The Olympic Games and Structural Transformation in Hosting Metropolitan Areas

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Abstract. The Olympic Games are an international cultural phenomenon that is growing more and more influential in the modern world. In the recent decades more and more cities, including a large numbers of developing world cities were bidding to host the Olympics. But scholars still fail to explain why it is beneficial for cities to host the Olympics. This paper applies the approach of economic structuralism to the legacy of the Olympic Games. The paper looks at whether the Olympics Games can be used as a tool that can support economic structural transformation in the city. It also attempts to identify the conditions related to the Games that can have effect on the likelihood of structural changes in the city economy. To address this objective a combination of quantitative and qualitative analytical methods is used to study the Barcelona '92 and Sydney'2000 Games. The paper concludes that overall the cases studied present rather weak evidence in support of the Olympic Games as drivers of structural change. No change of trend of structural transition was identified in Barcelona before or after the Olympics. In Sydney accelerated growth of business services and financial sectors can be related to the Olympics. This leads this paper to conclude that targeting the needs of a specific economic sector while preparing for the Games increases the likelihood of triggering the process of economic structural change. The paper also concludes that an Olympic preparation strategy focused on investment in built environment and infrastructure (like in Barcelona) appears to have a weaker impact on the structure of the economy in the short and medium term than the strategy focused on place marketing and promotion (like in Sydney). Finally the paper briefly applies the conclusions of the case studies to the case of Rio de Janeiro the next developing world city to host the Olympics Games. It concludes that given the circumstances of Rio Olympics it is highly unlikely that the Games will facilitate the process of economic transformation in the city.
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List of acronyms.

AOC – Australian Olympic Committee
ATS- Australian Technology Showcase
FDI – Foreign Direct Investment
IOC – International Olympic Committee
OC – Organising Committee
OCOG – Organising Committee of the Olympic games
PGA – Plan General Metropolita
PPP – Public Private Partnership
PWC- Price Warehouse Coopers Inc.
COOB – Committee Organizational for Olympic games in Barcelona (from Spanish)
HOLSA – Holding Olympic S.A. (Barcelona Games investment managing body)
VA – Value Added
1. What does it take to save a city?

“We have saved the city as a cultural concept” (Margall, 1992 cited in Montgomery, 2008, p. 1). This famous quote by the mayor of Barcelona, written after the city had hosted the 1992 Summer Olympic Games is very symbolic of the level of expectation that is assigned to the Olympics today. Montgomery (Ibid.) uses the quote to show that Barcelona Olympics became a symbol of revival of the post-industrial city. Even though the Games were not the only reason for Barcelona’s revival their contribution was crucial. The 92 Olympics showed the world that an event of an Olympic scale can transform the city and for good or evil that is what the word chose to believe ever since.

Throughout the XX Century Olympics have grown from minor meetings of international amateurs to events of enormous scale and complexity. The modern Olympics can crudely be described as complex cultural phenomena that may have effect on social, political and economic agenda on all levels from local to global. As the Olympics have grown in scale and influence, so has the International Olympic Committee (IOC). The level of influence the IOC has on cities and the power it exercises over them can hardly be compared to remits of any of the large international development organisations. The greatest mystery here is that even though there is a lack of comprehensive empirical evidence on the actual impact of the Olympics (Bayliss et. al. 2004, Hiller, 1998) there is definitely a universal belief in the Games as the greater good for the host city and nation, which can be proven by the rapidly growing number of cities that choose to bid for the privilege to host the Olympics. (Gold & Gold, 2006; Chalkley & Essex, 1999).

In recent decades hosting mega-events, including the Olympic Games, have been recognised as an urban development strategy, which can provide benefits of “fast track” regeneration, infrastructure development, increased international recognition of the locality and stimulate economic growth (Chalkley & Essex, 1999; Malfas, Theodoraki, & Houlihan, 2004; Coaffee, 2007). Academic literature on sports mega-events has identified this new trend as a feature of a post-fordist transition in urban politics that can be related to the impact of economic globalisation and changed role of cities in the world. (Andranovich, Burbank, & Heying, 2001; Cochrane, Peck, & Tickell, 1996; Hall, 2006; Hiller, 2006) Academics have analysed the Olympics from a cultural (Roche, 1994), social(Long & Sanders, 2001; Greene, 2003) and economic (Preuss, 2000; Kasimati, 2003; Gratton, Shibli, & Coleman, 2005) perspectives, with regard to their contribution to city’s image (Smith, 2005; 2001), or development of tourism sectors (Pyo, Cook, & Howell, 1988). Even though all of these approaches are important and relevant, the large body of research on mega-events still fails to explain why cities all over the world find the Olympics so appealing.

