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Investments in Sport

Recommendations to policy-makers

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1 Motivation

Investments in sport infrastructure require delicate decisions as sometimes their benefits are neither monetary nor immediately visible. However, as the project Investment in Sport (iSport) shows, there are substantial economic returns connected to the construction of such facilities. Table 1 reports the results of investments of 1 million euros in sport infrastructure in the partner states. The normalization to 1 million euros is necessary since costs for “typical” infrastructure may differ from region to region. Data come from real facilities, so they reflect different cost structures to a certain degree but are not representative in the statistical meaning. “Direct” effects are those which are generated directly in the course of planning and constructing the site and may include costs for architects, construction, electric and other equipment. “Total domestic” effects augment the direct effects by effects in the supply network of the directly involved companies. Construction companies need sand, water, and logistics, furniture of the facility may include wood, rubber, or fabricated metals. If the companies producing these intermediate goods and services are in the Member State that proceeds with the sport investment, they are included in the “Total domestic” effects. If they are somewhere else in the European Union, they are included in the “Total EU” effects. The investment impact is analysed in terms of Gross Value Added (GVA) and employment.

Table 1: Economic effects of investing 1 m euros into sport infrastructure.

		AT	CY	HR	LT	LU	PT	UK
GVA effects in thousand €	Direct	389	371	401	541	338	266	511
	Total domestic	747	674	720	790	387	727	834
	Total EU	881	804	839	886	563	861	915
Employment effects	Direct	6.2	11.3	19.9	28.1	2.7	7.3	16.7
	Total domestic	11.5	19.3	32.3	42.2	3.0	22.5	22.6
	Total EU	14.0	20.9	34.5	44.2	5.5	24.6	23.8

Source: data provided by national institutions. Own calculations by SpEA.

According to Table 1, if a sport infrastructure worth 1 million euros is constructed in Lithuania, a GVA worth 790,000 euros can be expected to be generated domestically – including 541,000 euros in the directly connected companies, and the rest in the domestic supply chain. The effect on the whole European Union is calculated as 886,000 euros.

The same logic can be applied to employment. Using the 1 million euros, 42.2 persons are expected to be employed in Lithuania for one year. If the infrastructure takes longer to be completed, the effect

is stretched over time. For the full effect, another two persons are expected to be employed in the rest of the EU-27 for one year.

If costs are a multiple of 1 million euros, the effects can be multiplied roughly with the same factor. Thus if 500,000 euros are spent, effects will be around half of those given in Table 1. Please note that these are just the effects of the infrastructure's construction, not the operation phase.

2 Considerations and recommendations

2.1 Economic and Social Effects

While a sport infrastructure will have many more effects – social integration and inclusion, joy, wellbeing, skill acquisition through volunteering, and many more – the empirical results show that they also have substantial positive economic effects on GVA and employment, which in turn can help to “pay back” the cost of creating the infrastructure. Given these facts, the decision-making process needs to consider, besides the sport-related benefits, the economic and the social value of sport as well.

Traditionally, as demonstrated by the iSport research, in sport infrastructure projects the economic value of sport has been underestimated. It is also more generally true for sport as a whole, as was shown by (SpEA et al. (2012)) and (SpEA and SIRC (2018)).

In most media, benefits are communicated in terms of money. Evaluations of sport investment should, where possible, follow suit, in order to make the results comparable to other research and to make the policy makers more comfortable with the investment decisions.

2.2 Economic – Impact and the Public Hand

Sport is associated with predominantly positive effects (injuries being certainly an outstanding exception). However, the positive effects of sport on health outweigh the negative ones (see Alt, Binder, Helmenstein, Kleissner, and Krabb (2015) for an example in the German context). Further, sport has not only positive effects on sport participants, but also on:

- a) the company employing him or her by having a healthier employee,
- b) the society by inclusion and integration effects, and
- c) the economy by benefitting from a more productive labour force.

Since the above are all benefits, but do not carry any costs, a market failure occurs. In this case, sport has so-called “positive externalities” on those who do not carry the costs, associated with participation in new sport facilities. This leads to too little sport infrastructure being constructed through the mechanism of a free market, compared to the economic optimum.¹ In such a case, the public hand must intervene to mitigate or even completely remove the market failure, otherwise, sport infrastructure will be insufficient.

¹ On the other hand, negative externalities (as would be in the case of pollution) lead to an over-production of the product. See (Mas-Colell, Whinston, and Green (1995)) for the economic details.

2.3 Economic – Infrastructure

Developing the previous point further, infrastructure types which finance themselves are provided – at least to a certain extent – by the competitive market. Together with the previous argument of positive externalities, to achieve an optimum supply, the remaining facilities must be provided by the public hand. This would allow the population the range of sport possibilities which optimizes the benefits of participation for the individual as well as for the overall economy and society. In the optimum, the sum of positive effects will offset the costs of infrastructure provided by the public hand. Because of this lack of investment, many local communities have very few sport facilities, which are mostly occupied by schools, sport clubs or private groups paying to play recreational matches, leaving not enough time for everyone to use them as they would like to or need to. For example, when there are sport competitions, there are no open hours for training. In other cases, swimmers have to train early in the morning, until 7 a.m., because the facilities then open to the public. Hence, a shortage of infrastructure, both in numbers and quality, creates a direct problem of accessibility to sport facilities.

