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The Olympics and elite sport policy: Where will it all end?

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Abstract

The Olympics and elite sport policy: Where will it all end?

The aim of the paper is to explore the consequences of the intensification of competition among the most successful countries at the Olympic Games – the sports powers – for participating countries, potential host countries and the IOC. The paper begins by tracing briefly the emergence of increasingly sophisticated and expensive elite sports systems and then examines some of the characteristics of these systems paying particular attention to the extent to which selected major sports powers and medium powers have developed a competitive advantage in a relatively narrow range of sports. Data for the paper was collected through the analysis of a range of financial and sport performance data and the analysis of political indices of democracy. The main findings of the paper are 1) identifying sports in which a country has a relative competitive advantage remains crucial for the continuing success of major sports powers and is becoming increasingly important for medium sports powers; 2) the cost of maintaining a country's relative position in the medals table is considerable and arguably locks countries on to a path from which it is difficult for them to deviate; 3) the increasing concern with providing security for the Games may have a deterrent effect on the willingness of more open democratic countries to bid to host the Games; and 4) the IOC faces a potential challenge in providing the majority of countries that attend the Games, but which do not win a medal, with a return on their investment in Olympic sport.

Keywords: Olympic Games, security, competitive advantage, democracy, hosting

The Olympics and elite sport policy: Where will it all end?

Over the last thirty years or so there has been much discussion of the future of the Olympic Games. In the 1970s and 1980s one of the key concerns was the rapid growth in the scale of the Olympic Games measured mainly by the steady increase in the number of athletes taking part which had risen from just over 6000 in 1976 (Montreal) to over 9,600 in 1988 (Seoul), the number of events which had risen from 198 in Montreal to 237 in Seoul and the number of National Olympic Committees sending athletes which had risen from 92 to 159 over the same period. By the late 1980s it was acknowledged by the International Olympic Committee that steps had to be taken to limit the size of the event. However, it was not until the election of Jacques Rogge as president in 2001 that limits on the number of athletes (to around 10,500) and events (to around 300) were introduced and even then the number of accredited persons (such as media, volunteers and athlete support staff) continued to increase from approximately 196,000 in 2000 to just under 350,000 in 2008. Although the continued growth in the scale of the Games, especially the summer Olympics, poses substantial challenges to the International Olympic Committee (IOC) the focus of this paper is on the implications of the growth in scale, complexity and political and cultural prominence of the Games for governments and their policies concerning elite athlete development and hosting.

The growth in political and cultural significance of the Olympic Games and especially the summer Olympics is easily illustrated by reference to the steady rise in the number of countries sending teams to the Games which reached a record of 205 at the 2012 London Olympics. However, while for most countries the height of their ambition is, apparently at least, simply to attend the Games a smaller number also harbour a variety of additional ambitions such as winning a medal, winning a gold medal, finishing in the top ten of the medals table and hosting the Games. An arguably essential requirement for those more ambitious countries is that they put in place a strategy for the identification and development of elite athletes. Even if a country is primarily concerned to host an Olympic Games it is highly advantageous, if not quite essential, that the country has a record of success at the Olympic Games. However, as Table 1 shows at any one Games the proportion of countries winning one gold medal or one medal of any kind has remained broadly stable over the last

five Olympic Games with well over half of all NOCs failing to win a single medal and around three quarters failing to win a gold medal.

Table 1 about here

Just as the lack of improvement in the chances of winning a medal has not deterred countries from participating in the Games the increasing cost and complexity in organising the Games has not prevented a steady increase in the number of cities expressing an interest in bidding to host the event. In 1984 only Los Angeles submitted a bid, but by 2004 the number of candidates totalled eleven. Since 2004 there has been a slight decline in enthusiasm to host although there were ten candidates to host the 2008 Games and nine to host the 2012 Games.

While the continued attraction of involvement with the Olympic Games to a very broad range of countries is undeniable what is less apparent is the consequences of the Olympic infatuation for domestic sport policy and the implications for the Olympic movement. This paper begins with an examination of the response of a selection of major 'sports powers' to the intensification of competition for the higher positions in the medals table. The paper then examines the challenge of hosting the modern Olympics and the implications for future Games and for the IOC.

Trends in elite sport development systems

Outside the communist countries of the 1950s to 1980s there was little evidence of a wide-spread systematic government-funded approach to elite sport development. A variety of factors, including the introduction of satellite broadcasting of the Games, the intensification of the Cold War and the abandonment of amateurism, combined to raise the political profile of the Games and led many countries to establish a specialist industry around elite athlete identification and development. For almost all developed industrial countries the domestic elite sport industry was supported by publicly controlled resources either directly (i.e. from taxation) or indirectly (from some form of state lottery). Even in the United States where elite athletes are

nurtured through the college system the prominent role of state-funded universities suggests that American exceptionalism is more evident in organisational structure than in independence from state resources.

The characteristics of the increasingly systematic approach to elite sport development found in countries such as Australia, France, China and the UK have been catalogued by a number of authors (Oakley and Green 2001, Green and Houlihan 2005, Houlihan and Green 2008, Bergsgard et al 2007, de Bosscher et al 2008). Although there were some differences in the particular characteristics identified there was a broad consensus that a successful system required certain tangible resources (finance to support full-time athletes, sport science provision, full-time high quality coaches and specialist training facilities; specialist administrative units; post career support; and a supportive domestic competition structure), less tangible resources (salience of sport to the government; a high level of public support for/expectation of elite sport success; and a culture which values a sporting career) and appropriate processes (for allocating funding between sports and athletes; for athlete selection and for performance monitoring and review). For De Bosscher (2007, p. 246) these characteristics reflected the emergence of an 'increasingly homogenous elite sport development system which is ostensibly based around a near uniform model of elite sport development with subtle local variations' which is a conclusion supported by Bergsgard et al. (2007, p. 255) who concluded that '[o]ur study indicates that elite sport systems and policies do converge'.