In recent years the countries of developing world have been awarded with a privilege to host several sporting mega-events. And this trend adds a new dimension to the question at hand. Recently the Summer Games have taken place in Beijing, the 2016 Games in Rio de Janeiro and 2014 Winter Games in Sochi are coming up, and the 2018 Winter Games have been awarded to PyeongChang. Together with the fact that more and more developing world cities are bidding for biggest sports events this may change the rule, according to which the absolute majority of the Olympics of the past were held within the “western” world (Matheson & Baade, 2003). Yet so far there has been very limited attention given to possible impact of the Olympics on a host city in the developing world.

This paper will not aim to introduce an all-encompassing approach to interpretation of the Olympic motivations and impacts. It will instead make an attempt to introduce a new perspective to the analysis. This paper will apply the position of economic structuralism to analyse the lasting impact of the largest sports festivals in the world at city level. It will try to identify whether the Olympic Games have triggered or at least contributed to the process of structural transformation in host cities.

The use of this approach can be justified by a number of reasons. Primarily, it is rather striking that even though the connection between mega sports events and process of structural change in cities has been acknowledged in literature (Hiller, 2006; Preuss, 2000; London East Research Institute, 2007) so far there have been no comprehensive attempts to assess whether this relation actually exists. Secondly, if it is proven that the Olympic Games can contribute to the process of structural transformation, this can be seen as an additional justification for awarding the Games to cities in the developing world, as they could be used to help local economies adjust to global markets and increase their competitiveness. Based on the impact of the previously held Olympics on the economic structures of their host cities this paper will attempt to draw
out lessons for developing world cities that will host the Olympics in the future.

This paper will attempt to answer the following questions:

- **Primary question:** Is there evidence that proves that the Olympic Games have facilitated or supported the process of structural transformation in hosting metropolitan areas and if so what are the conditions, that made it possible (overall economic situation, planning and management practices, relation of the Olympic preparation process to the general city development strategy etc.)?

- **Secondary question:** Can the Olympic Games be used to foster structural transformation in cities of the developing world?

The second chapter will present an overview of academic literature on impact of Mega-Events and the Olympic Games in particular. The third chapter will aim to link the literature on Sports Mega-Event to key concepts of economic structuralism and will formulate the methodology for further analyses.

The fourth chapter will focus on the case studies of the Olympic cities including Barcelona and Sydney. Each of the case studies will look at the background for the Games (political, economic, social), preparation strategies and most significantly the impact of events on the structure of economies of the host cities. Conclusions will summarise the findings and discuss the application of the findings to the developing country context. The case of the upcoming Summer Olympic Games 2016 in Rio de Janeiro will be used as an illustration.

**NOTES TO CHAPTER 1**

1. Economic inequality is often described as income inequality which can be measured by the Gini coefficient with 1 stands for absolute inequality where one economic person possesses all the income while others have none and 0 stands for perfect equity where everybody share the same level of income (Atkinson, 1970).
2. Conceptualising Mega-Events

2.1. Defining the Olympic Games as mega-events

The Olympic Games, along with several other international sport festivals and international fairs and exhibitions are widely conceptualised as mega-events (also called hallmark (Pyo, Cook, & Howell, 1988; Chalkley & Essex, 1999; 1998), landmark, special (Dwyer, Forsyth, & Spurr, 2005) and major (Gratton & Henry, 2001) events). There are multiple definitions of mega events; one by Roche (1994) can be considered the most holistic:

“Mega-Events (large scale leisure and tourism events, such as Olympic Games and World Fairs) are short-term events with long-term consequences for the cities that stage them. They are associated with creation of infrastructure and event facilities often carrying long-term debt and always requiring long-term use programming. In addition, if successful they project a new (or renewed) and perhaps persistent and positive image and identity of the host city through national and international media, particularly TV, coverage. This is usually assumed to have long-term positive results in terms of tourism, industrial relocation, and inward investment.” (Roche, 1994, p. 1)

Another definition was suggested by Hall (1992, cited in Dobson & Sinnamon, 2001, p. 65):

“Major one-time recurring events of limited duration, developed primarily to enhance awareness, appeal and profitability of a tourism destination in the short and long term. Such events rely for their success on uniqueness, status or timely significance to create interest and attraction.”

Both definitions focus on the most important features of a mega-event: short duration, but lasting effect. Malfas, Theodoraki & Houlihan (2004, p. 2) broadened these core characteristics when trying to answer the question: “How are Mega-Events different from the regular ones?” They distinguished internal characteristics: short duration but large scale, and external: lasting impact and broad outreach.

The second component of the definitions focuses on possible impact of a mega-event. Every author adjusts this part of definition according to the focus of his research. (Roche, 2000) Some definitions are centred on political implications of the Games (Dunn & McGuric, 1999; Graham & Marvin, 1999, Malfas, Theodoraki, & Houlihan, 2004), some authors, like Hall, emphasise the impact on tourism (Burbank, Andranovich, & Heying, 2002), others add the urban regeneration component (Pyo, Cook, & Howell, 1988), or the importance of experience gained by local government through organising the event. (Elvin, Emery, 1997, cited in Dobson & Sinnamon, 2001). This variety of approaches shows that the complexity of mega events and their affect in a city.

Finally, even though the first of presented definitions is broader, the second adds an important component – the uniqueness and timely status of the events, which are the reasons for their attractiveness and wide outreach. For the purpose of this paper Mega-events would be understood as happenings restricted in time and space, yet of significant scale, broad outreach and lasting impact, which are achieved due to the unique status and high significance of an event.

Is there anything specific about the Olympics, which distinguishes them from mega-events in general? Even though the Games are seen as the biggest sports contest in the world, the Olympics deserve a broader interpretation. The modern Games are versatile festivals with significant cultural components and strong economic motivations and consequences.

Today the Olympic Games are organised under supervision of the IOC, an international non-governmental body, and by the cities that IOC members select. The IOC draws support from member nations, delegates from which form the committee (Gold & Gold, 2007). One of the IOCs main missions is conveying the ideological message of the Games as it is presented in the Olympic charter: “placing every sport at the service of harmonious development of a man, with a view of encouraging the establishment of a peaceful society concerned with the preservation of human dignity” (International Olympic Committee, 2007, p. 14). This is important, as how Malfas, Theodoraki, & Houlihan (2004) have stated, there is a “high premium” that cities and individuals are willing to pay for association with the principles of Olympism, which is one of the reasons for the success of the Olympic movement and Olympics as a tool of urban politics and economic development. To put it in even broader terms the Olympics posses a very special cultural status, connected to it's an-
cient history and principles established by De Coubertin, which act as universal values that cross cultural borders. This universal appeal of the Olympic ideas is the essential basis for the huge influence of the Olympics and all of the effects of the Olympics that are discussed in this paper. (Preuss, 2000)

Another important characteristic is that the Olympics are not stand alone events. They happen in a sequence and they are always bound to be compared to one another and later Games always have to adjust to the trends set by earlier ones. (Gold & Gold, 2007)

### 2.2. Impact of the Olympic Games at urban level

The academic literature on mega-events and Olympics is very diverse. Gratton & Henry (2000, p. 7) identify the variety of perspectives from which sports mega events have been analysed as ranging from “classical positive economics, through radical perspectives (predominantly neo-Weberian, neo-Marxist, feminist and anti-racist...) to critiques (and celebrations) of postmodern city, and post-Fordist accounts of urban social regulations.” Bade, Christensen(2004) outline following aspects of the Games that have been analysed in the literature: cultural, commercial, social, sport related, aesthetic, political and others. Malfas, Theodoraki, & Houlihan (2004) are more precise in their classification distinguishing 4 major impacts at urban level: physical (related to built environment), socio-cultural, socio-economic and political. This chapter will use the later classification to present the overview of the different effects of the Olympics before focusing on the economic effects.