2.4 Economic – Supply and Demand Considerations

It may sound trivial, but one should only construct sport infrastructure which is demanded. There are several considerations here:

- a) Demand for the infrastructure must be shown to exist both now and in the future. Future demand is very important and should be associated with expected demographic changes. Older people most likely do different sports than younger ones. Sport participation of different age groups should be studied (see for example the Special Eurobarometer of the European Commission and TNS Opinion & Social (2014)). An infrastructure providing room for both age groups would be a safer decision.
- b) Providing a sport infrastructure influences sport participation. This was the case in the UK in the 1970s where increasing infrastructure was translated into rising participation. In a modern mature sport economy, a direct increase of participation does not necessarily follow from investment in infrastructure. Targeting specific sports and population segments has risen in importance.
- c) Align sport infrastructure in a region with the other available sport facilities there. Spatial planning is done in every country, thus there are plans and strategies within which the sport infrastructure should be embedded.
- d) Sport infrastructure must be reachable by public and private transportation.

- e) Multipurpose infrastructure may increase capacity utilisation without raising the costs proportionally. Check if such use is possible and strongly consider its realisation.
- f) Allocate different users at different times. In the morning, when demand by private persons often is lowest, schools could use the infrastructure. Afternoons and evenings are usually demanded by clubs and private persons.
- g) Try to smoothen demand over the days of the week. Weekends show different demand patterns than working days.
- h) The same is true for different times of the year. Many sports can be practiced outside when it is warm but need a special infrastructure during the winter.

There are many caveats to be avoided. The most obvious is that competition for the most attractive infrastructure in the region leads to too many or too large infrastructures being built. Finally, some of them must be abandoned which is a worst-case scenario. A similar situation occurs if the municipalities do not coordinate themselves and duplicate already existing infrastructure or interfere otherwise with each other's development plans.

2.5 Economic – Employment and Sustainability

Past research has shown that sport is employment intensive. The results of (SpEA and SIRC (2018)) demonstrate that in 27 out of the 28 Member States sport generates more employment than GVA (in relation to their economy-wide totals). The current research shed more light on the construction of sport infrastructure and shows that, especially, Member States with low labour-productivity generate a lot of employment in the process. With more than 20 employees per million Euros investment, employment generation is highest in the Baltic States as well as in Romania, Bulgaria, and Hungary. This effectiveness to increase employment can be used to counter unemployment and to achieve Europe 2020 goals, especially during periods of economic crisis or following the current pandemic.

In general, smaller countries with open economies import more goods and services. In these cases, the investment goods necessary for the sport infrastructure generate their beneficial effects abroad to a higher degree. However, some of these small economies manage to produce a high share of those goods domestically, ensuring a greater degree of self-sufficiency around sport investment within a region or a state. Therefore, policy makers should consider investing in sport infrastructure during periods of economic downturn, as a tool of increasing employment, and endeavour to produce as much as possible of the necessary investment goods within the state or the region under consideration.

2.6 Economic – GVA Growth

Although sport generates more employment than GVA, the impact on the latter must not be underestimated. As can be seen in Table 1, the effect of the directly involved companies is in most cases substantially smaller than the total domestic effect. This means that the domestic supply-networks play an important role in generating GVA. In fact, sport-related construction is found to be one of the key-sectors of the sport industry and has a sectoral multiplier of 2.62 within the European Union (if GVA worth one euro is generated directly, another 1.62 euros of GVA are generated in the European supply network).²

The fact that the supply networks benefit so much can be used as a tool to stimulate the whole economy by constructing sport infrastructure. Doing so is a way of ensuring that a large share of the investment is turned into GVA domestically or within the European Union.

2.7 Economic – Sport Participation and the Public Hand

Other than examining the supply and demand conditions for investment, one should also consider the operational aspects, especially the availability of coaching and cost of future maintenance which is likely to be very considerable. In their assessment, policy makers should take into account that if an investment can help to increase sport participation (from the field of non-participants) then the generated income for the public hand (e.g., in terms of VAT) could partially offset such costs. In fact, this economic benefit, through VAT, is so large that all economic impact studies of sport in the nations of the UK since the 1980s have shown that the UK government is making money out of sport. These revenues are maximised when new participants are attracted in sport, requiring new set of sport gear, membership in clubs and fitness centres etc.

Therefore, policy makers in their evaluation of an investment should consider the availability of coaching in the future and the expense of maintaining the facility. They should also incorporate the effect on sport participation in the country or the region, and what that means in terms of state revenues in the form of VAT.

2.8 Economic – Best Practices

To learn from your own and from other experiences, it is necessary to have a good documentation and a clear and transparent decision process. Member states should publish their reports evaluating

² The average multiplier within the EU is 1.85, meaning that for an average euro GVA, another 85 cents of GVA are generated in the supply network – much less than for sport construction!

sport investment. This would allow policy makers to draw conclusions, derive best practices, and apply them.