The aim of the first section of this paper is to explore some of the characteristics in more detail and to assess their implications for public policy and for the Olympic Games. Among the most significant tangible resources is increased funding to support athletes directly so that they can train either full time or for a substantial proportion of their time and to provide the range of support services required for elite success. While it is often difficult to identify precisely the proportion of a national sport budget that is devoted to elite sport the broad trend is clear among the selected 'sports powers'¹ as indicated in Table 2.

Table 2 about here

In all the countries in Table 2 there has been a substantial increase in funding allocated to elite sport. In none of these countries does the increase reflect a similar

proportionate increase in the total sport budget. In general the additional investment resulted in a substantial improvement in either the summer or winter Olympic Games, whichever was nationally the more important. Only Spain and Japan failed to capitalise on the increased investment. The 28.6% increase in investment simply enabled Spain to retain its position whether measured by medal count or position in the medals table. Japan's situation is more interesting insofar as despite a significant increase in investment the country slipped down the medals table in the summer Games and only marginally improved its medal total in the winter Games between 2002 and 2010.

Although for most countries included in Table 2 the data provide clear confirmation of the efficacy of public investment to generate enhanced elite sporting success the most intriguing observation concerns the capacity of governments to retreat from their objective of maximising medals at the Olympic Games. It is arguable that once governments identify elite sport success as a policy objective they are locked onto a path from which it is increasingly difficult to deviate. It would indeed be a courageous government which, having seen its national squad significantly improve its medals total and/or its position in the medals ranking announced to its public that funding was being cut or frozen and that a decline in success was highly probable. One country which has recently taken that decision to scale back its support for elite sport is Sweden.

Within the context of Sweden's traditional commitment to social democratic values prioritising elite sport has always been problematic. Government funding to the Confederation of Sports has been primarily to support 'sport for all' programmes although it was acknowledged that some of the funding would be used to support athletes preparing for Olympic competition. In 1998, for the first time, a separate, though modest, allocation was made for talent identification in Olympic sports which was followed by a €22.8m allocation for the four year period from 2009. However, in 2012 the government took the politically risky decision to discontinue the elite athlete allocation. It is possible that NGBs will decide to use a greater proportion of their basic allocation (i.e. that allocated for youth sport and community sport) to compensate for the loss of funding, but if they do not it will be interesting to see

whether the country's performance in the 2014 or 2018 winter Olympics deteriorates and whether the government is held responsible (Norberg and Sjöblom 2012).

While a proportion of increased government funding was frequently used to enable athletes to devote more of their time to training a proportion was often allocated to strengthen the athlete's support services especially sports science support and specialist coaching services. An indication of the extent of financial support for elite sport, much of which comes from governments, is the rapid growth in the sports science industry and the proliferation of dubious specialisms such as sports medicine with their accompanying journals and associations. The British and American sports medicine associations date from the 1950s, the Australian and Japanese from the 1960s, the Canadian and Chinese from 1970 with the majority dating from the 1980s and 1990s. As the website of the International Federation of Sports Medicine makes clear no self-respecting country is without a sports medicine association as the Federation has over 140 affiliates. The proliferation of sports medicine associations is almost matched by the rapid spread of specialist elite sport training centres which not only enable the concentration of specialist support services, but also ensure that athletes are effectively insulated from association with their less talented contemporaries. Complementing the investment in coaches many sports powers and aspiring sports powers have also invested in specialist elite performance centres. INSEP (Institute National du Sport, de l'Expertise et de la Performance) in France, the Australian Institute of Sport in Canberra and the National Coaching and Training Centre in Ireland and the five federal training centres in Germany are typical of the recent investment in such facilities.

The provision of high quality coaching for elite athletes has been a challenge in many countries partly due to the problems of establishing a career structure for coaches in non-commercial sports and partly in developing with sufficient speed coaches able to meet the needs of current elite level athletes and to meet the often short term ambitions of politicians. The former communist countries of Central and Eastern Europe overcame these problems by incorporating coaching into the state run sports system and treating coaches as public officials. In China in 1994 there were reported to be just under 6,000 full time coaches funded by the state working in sports schools or provincial or national elite training centres (Hong 2008). In the

United States the problems were, to an extent, avoided by the existence of a strong coaching career structure within the college sports system. For the majority of countries coaching, even at the highest level, was a part-time activity which relied mainly on good will rather than significant financial reward. In many countries there were two related problems associated with coaching support: the first was the absence of a systematic coach development strategy; and the second was the lack of full-time coaches. In response to these problems some countries responded by importing foreign coaches. For example, Singapore hired 23 foreign coaches in 1993 indicating in part the failure of its earlier plan to develop home-grown coaching talent as part of the 1976 National Coaching Plan (Teo 2008). Japan, despite introducing a scheme to develop top level coaches, relied on imported coaches for ball sports (Yamamoto 2008) as did China for sports such as football and synchronised swimming. After a disappointing performance in track and field events in 2000 Games the Korean Athletics Federation began to import foreign coaches and rapidly increased the number of imported coaches following the successful bid to host the 2011 Athletics World championships (Park, 2011). Perhaps the clearest example of the reliance on imported coaches comes from the UK which, in the build up to the 2012 London Olympics, recruited heavily from abroad. According to Hubbard (Independent newspaper 10th July 2011)² 'At least 21 of the 26 sports in which Team GB compete in London will have performance directors or senior coaches who have been expensively head-hunted ... In all there are 52 foreigners working at various levels'. These coaches were imported at considerable expense. As de Bosscher (2007) has shown, in a comparison of the earnings of coaches in Italy, the Netherlands and the Flanders region of Belgium, UK coaches were substantially better paid with one third reporting earnings of over €50,000 by comparison to none in Italy, 5% in the Netherlands and just over 3% in Flanders.