**Physical impact.** The physical transformation of urban space is the most visible impact of the Olympic Games. Hosting an international event that involves such a variety of activities usually requires construction of new sport stadia. Accommodating huge amount of visitors in a very condensed period of time usually requires significant upgrades to transportation infrastructure, leisure facilities, hotels and housing (Malfas, Theodoraki, & Houlihan, 2004), or even broader improvements to urban infrastructure including water supply and sewage, or reorganisation and beautification of public space (as in Seoul 1988 and Barcelona 1992(Chalkley & Essex, 1999)).

The physical impact of the Olympic Games grew more significant throughout the modern history of Olympic movement. Chalkley & Essex, (1999); Coaffee(2007) and Gold & Gold(2007) all present a similar description of the evolution of the Olympics in relation to their impact on built environment of cities. Essex & Chalkley(1998) distinguished 3 groups of Olympics based on their contribution to the built environment:


**Games that focused on transformation of the built environment:** Rome’1960, Tokyo’1964, Munich’1972, Montreal’1976, Moscow’1980, Seoul’1988, Barcelona’1992, Sydney’2000. This group is defined by significant amount of construction and infrastructure upgrades outside facilities directly related to the Olympics.

The Recent Athens and Beijing Olympics can definitely be added to the latter group. Generally all of the Games since Barcelona’92, or even Seoul’88 (except Atlanta 1996) can be put in a separate category, as in this period large scale urban regeneration became an intrinsic part of what is expected from the Olympic Games. The physical impact of the modern Games is unquestionable, but physical change doesn’t guaranty social and economic benefits. Before every Olympics there are always serious concerns expressed about the long-term use of facilities provided for the Games. This relates to both sports facilities, which may be underused or only accessible to elites after the event, and the infrastructure that may be excessive for everyday needs of the city, and mostly suited for the stadia, which would never be used as intensively during the Olympics. (Chalkley & Essex, 1999; Preuss, 2004)

**Socio-cultural impact.** Main themes that can be identified regarding socio-cultural impact of the Olympic Games include: promotion of sport and healthy lifestyle, boost of civic pride, transformation and promotion of city image. (Malfas, Theodoraki, & Houlihan, 2004), beautification of public spaces and creation of landmarks can be added to this list.

The promotion of a healthy life style is often considered to be directly linked to the overall improvement in the quality of life. (Malfas, Theodoraki, & Houlihan, 2004) The boost in civic pride can be of significant importance to local communities and may be used by local politicians to gain support. There is also some indication that it can have economic implications through increased labour productivity. (Matheson, 2006)

The ability of the Games to change or refresh the international image of the city can be seen as one of the key motivation for hosting the Games. Benefits of rebranding can include increased stream of tourists, inflow of investment, relocation of skilled workers or entrepreneurs or a chance to host other international events. (Greene, 2003; Hiller, 2000; Roche, 1994)
The possible negative social impacts of the Olympics have to be mentioned as well. Over the years eviction and gentrification related to mega events have been reasons for major concern. The Games in Seoul 1988 are known for the eviction of 720000 dwellers in an attempt to convey an image of prosperity. (Greene, 2003) The Games in Atlanta saw council housing inhabitants forced out for the Game period (Burbank, Andranovich, & Heying, 2002), and there is also evidence of eviction of significant scale associated with the Beijing’08 Games. (Broudehoux, 2007)

Long and Sanders (2001) conclude that over all the Olympics have a potential to be socially beneficial at a community level, though effects are not guaranteed to be inclusive and depend on planning and management quality.

Political aspects. Why cities host the Olympics? Some academics suggest that bidding for the Olympics is a risky urban development strategy that cities undertake under the pressure of increased global competition or as a response to the challenge of de-industrialisation. (Broudehoux, 2007; Greene, 2003; Burbank, Andranovich, & Heying, 2002; Malfas, Theodoraki, & Houlihan, 2004). But much more mundane political motivations can also be significant.

