporting events: marketing improvement. Science - Future of Lithuania", *Business in XXI century*, Vol. 6, No 1, pp.8392, [Tarpautiniai sporto renginiai: rinkodaros tobulinimas. Mokslas – Lietuvos ateitis, in *Lithuanian*].
- Kesenne, S. (2005), "Do We Need an Economic Impact Study or a Cost-Benefit Analysis of a Sport Event?", *European Sport Management Quarterly*, Vol. 5, No 2, pp.133-142.
- Lee, S. (2001), "A Review of Economic Impact Study on Sport Events", *The Sport Journal*, Vol. 4, No 2, pp.32-39.
- MacAdam, J.L. (2011), *Legacy Planning for Major Multi-Sport Events*, Sport Management, Faculty of Management, Laurentian University.
- Moreno, F.C., Hervas, J.C., Pomar, J.N., Valantine, I., Butiene, I.S. (2016), "The role of perceived value and emotions in the satisfaction and future intentions of spectators", *Engineering Economics*, Vol. 27, No 2, pp.221-229.
- Preuss, H. (2004), *The Economics of Staging the Olympics. A Comparison of the Games 1972-2008*, Cheltenham, Glos, Edward Elgar.
- Preuss, H. (2011), "The conceptualisation and Measurement of mega sport event legacies", *Journal of Sport and Tourism*, Vol. 12, No 3-4, pp.207-222.
- Robinson, S., France A. (2011), "Comparing sport marketing of amateur team sports to professional team sport", *Journal of Applied Business Research*, Vol. 9, No 1, pp.47-61.
- Surginienė, L. (1998), *Event organization methodology*, Vilnius, LTSR moksl. metod. kultūros centra, [Renginių organizavimo metodika, in *Lithuanian*].
- Welsh Assembly Government, (2010), *Event Wales: A Major Events Strategy For Wales 2010 – 2020*. Cardiff, Welsh Assembly Government, available at, <http://gov.wales/docs/drah/publications/Tourism/100928eventstrateng.pdf>, referred on write the date.
- Wilson, R. (2006), "The economic impact of local sport events: significant, limited or otherwise? A case study of four swimming events", *Managing Leisure*, Vol. 11, No 1, pp.57-70.

SPORTO RENGINIO PALIKIMO VERTINIMAS: „EUROBASKET 2007–2013“ ATVEJIS

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SANTRAUKA

Poindustrinėje visuomenėje plečiantis sporto industrijai ir didėjant sporto indėliui į ekonomiką, vis daugiau Lietuvos ir užsienio mokslininkų analizuoja sporto renginių palikimą. Vieni autoriai analizuoja renginio planų įgyvendinimo rezultatus bei vertina gautą grįžtamąjį ryšį po renginio (Jago, Shaw, 1998; Preuss, 2011), kiti sutelkia dėmesį į gaunamą ekonominę, socialinę-kultūrinę, technologinę ir kitokią naudą po renginio (Barget, 2001; Barget ir kt., 2007; Balciunas ir kt., 2014; MacAdam, 2011), treči skiria dėmesį sporto renginių programų įgyvendinimo analizei (Huang, 2011). Viena vertus, svarbu analizuoti tikėtiną naudą prieš renginį. Kita vertus, labiausiai nauda atsiskleidžia tik po renginio, kada galima įvertinti rezultatus.

Straipsnio objektas – sporto renginio ekonominis palikimas. Kelta problema: kokios metodikos leistų tiksliau įvertinti sporto renginio ekonominį palikimą? Tyrimo tikslas – įvertinti sporto renginio ekonominį palikimą „Eurobasket 2007–2013“ atveju. Siekiant tikslo, suformuluoti uždaviniai atskleisti sporto renginio sąsajas su palikimu, identifikuoti tinkamiausias sporto renginio ekonominio vertinimo metodikas ir parengti teorinį sporto renginio palikimo modelį, išanalizuoti MERLIN* metodikos koncepciją bei ja remiantis įvertinti ir palyginti „Eurobasket 2007–2013“ sporto renginius, ir pagaliau, remiantis ekspertų apklausa, identifikuoti pasirinktos metodologijos privalumus ir trūkumus, į juos atsižvelgus pateikti tobulinimo siūlymus. Tyrime taikyta mokslinės literatūros analizė, statistinė analizė, ekspertų apklausa.

Atlikus tyrimą, galima teigti, kad sporto renginiai turi didelės reikšmės ekonominiam palikimui. Tiesioginė sporto renginio ekonominio palikimo nauda atsiskleidžia infrastruktūra, jos panaudojimu, investicijų atsiperkamumu ir pridėtine nacionalinio šalies biudžeto verte. Netiesioginę ekonominio palikimo naudą parodo socialiniai, kultūriniai aspektai.

Išanalizavus mokslinę literatūrą galima teigti, kad pagrindinės sporto renginių palikimo vertinimo metodikos yra pagrįstos teoriniais modeliais. Remiantis modeliais „Sporto renginio poveikis vietos sektoriams ir jo svarba ekonomikai“, „Sporto renginio bendros ekonominės vertės įvertinimas“ ir „Europos krepšinio čempionato ekonominis indėlio didinimo galimybės“, buvo sukurtas teorinis sporto renginio palikimo modelis, kurį sudaro trys kintamieji: juntama vertė, nejuntama vertė ir po sporto renginio likusi infrastruktūra. Sudarant empirinį sporto renginio ekonominį palikimo vertinimo modelį, pasitelktą modifikuojant MERLIN* metodiką, taikytas minėtas teorinis modelis.

Pagal MERLIN* metodiką įvertinus Europos vyrų krepšinio čempionatus, organizuotus Ispanijoje, Lenkijoje, Lietuvoje ir Slovėnijoje, konstatuotina, kad aukščiausio lygio palikimo vertė yra juntama Ispanijoje, vidutinio lygio – Lietuvoje ir Slovėnijoje, žemiausio – Lenkijoje.

Tyrimas atskleidė, kad MERLIN* vertinimo kriterijai, apimantys socialinius, kultūrinius politinius ir ekonominius palikimo aspektus, yra nepakankami siekiant optimaliai įvertinti sporto renginių palikimą. Pateikti kriterijai yra nevienodo stiprumo, abstraktūs ir skirtingai suprantami. Atsižvelgus į gautus rezultatus, MERLIN* metodiką būtina modifikuoti – suvienodinti kriterijus, apsvaistyti jų reikšmę, įtraukti naujus kriterijus, susijusius su infrastruktūra ir žmogiškaisiais ištekliais.

REIKŠMINIAI ŽODŽIAI: sporto renginys, palikimas, MERLIN, palikimo indeksas.