Although importing elite level coaches is a popular solution many countries are also endeavouring to develop home-grown coaches. For example, Singapore introduced a strategy in 1995 for domestic coach development due to the recognition that a significant proportion of coaches were still using 'traditional methods gleaned from experience in their respective sports' (Lim, 2004, quoted in Teo, 2008). Similar developments were evident in Japan in the early 2000s (Yamamoto 2008) and in New Zealand in the mid-2000s. The objectives in the 2004 New Zealand Coaching

Strategy were typical and included: improving the quality and quantity of time available for coaches to focus on coaching activities; the need for increased recognition and status of coaches; and improvement of the quality of the coach education process (Collins 2008). Not surprisingly the emphasis on the improvement in the quality of coaching and in the career structure for coaches has resulted in the formation of national coaching associations many of which are affiliated to the International Council for Coach Education or the European Athletics Coaches Association and which add to the domestic lobby for elite sport.

The final significant tangible resource supporting elite athlete ambitions is the development of specialist administrative units within the machinery of government. In the 1960s and 1970s it would have been rare to find outside the communist group of countries a central government department with sport among its portfolio of responsibilities. However, by the turn of the century most countries which aspired to Olympic success had acknowledged elite sport as a function of government and had allocated responsibility to a government department of governmental agency.

The cumulative effect of the increased salience of elite sport success to governments has been to create an increasingly strong coalition of interest which arguably has locked many governments onto a path of high (and for some increasingly high) commitment of public resources. Given that most of the countries that traditionally finish in the top 20 of the Olympic Games or the top ten of the winter Olympics are participating in this sporting arms race there should hopefully be an awareness that a high proportion of every increase in funding is absorbed in maintaining rather than improving the country's relative position. With the exception of Sweden there are few signs of the leading sports powers scaling back their investment. However, there are signs that countries are attempting to use their substantial public investment more astutely by concentrating resources in those sports where they consider they have a competitive advantage.

The search for competitive advantage

One of the most intriguing elements of many contemporary sports systems is the pressure for countries to concentrate their resources in those sports and events in

which they either have, or consider themselves capable of developing, a relative competitive advantage. In some cases, such as Cuba and boxing, South Korea and archery, China and table tennis and Australia and swimming, contemporary elite sport strategy simply reinforces relatively well established historical advantage or dominance. However, in other cases, such as the former German Democratic Republic and female swimming, China and diving and the UK and cycling, the competitive advantage has, arguably at least, been the product of the strategic identification of sports/events where the quality of opposition was considered to be relatively weak. In seeking to maximise the medal return on public investment in elite Olympic sport it makes sense for countries to pursue a strategy of reinforcing historic advantages and seeking out sports where competition is relatively weak. This strategy might be particularly attractive to countries with Olympic medal ambitions but modest resources in the key areas of population and wealth: for them the need to concentrate strategically scarce resources is essential. For a country with limited (or even extensive resources) to harbour ambitions to challenge the dominance of China in table tennis, Korea in archery or the Caribbean and USA in male sprint events would be a serious misuse of public finances.

Table 3 illustrates the extent to which medals have been concentrated in a relatively small proportion of countries that participate in the summer Olympic Games although it needs to be borne in mind that the degree of concentration reflects, to an extent, population size. Since the Games of 1988 and 1992 where the degree of concentration was even more marked between 71% and 74% of summer Olympic medals have been won by just 20 countries and between 82% and 84% of medals have been won by the most successful 30 countries. Even when the increase in the number of participating countries is taken into account the figures still show between 71% and 74% of medals have been won by the most successful 10% of participating countries in the last five summer Games.

Table 3 about here

The stability evident in the distribution of medals is despite changes to the sports included in the Olympic programme and the changes made by some Olympic

international federations, and encouraged by the IOC, designed to prevent the concentration of medals in individual athletes or individual countries. For example, in track cycling countries were limited to one athlete/team per events thus making it impossible for a country to win more than one medal per event. In weightlifting where there were 45 medals available (from 15 events) at the London Games countries could enter a maximum of ten athletes. Similar restrictions are enforced in taekwondo. The net effect of these changes is to limit the total number of medals that a country can contest. For example, at the London Olympics while there were well over 900 medals available one country could only compete for a maximum of 497.³ While changing the eligibility rules in an attempt to increase the number of countries that are able to win medals might appear attractive to all international sports federations as a way of encouraging more countries to invest in their sports there are still sports that have resisted this trend. Swimming for example still allows one athlete to collect five or more medals: Michael Phelps won six medals and Missy Franklin, Allison Schmitt and Ryan Lochte each won five medals in the 2012 London Games. One explanation for the international federation, FINA, continuing to allow such a concentration of medals is that multiple medal winners give the sport a higher profile due to the publicity that these athletes can attract. Another possible explanation is that the countries that tend to win the most medals (USA, Australia and China) are prominent voices in the international federation and are unlikely to agree to changes that might loosen their grip on a sport in which they have a well established competitive advantage.

Even with the changes that some sports have introduced designed to reduce the concentration of medals there has been little significant impact on the distribution of medals across competing countries. Moreover, there is a relatively high degree of stability over time among the 'sports powers' with the most significant change being the rapid decline in success among the former communist countries. Hungary, Romania and Bulgaria were all within the top ten medal positions in 1988, but by the 2012 Games only Hungary remained in the top ten (9th) while Romania had dropped to 27th and Bulgaria to 63rd. In contrast the United States, South Korea, West Germany, France and Italy which had also reached the top ten in the medals table in 1988 fell no lower than second, twelfth, sixth (as Germany), tenth and twelfth respectively in the subsequent six Olympic Games. The explanation for the stability in the domination by these countries lies in part in the breadth of Olympic sports in

which they compete and the size of the squad that they send to the Games. Using a business metaphor they have the resources to spread risk across a wide portfolio of investments. However, even sports powers are often reliant on a small number of sports/events for a significant proportion of their medals (see Table 4).