First of all, the events of such a scale as the Olympics are always political. In majority of cases they are funded by the public sector and that means that the politicians always need to gain public support for the event to justify the spending. (Malfas, Theodoraki, & Houlihan, 2004) And if support is achieved it can be used to pursue the interest of certain power groups.

For instance, the Games often require “fast-track” regeneration of urban spaces, which implies simplification of planning regulation, which can be used to push through certain developments that were unlikely under normal circumstances. (Broudehoux, 2007) in general the reasons for hosting the Games that politicians declare to justify the spending of public funds, and their true motivations may differ. The Urban Regime Theory (Annex 2) has been widely applied to analyse how the shape of Olympic coalitions has defined the core goals of the Olympic bids. (Cochrane, Peck, & Tickell, 1996; Schimmel, 2001) The central assumption of the theory is that in the circumstances of globalisation and decentralisation local governments are less powerful than the business groups that have wider outreach and possess greater resources. So local governments have to rely on support of the business elites to take on the projects of the size of the Olympics. As a result the interests of the business elites often determine whether a certain place will bid for the Olympics. (Stoker & Mossberger, 1994).

Famous results of studies that used this approach include investigation into Manchester’s bid for 2000 Olympics, which was used solely to attract more public sector investment into the city. (Cochrane, Peck, & Tickell, 1996) Yet this theory has its limitations and it can’t be applied to all political systems.

There is also and international political aspect to the Olympics. As global attention is drawn to the country it has a chance to communicate various messages, including politically related. A famous example is Tokyo’64 Games, which presented Japanese compliance with the rule of international law and reintegration of Japan into the global community after the World War II. (Greene, 2003)

Economic effects of the Games. Identifying and structuring the economic impacts of the Olympic Games is a difficult task. The academic literature doesn’t offer any comprehensive classifications, rather than a distinction between direct and indirect benefits (Hiller, 1998).

A number of authors attempt to list all economic effects of the Olympics. Kasimati (2003) identifies the following: infrastructure upgrades, urban renewal, increased tourist flows, employment creation, growth opportunities for local business, potential relocation of corporate headquarter into the city.

One way to apply structure to the economic effects of the Games is to distinguish between short-term effects and long-term effects. Several authors have covered the subject of immediate economic outcome of the Games. (Dwyer, Forsyth, & Spurr, 2005; Matheson V. A., 2006; Kasimati, 2003) Their analysis usually uses input-output models, where input – sum of all Games-related expenses and outputs – direct pecuniary benefits of the Games (mostly money that flow into economy, through tourist and participant spending) are weighted against one another. Such models use multiple assumptions about the scale of multiplier effects and additionality of the spending. Several researchers have shown that this approach leads to inaccurate results due to the problems of double counting, failing to account for the no-Games scenario, and other methodological problems, or even due to biases as a number of studies of this kind were financed by Organising Committees (OC) or their sponsors (Matheson V. A., 2006). (Dwyer, Forsyth, & Spurr, 2005; Kasimati, 2003). A number of studies have confirmed that if proper methodology is used the Olympic events produce limited or no short-run benefits for local economies. In fact it is in a way very optimistic to expect that a two-week event can justify large-scale investment in durable assets: buildings and infrastructure. This is why long-term benefits are worth considering as was done by Preuss (2000, 2004).

Rather than distinguishing between long-term and short-term effects Preuss (2000), the author of the most comprehensive study on economics of the Olympic Games,
distinguishes between the macroeconomic aspects, which are of great significance for this paper and the aspects of the business economy. The second category looks at the Organising Committee of the Olympic Games (OCOG) as a commercial enterprise that incurs costs as it organises the event (only operational costs are considered) and earns money through broadcasting rights, ticket sales, sponsorship, and other.

Preuss emphasises two key macroeconomic effects (Figure 2.1):

- Increased demand – primarily through increased tourist inflow, which leads to:
  - Higher employment, through extension of business activity.
  - Higher total income, both through extra employment and extra profits (which increases demand even further, creating multiplier effect).
  - And some negative effects:
    - Crowding out of some normal economic activity.
    - Possibility of rapid inflation before and during the Games.