Such conclusions can be derived both by intranational and international comparisons. Through international comparisons many best practices and bad examples can be identified. For comparisons, policy makers should try to identify Member State or regions with comparable sport and economic profiles.

2.9 Economic – Other Effects

As was noted before, economies with low labour productivity benefit the most. Decision makers in such countries should therefore pay a lot of attention to constructing sport infrastructure.

Regional, national, and international statistics offices have to be supported in their effort to collect and publish more detailed data on sport economics. Far-reaching research is not possible otherwise. Open and clear documentation of the construction process provides that data and thus allows further research.

2.10 Social - Inclusion

Construction of small- to medium-size inclusive and family friendly facilities give added confidence to non-participants to engage in sport. In this scenario, “Inclusive” primarily means that a person who is not normally active would feel comfortable enough to walk into a facility which is designed in a way that it is inviting to a wider demographic of users. Decision makers are encouraged to consider a design-led approach to include safe, open, socially inclusive, and interactive spaces, featuring a wide range of equipment aimed at all ages, abilities, and genders. People who are physically inactive are much less likely to use a facility that they might perceive as ‘elitist’. For example, many 3G sports pitches – that people pay to play on – are largely used by those who already have active lifestyles and are physically and mentally confident. Research has shown that the inactive people are the hardest to reach. Less active people may also suffer from lower self-esteem and less likely to travel to and use a large facility. Most current investment is used by existing participants and the focus must shift to the inactive population. This would also maximise economic and social returns.

2.11 Social - Integration

Planning for an investment should take a holistic approach and have the whole community in mind. Sometimes what a community requires is not big projects that generate large amounts of GVA, but small projects that cater for families even in an informal way. There are many examples of facilities being built that look the same and offer little innovation or opportunity for social integration. For

example, almost all multi use games areas are designed and built as rectangular fenced areas on tarmac surfaces, featuring two football goals and basketball hoops within the 'cage'. These spaces are largely frequented by a small demographic of teenage boys. The reason for this is because the facilities are not designed to look inviting or safe enough for other groups to enter (for example: girls, mothers and grandparents looking after children). If a project is built with the entire community in mind, it is more likely to be used by a wider demographic. It is paramount that when a new construction is promoted as 'multi use' it actually caters for several user groups. This is achieved by authorities moving away from requesting 'like for like' quotations and designs from manufacturers and designers, which result in cheap investment that look the same and cater for the same group of people every time. Decision makers taking a more design-led approach and collaborating with community groups and playground designers / companies should lead to the creation of more innovative, inclusive, and active spaces which will in turn result in better social integration.

In today's world, with social media platforms such as Facebook, TikTok and Instagram playing a huge part in everyday lives, people have collectively become (and are further becoming) a lot more visual than ever before. Therefore, it is important that the "outdoors", in this case sports areas and recreation grounds, are aesthetically pleasing and inspiring enough for people to want to visit.

The next generation of children and adults will also be integrated into the newly formed and quickly evolving 'metaverse', an online world where colour, shape and innovation have no boundaries. The online world will essentially inform and influence designers in the 'real world' so that there is a link between the two worlds. In a nutshell, the public sector investment needs diversification and the style of constructions requires revolutionising to keep up with modern mentality and cultural trends to succeed in tackling inactivity and generating economic success as well as social integration. Consumers are using visual criteria and the projects approved should look amazing and welcoming as well as functional.

3 Literature

Alt, Raimund, Astrid Binder, Christian Helmenstein, Anna Kleissner, and Philipp Krabb (2015): *Der Volkswirtschaftliche Nutzen von Bewegung*. Österreichische Bundes-Sportorganisation (BSO) und Fit Sport Austria.

https://www.sportaustria.at/fileadmin/Inhalte/Dokumente/Initiative_Sport/Studie_Volkswirtschaftlicher_Nutzen_Sport.pdf.

European Commission, and TNS Opinion & Social (2014): *Special Eurobarometer 412: Sport and Physical Activity*. Sport and Physical Activity. European Commission, Directorate-General for Education Culture and Directorate-General for Communication. <https://doi.org/10.1007/978-1-137-06127-0>.

GHK (2010): *Volunteering in the European Union*. Educational, Audiovisual & Culture Executive Agency (EAC-EA), Directorate General Education and Culture (DG EAC).

Mas-Colell, Andreu, Michael Dennis Whinston, and Jerry R Green (1995): *Microeconomic Theory*. Vol. 1. Oxford university press New York.

SpEA, and SIRC (2018): *Study on the Economic Impact of Sport through Sport Satellite Accounts*. European Commission. <https://doi.org/10.2766/156532>.

SpEA, SIRC, Statistical Service of the Republic of Cyprus, Meerwarde Sport en Economie, Federation of the European Sporting Goods Industry, and Ministry of Sport and Tourism of the Republic of Poland (2012): *Study on the Contribution of Sport to Economic Growth and Employment in the EU*. SportsEconAustria. European Commission, Directorate-General Education and Culture. <http://ec.europa.eu/sport/library/studies/study-contribution-spors-economic-growth-final-rpt.pdf>.

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