Table 4 about here

As can be seen from Table 4 almost all the most successful countries rely heavily on a limited number of sports for a significant proportion of their medals with most obtaining well over half their gold medals and around half of all their medals from just three sports. The competitive advantage that countries such as the USA (swimming and athletics), Cuba (boxing), Germany (canoeing and rowing) and Great Britain (cycling and sailing) have established has been sustained over successive Olympic Games indicating both the strategic investment in these sports and also the difficulty other countries have in attempting to loosen the grip that these countries have on their targeted sports. If the same analysis is undertaken with regard to what might be referred to as medium sports powers, that is those countries that won at least two gold medals at a single Olympic Games between 1992 and 2012 the degree of reliance on a small number of sports disciplines is even more pronounced (see Table 5). Ethiopia and Kenya are exceptional in their reliance on one discipline to provide their medals, but Azerbaijan, South Africa and Iran are also very heavily reliant on two sports for well over two thirds of their medals (see Goldman Sachs 2012 for an analysis of the relationship between economic growth and medal success).

Table 5 about here

The strategy of identifying one or more niche sports in the Olympic programme and the concentration of resources to consolidate a country's relative advantage poses, potentially at least, a significant challenge to newly ambitious countries, such as India, for international federations who want to attract increased investment in their

sports at the domestic member level and for the IOC if it is to avoid the potential negative consequences of an increasingly ossified medals table. However, there are additional challenges for those countries that harbour ambitions to host the summer Olympic Games most notably around the issue of the cost of hosting and especially the rapidly rising cost of ensuring adequate security for those attending the event.

The challenge of hosting the Olympic Games

Providing adequate security for those attending the Olympic Games has been a recurring issue over the last fifty years. The massacre of student protesters in the days immediately prior to the commencement of the Mexico Olympics in 1968 and the killing of Israeli athletes by the Palestinian terrorist group Black September at the 1972 Munich Olympics were powerful reminders of the attractiveness of the Olympics as an arena for political protest. Although similar incidents were comparatively rare in the remaining years of the twentieth century (the bombing at Centennial Park during the Atlanta Games of 1996 was an important exception) the pre-occupation with ensuring a secure (or at least embarrassment-free) Games has become increasingly prominent. The attractiveness of the Olympic Games to political interests is clear to see. Indeed the Games provide an organisational context that facilitates political opportunism. The regularity of the event, the pattern of high profile inspections by IOC members, the geographically dispersed location of most Games, the global participation in the Games and the attendant global media attention not only during the Games but for a considerable period prior to the Games result in an event which provides multiple opportunities for publicising political issues and causes. In summary, the Games provides political interests, whether state or non-state, with a relatively risk free, low cost and high profile political opportunity.

For much of the 1970s and 1980s the exploitation of the Games for political advantage was conducted by governments prompted by the major global issues of the Cold War and apartheid in South Africa. More recently the attempts to use the Games for political purposes have tended to be made by non-state interests whether they are domestic lobby groups (on behalf of aboriginal rights in Australia and Canada for example) or by international groups (supporters of the Free Tibet movement at the 2008 Beijing Games). Two events have been significant in

escalating the host nation's concern with security: the first was the bombing in Centennial Park in 1996 and the second was the terrorist attacks on New York and Washington in September 2001.

Rather than dismiss the Centennial Park bombing as an exception unlikely to be repeated or emulated in 2000 the organisers of the Sydney Games took extraordinary and expensive precautions to ensure a secure Games. Although the Minister for Defence admitted that there was 'no specific threat of terrorism against the Sydney Games' (quoted in Head 2000) the country mobilised 4,000 military personnel, 30,000 private security staff, all of Australia's Special Forces plus state and federal police. Perhaps persuaded by the assertion by the New South Wales chief of police that the Games represented an 'almost irresistible magnet to terrorist groups' (quoted in Head 2000) the government also introduced legislation which significantly extended police powers.

Not surprisingly the concern with security was dramatically reinforced following the attacks in New York and Washington in September 2001. Security at the 2004 Games scheduled for Athens became a major concern not only for the host government, but also for a number of the participating countries most notably the United States. The Greek government deployed an estimated 70,000 police and military personnel, installed an expensive and elaborate CCTV network of 1,200 cameras and amended existing legislation which, according to Molnar, 'encourage[d] spying on citizens and provide[d] pecuniary motives for police informers'.⁴ The overall cost of providing security for the Games was estimated at US\$1.5bn. The concern with security continued in 2008 where the Chinese government deployed around 100,000 troops, installed an estimated 300,000 security cameras and located anti-aircraft missiles adjacent to the main venue (Houlihan and Giulianotti 2012).

The counter-terrorism measures adopted for the London Olympics were extensive and expensive. According to the Home Secretary 'we know that we face a real and enduring threat from terrorism and we know that the Games – as an iconic event – will represent a target for terrorist groups'.⁵ Taking risk aversion to new heights the UK government spent an estimated £2bn on security measures which included the, by now conventional, array of armed forces, private security staff and surface to air missiles. As Table 6 indicates the cost of securing the Games has risen dramatically since the turn of the century.

Table 6 about here

Although it has been argued that the actual threat level from terrorism has been exaggerated there is little evidence that the perception of risk from terrorism at the Olympics has reduced. A central question arising from the increasing perception of risk and the escalating cost of managing risk is whether the willingness of cities and countries to host the Games will be affected. Mention has already been made that the enthusiasm of countries to host the summer Games may have peaked. While a reduction in the number of candidate cities would be a disappointment for the IOC a more significant concern might be whether the increasing concern with security will influence the type of country that bids to host the Games. The concern would be that hosting the Games will become less attractive to the more open democratic political systems. Given the time lag of roughly seven years between notification of candidature and hosting the Games it might still be too soon to identify a clear trend towards a greater proportion of candidates from less open and more authoritarian regimes. However, as indicated in Figure 1 there is a tentative trend towards candidate cities being located in less democratic countries (see also Table 7 in the Appendix). In the Figure the vertical axis is a democracy rating which is derived from an assessment of a country's electoral process, the functioning of its government, the nature of political participation, the political culture and civil liberties (Economist Intelligence Unit 2011). As indicated in the Figure the IOC has consistently selected the more democratic countries to move forward for consideration as bid cities. The trend lines indicate a steady widening in the gap between the mean democracy score of candidate cities and that of bid cities. Furthermore the data also indicate that there has been a steady decline in the mean democracy score of candidate cities suggesting, albeit tentatively, an increasing reluctance among more open democracies to take the risk and bear the cost of providing security for the Games. However, at least two more bidding cycles would be needed before the trend could be confirmed.

Figure 1 about here

Where will it all end?

It is common for academic commentators to forecast an approaching crisis for the Olympic movement whether that crisis is due to doping, gigantism or terrorism. However, the resilience of the Olympic movement and of the summer Olympic Games has been repeatedly demonstrated. An examination of key indicators would suggest that the Games are in rude health. The number of countries participating has steadily increased over the last twenty years and the number of cities offering to host the Games is still healthy despite a slight decline. A similar healthy picture is painted if only financial indicators are examined. The revenue generated by the summer and winter Games increased by 40% between the period 2005 and 2008 (which covers the Turin 2006 Games and the 2008 Beijing Games) and the period 2009-2013 (covering the Vancouver 2010 and London 2012 Games) to reach just over US\$8bn.

Despite this continued success this paper has questioned the sustainability of the current trajectory over the medium to long term. Four issues in particular need to be addressed. The first is the continued dominance of a relatively small group of 'sports powers' which have arguably been successful in consolidating their relative competitive advantage thus making it difficult, and perhaps increasingly difficult, for other countries to achieve Olympic success. Although the group of dominant sport powers might be widened as the more powerful emerging economies (particularly Brazil and India) invest more heavily in elite sport their entry to the dominant group may be at the expense of medium powers rather than other leading sports powers. One implication of this situation is that the IOC might find it increasingly difficult to provide incentives to smaller and regularly unsuccessful countries to continue attending the Games. While a record 205 countries attended the London Games eleven sent the minimum IOC-required number of two and fifty-four sent five or fewer. Apart from designing ever more elaborate opening and closing ceremonies it is difficult to identify what additional benefit from participation that the IOC can offer these countries.

The second issue concerns future hosts of the Games. Despite curbs on the number of events and athletes the cost of hosting the Games has continued to rise due in large part to the hyper-sensitivity to perceived terrorist risk. There must be a concern that the combination of increased cost and perceived risk will further narrow

the range of countries willing and financially able to host future Games. A specific concern must also be that the more open democratic countries will be more reluctant to bid to host the Games leaving a gap to be filled by those with more authoritarian governments and thus posing a challenge of consistency with the democratic principles of the Olympic Charter.

The third issue concerns the impact of the Olympic Games on domestic sport policy particularly in those countries with ambitions to a high position in the medals table. Mention has already been made of the increase in investment in elite sport being made by many countries and the fact that the increase is disproportionate to the increase in the overall sport budget and has established a well organised internal lobby on behalf of elite sport. There is a clear risk that the prioritisation of elite sport will impact on the finance available for community sport, but more importantly that investment in community sport and particularly youth sport will be assessed in terms of its contribution to elite sport success – a risk that is arguably exacerbated by the introduction of the Youth Olympic Games.

The final issue concerns the sustainability of the current upward trend in public investment in elite sport identified in many sports powers. Logic would suggest that this upward competitive financial spiral is not sustainable, not simply due to the escalating cost of winning a gold medal and maintaining a country's relative ranking, but also due to the political risk of public disillusionment with excessive spending. At some point in the medium term future the government of one of the major sports powers will step off the policy path be faced with the challenge of justifying its decision to its electorate/public. However, there is no sign that over the short term there is a desire among either the public or among governments to rein in their increasingly generous, if not frankly absurd, level of spending on the pursuit of Olympic success.

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Table 1. The distribution of medals at summer Olympic Games 1988 to 2012

Olympic Games	Number of participating countries	Number of countries winning at least one medal	Proportion of countries that won at least one medal	Number of countries winning at least one gold medal	Proportion of countries that won at least one gold medal
1988	159	52	32.7%	31	19.5%
1992	169	64	37.9%	37	21.9%
1996	197	79	40.1%	53	26.9%
2000	200	80	40%	52	26%
2004	201	74	36.8%	56	27.9%
2008	204	86	42.1%	54	26.5%
2012	205	85	41.5%	54	26.3%

Table 2. Trends in government support for elite sport – selected countries

Country	Change in elite sport budgets	Impact of funding
New Zealand	<p>i) Allocation for community sport declined from NZ\$ 53.84m in 2009 to NZ\$ 50.53m in 2013 (NB. about NZ\$6m was transferred to the Health budget in 2011 which if it had been left in the sport budget would have changed the 2013 figure to approximately NZ\$ 56.5m giving a percentage increase of 5.5% over 5 years).</p> <p>ii) Allocation for high performance sport increased from NZ\$ 37.5m in 2009 to NZ\$ 58.84m in 2013 and increase of 57% over 5 years.</p> <p>iii) In 2010-11 51% of the total sport of Sport New Zealand was allocated to high performance sport.</p>	In 2008 New Zealand secured 9 medals (3 gold) and was 25 th in the medals table. In 2012 13 medals were won (6 gold) and the country finished 15 th in the table.
Spain	Elite sport funding increased from €73.2m in 2005 to €94.1m in 2011 and increase of 28.6% over six years.	In 2004 Spain won 19 medals (3 gold) and was ranked 20 th in the medal table. In 2012 the country won 17 medals (3 gold) and slipped to 21 st in the medals table.
Ireland	<p>Approximately €2m was allocated in 2000 for elite athlete preparation for Sydney; €5.3m was allocated in 2004 for high performance sport</p> <p>ii) €6.5m per year was invested over the four years 2009 to 2012.</p>	In the 2000 Olympic Games Ireland won only one medal (silver) and was ranked 64 th in the medals table. At the 2012 Games Ireland won 5 medals (1 gold) and ranked 41 st in the medals table.
Norway	In 1990 Olympiatoppen (Norway's high performance organisation) had a budget of c€2m (€3m in 2010 values). By 2001 the budget had increased to c€10m (€12.1m in 2010 values) and by 2010 the budget had reached €14m representing real increases of 300% between 1990 and 2001 and increase of 15% between 2001 and 2010.	At the 1988 Games Norway won 5 medals (2 gold) and was ranked 21 st in the medal table. More importantly, In the 1998 winter Olympics the country won 5 medals (no golds) and came 12 th in the table. In 2012 Norway won 4 medals (2 gold) and came 35 th in the table. In the more significant 2010 winter Olympics the country won 23 medals (9 gold) and came 4 th in the table.
United Kingdom	£62m was spent in the four years leading up to the 1992 Olympic Games. The equivalent figure for 2000 was £172m (a 177% increase on 1992) and for 2008 the figure was £394m (a 129% increase on 2000).	In the 1992 Olympic Games the UK won 20 medals (5 gold) and came 13 th in the rankings. In 2008 the country won 47 medals (19 gold) and came 4 th in the rankings.
South Korea	The elite sport budget increased from 77,718m won in 2005 to 177,563m won in 2009 – an increase of 130% over 5 years.	At the 2004 Games in Athens the country won 30 medals (9 gold) and came 9 th in the table. In 2012 the country won 28 medals (13 gold) and came 5 th in the medals table. In the 2002 winter Olympics the country won 4 medals (2 gold) and was ranked 14 th . In the 2010 Games the country won 14 medals (6 gold) and came 5 th in the medals table.
Japan	In 2008 the elite sport budget was ¥204m which increased to ¥3.2bn by 2012.	In 2004 Olympics Japan won 37 medals (16 gold) and was ranked 5 th . In 2012 the country won 38 medals (7 gold) and was ranked 11 th . In the 2002 winter Olympics Japan won 2 medals (no gold) and was ranked 21 st . In 2010 the country won 5 medals (no gold) and was ranked 20 th .
Sweden	In 1998 expenditure on elite sport was €1m: by 2009 the figure had increased to €14m	In the 1996 Olympic Games Sweden won 8 medals (2 gold) and was ranked 29 th in the medal table. At the 2008 Games the country won 5 medals (no gold) and was ranked 55 th . In the 1996 winter Games Sweden won 3 medals (no gold) and was ranked 17 th . In 2010 the country won 11 medals (5 gold) and finished in 7 th place in the medal table.

Note. Figures do not take account of inflation unless indicated.

Table 3. Concentration of medals

Year	Total medals available	Number of participating countries	Number and proportion won by top 20 countries	Number and proportion won by top 30 countries	Proportion won by the most successful 10% of countries
1988	739	159	661-89%	700-95%	83%
1992	815	169	687-84%	752-92%	78%
1996	842	197	599-71%	706-84%	71%
2000	928	200	668-72%	770-84%	72%
2004	928	201	683-74%	769-83%	74%
2008	958	204	689-72%	794-83%	72%
2012	962	205	683-71%	787-82%	73%

Table 4. The degree of specialisation among the ten most successful countries. Gold medals won in three most successful sports/events, selected years 1992-2012

Country	Year	Gold medals won in sport 1	Gold medals won in sport 2	Gold medals won in sport 3	% gold medals won in top three sports (total gold medals in brackets)	% all medals won in top three sports (total medals in brackets) ³
USA	1992	Athletics-12	Swimming-11	Wrestling-3	70% (37)	61% (108)
	2004	Swimming-12	Athletics-8	Gymnastics-2	61% (36)	61% (102)
	2012	Swimming-16	Athletics-9	Gymnastics-3	61% (46)	63% (104)
Russia¹	1992	Gymnastics-9	Athletics-7	Wrestling-6	49% (45)	49% (112)
	2004	Athletics-6	Wrestling-5	Shooting-3	52% (27)	43% (92)
	2012	Athletics-8	Wrestling-4	Judo-3	63% (24)	45% (82)
China	1992	Swimming-4	Table tennis-3	Diving-3	63% (16)	43% (54)
	2004	Diving-6	Weightlifting-5	Shooting-4	47% (32)	41% (63)
	2012	Diving-6	Swimming-5	Badminton-5	42% (38)	32% (88)
Germany	1992	Canoeing-7	Rowing-4	Athletics-4	45% (33)	39% (82)
	2004	Canoeing-4	Rowing-2	Shooting-2	61% (13)	41% (49)
	2012	Canoeing-3	Equestrian-2	Rowing-2	64% (11)	50% (44)
Australia	1992	Equestrian-2	Rowing-2	Swimming-1	71% (7)	63% (27)
	2004	Swimming-7	Cycling-6	Diving-1	82% (17)	63% (49)
	2012	Sailing-3	Swimming-1	Cycling-1	71% (7)	60% (35)
France	1992	Judo-2	Fencing-2	Sailing-2	75% (8)	55% (29)
	2004	Fencing-3	Canoeing-2	Swimming-1	55% (11)	45% (33)
	2012	Swimming-4	Judo-2	Canoeing-2	73% (11)	53% (34)
S Korea	1992	Archery-2	Badminton-2	Wrestling-2	50% (12)	45% (29)
	2004	Archery-3	Taekwondo-2	Badminton-1	67% (9)	40% (30)
	2012	Archery-3	Shooting-3	Fencing-2	62% (13)	54% (28)
Italy	1992	Cycling-2	Fencing-2	Canoeing-1	83% (6)	42% (19)
	2004	Fencing-3	Athletics-2	Shooting-1	60% (10)	41% (32)
	2012	Fencing-3	Shooting-2	Taekwondo-1	75% (8)	54% (28)
Great Britain	1992	Athletics-2	Rowing-2	Cycling-1	100% (5)	55% (29)
	2004	Athletics-3	Sailing-2	Cycling-2	78% (9)	43% (30)
	2012	Cycling-8	Sailing-4	Rowing-2	74% (29)	42% (65)
Cuba	1992	Boxing-7	Athletics-2	Wrestling-2	79% (14)	68% (31)
	2004	Boxing-5	Athletics-2	Wrestling-1	89% (9)	70% (27)
	2012	Boxing-2	Judo-1	Wrestling-1	80% (5)	64% (14)

Note: 1. In 1992 Russia competed as the 'Unified Team'

2. Countries were selected on the basis of their ranking in medals tables between 1992 and 2012

3. The three sports in which the most gold medals were won were not always the three sports in which most medals (gold, silver and bronze) were won.

Table 5. The degree of specialisation among selected countries that had won at least two gold medals in one Games between 1992 and 2012*

Country	Year	Sport 1	Sport 2	% all medals won in top two sports (total medals in brackets)
Azerbaijan	1992	-	-	-
	2004	Shooting-2	Boxing-2	80% (5)
	2012	Wrestling-7	Boxing-2	90% (10)
Belarus	1992	-	-	-
	2004	Athletics-3	Weightlifting-3	40% (15)
	2012	Canoeing-3	Weightlifting-2	42% (12)
Canada	1992	Rowing-5	Athletics-3	44% (18)
	2004	Canoeing-3	Cycling-2	42% (12)
	2012	Swimming-5	Canoeing-3	44% (18)
Ethiopia	1992	Athletics-3	-	100% (3)
	2004	Athletics-7	-	100% (7)
	2012	Athletics-7	-	100% (7)
Iran	1992	Wrestling-3	-	100% (3)
	2004	Wrestling-3	Taekwondo-2	83% (6)
	2012	Wrestling-6	Weightlifting-4	83% (12)
Kenya	1992	Athletics-8	-	100% (8)
	2004	Athletics-7	-	100% (7)
	2012	Athletics-11	-	100% (11)
New Zealand	1992	Sailing-4	Equestrian-2	60% (10)
	2004	Triathlon-2	Rowing-1	60% (5)
	2012	Rowing-5	Cycling-3	62% (13)
Poland	1992	Canoeing-3	Weightlifting-3	32% (19)
	2004	Swimming-3	Athletics-2	50% (10)
	2012	Athletics-2	Weightlifting-2	40% (10)
South Africa	1992	Tennis-1	Athletics-1	100% (2)
	2004	Swimming-3	Athletics-2	83% (6)
	2012	Swimming-3	Athletics-1	67% (6)
Switzerland	1992	Tennis-1	-	100% (1)
	2004	Cycling-2	Fencing-1	60% (5)
	2012	Cycling-1	Tennis-1	50% (4)

Note: * Thirty one countries won at least two gold medals in a single Games between 1992 and 2012. The sample used in the table was produced by selecting every third countries from an alphabetical list.

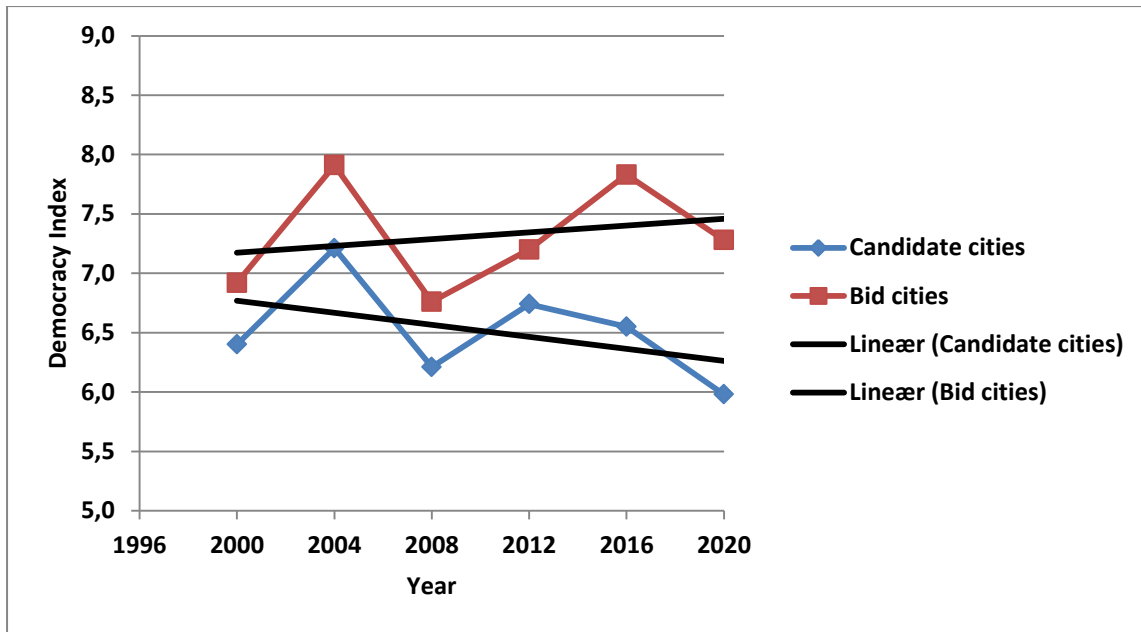
Table 6: Security expenditure for the Olympic Games, 1984–2012 (current prices)

Games	Expenditure (US\$m)	Cost per athlete (US\$)
1984 Los Angeles	79.4	11,627
1988 Seoul	111.7	13,312
1992 Barcelona	66.2	7,072
1996 Atlanta	108.2	10,486
2000 Sydney	179.6	16,062
2004 Athens	1,500.0	142,897
2008 Beijing	6,500.0	607,022
2012 London	1,997.0 ^a	181,545 ^a

^a Estimate.

Source: See Philip Boyle and Kevin D. Haggerty, 'Spectacular security: mega-events and the security complex', *International Political Sociology* 3, 2009, pp. 257–74; BBC Sports News, http://www.bbc.co.uk/blogs/davidbond/2011/11/the_final_bill_for_security.html, accessed 23 May 2012.

Figure 1. Democracy and candidate and bid cities



Note. The democracy index scores are all taken from 2011 and so do not take account of movement in the index score over time. However, comparisons with earlier EIU indices suggest that movement has been minimal over the period 2000 to 2011.
Source: Economist Intelligence Unit (2012) Democracy Index 2011: Democracy under stress, London: EIU.

Appendix

Table 7: Candidate cities

Olympic Games	Democracy ranking of candidate cities	Democracy ranking of bid cities
2000 Sydney	Sydney – 9.22 (FD) Beijing – 3.14 (AR) Berlin – 8.34 (FD) Istanbul – 5.73 (HR) Manchester – 8.16 (FD) Milan – 7.74 (FLD) Brasilia – 7.12 (FLD) Tashkent – 1.74 (AR) Mean score: 6.4	Sydney – 9.22 (FD) Beijing – 3.14 (AR) Berlin – 8.34 (FD) Istanbul – 5.73 (HR) Manchester – 8.16 (FD) Mean score: 6.92
2004 Athens	Athens – 7.65 (FLD) Buenos Aires – 6.84 (FLD) Cape Town – 7.79 (FLD) Rome – 7.74 (FLD) Stockholm – 9.5 (FD) Istanbul – 5.73 (HR) Lille – 7.77 (FLD) Rio de Janeiro – 7.12 (FLD) St Petersburg – 3.92 (AR) San Juan – n/a Seville – 8.02 (FD) Mean score: 7.21	Athens – 7.65 (FLD) Buenos Aires – 6.84 (FLD) Cape Town – 7.79 (FLD) Rome – 7.74 (FLD) Stockholm – 9.5 (FD) Mean score: 7.91
2008 Beijing	Beijing – 3.14 (AR) Istanbul – 5.73 (HR) Osaka – 8.08 (FD) Paris – 7.77 (FLD) Toronto – 9.08 (FD) Bangkok – 6.58 (FLD) Cairo – 3.95 (AR) Havana – 3.52 (AR) Kuala Lumpur – 6.19 (FLD) Seville – 8.02 (FD) Mean score: 6.21	Beijing – 3.14 (AR) Istanbul – 5.73 (HR) Osaka – 8.08 (FD) Paris – 7.77 (FLD) Toronto – 9.08 (FD) Mean score: 6.76
2012 London	London – 8.16 (FD) Madrid – 8.02 (FD) Moscow – 3.92 (AR) New York – 8.11 (FD) Paris – 7.77 (FLD) Havana – 3.52 (AR) Istanbul – 5.73 (HR) Leipzig – 8.34 (FD) Rio de Janeiro – 7.12 (FLD) Mean score: 6.74	London – 8.16 (FD) Madrid – 8.02 (FD) Moscow – 3.92 (AR) New York – 8.11 (FD) Paris – 7.77 (FLD) Mean score: 7.2
2016 Rio de Janeiro	Rio de Janeiro – 7.12 (FLD) Chicago – 8.11 (FD) Madrid – 8.02 (FD) Tokyo – 8.08 (FD) Baku – 3.15 (AR) Doha – 3.18 (AR) Prague – 8.19 (FD) Mean score: 6.55	Rio de Janeiro – 7.12 (FLD) Chicago – 8.11 (FD) Madrid – 8.02 (FD) Tokyo – 8.08 (FD) Mean score: 7.83
2020	Istanbul – 5.73 (HR) Tokyo – 8.08 (FD) Madrid – 8.02 (FD) Rome – 7.74 (FLD) Baku – 3.15 (AR) Doha 3.18 (AR) Mean score: 5.98	Istanbul – 5.73 (HR) Tokyo – 8.08 (FD) Madrid – 8.02 (FD) Mean score: 7.28

¹ A 'sports power' is defined as a country which regularly finishes in the top 30 of the summer Olympic Games or in the top 10 of the winter Olympic Games.

² News item available at: <http://www.independent.co.uk/sport/olympics/team-gb-banking-on-foreign-legion-2309889.html> . Accessed on 28th October 2011.

³ I am grateful to Professor Simon Shibli at Sheffield Hallam University for providing me with the information about track cycling, taekwondo and weightlifting and also the total number of 'contestable' medals at the London Olympic Games.

⁴ Adam Molnar, 'Warning to London 2012 Olympic hosts as Greece struggles with economy and security: an interview with political sociologist Minas Samatas', Security Games, <http://www.security-games.com/news/warning-to-london-2012-olympic-hosts-as-greece-struggles-with-economy-and-security>, accessed 23 May 2012.

⁵ Home Secretary, Theresa May, speech to RUSI conference, 25 Jan. 2012, <http://www.homeoffice.gov.uk/media-centre/speeches/Home-sec-olympic-speech>, accessed 23 May 2012.