- Attraction of international attention, which leads to:
  - Increased inflow of tourists that may lead to increased aggregate demand in the long run.
  - New or strengthened image of the city.

Even though this approach doesn’t distinguish between short-term and long-term effects, it acknowledges, that they are different in their scale and nature, yet they are driven by similar economic mechanisms. The inflow of tourists and the Games related staff increases demand dramatically over the course of 2 weeks. There is a question as to whether some of the extra demand is sustained in the long run. Preuss (2000) generally expresses the opinion that long-term growth of demand, is hard to relate to the Games, as it is shaped by a variety of other factors.

The factors identified by Preuss can be explained and assessed in the following way:

1. The income growth during the Games is understood as the difference between the spending of the visitors coming because of the Games and the spending of those crowded out excluding time shifters, who would have come anyway, just at a different time (Ibid., Matheson, 2006).
2. The employment gains are related to the dramatic rise in construction activity prior to the Games and in services during the Games (Preuss, 2000; Malfas, Theodoraki, & Houlihan, 2004; Bayliss et. al. 2004). Yet, there is no consensus on whether there are long-term employment benefits. One position suggests that the increased tourism profile should generate extra employment in tourism (Bayliss et. al. 2004, Preuss, 2004). Another one claims that effects are predominantly short-term (Malfas, Theodoraki, & Houlihan, 2004). Preuss (2000) also recognises that generally the extend of the economic

**Figure 2.1.** Classification of economic impacts of Olympic games. Source: Preuss, Economics of the Olympic Games, 2000
benefits of the Games depends on macroeconomic factors.  
3. A price increase is also a possible result of extra economic activity sparked by the Games, though the extent of it is very much specific to particular cities. Preuss (2004) shows that it is high to prove that the inflation infused by the Games adds significantly to the national level of inflation.  
4. The attraction of international attention is achieved through the extensive media coverage of the Games around the world and is mostly short term. A change of the city image that results from it can be lasting, and has a potential to affect city’s future. Change of the image shouldn’t be confused with increased awareness, which is guaranteed for Olympic cities (Ibid). Researchers understand image of a place as "ideas or concepts, held individually or collectively of a destination" (Smith, 2005, p. 219). It is proved that cities have managed to change perception towards them by communicating certain ideas about the city through the Games. Barcelona and Sydney created an image of friendly tourist destinations; Beijing and Seoul used the Games to reproduce the image of dynamism and innovation. And it is not necessarily only about the image of a place: the Seoul Games also were a part of strategy of launching South Korean electronics industry, which shows that perception of products of the area can also be targeted (Bayliss et. al., 2004, Preuss, 2004). But in order for significant results to be achieved the communication of a new image should be approached strategically and the new image shouldn’t contradict the pre-existing one. (Smith, 2001) The Games can also damage the image of a place. Studies show that flaws in organisation, scandals related to the Games or terrorist attacks are harmful for the city image as it was in the case of Atlanta (Chalkley & Essex, 1999) or Torino (Auruskeviciene et. al. 2010).  

Overall, even though the Preuss’s framework is very useful, adjustments should be made for the purpose of this paper. Firstly, Preuss doesn’t recognise changes to the built environment of the city as a separate category of factors that may trigger economic benefits. For the purpose of this paper we assume that the change of the built environment of the city, which has a strong influence on the dynamics of the city economy (which will be discussed later) and thus this affects should be considered separately. Secondly, Preuss mentions the structural change in the city as an intangible effect. It may be considered intangible in the sense of difficulty of measure. Yet, this paper would see structural transformation as the final outcome of all the impacts of the Olympics on the city. As explained earlier this paper takes on the hypothesis that

Figure 2.2. Classification of Economic Impacts of Olympic games. Source: Preuss (2000), adjusted by the author
the Olympic Games can trigger or reinforce the process of economic structural transformation at a city level, so the change of the sectoral structure of the city economies should be given a central place in the theoretical framework. (figure 2.2)

2.3. The Olympic Games in developing countries

What is different about the context of the developing countries in terms of their ability to benefit from mega-events in economic terms? The generalizations of this level are usually a bad idea, as local contexts always differ a lot. But the findings of Matheson & Baade (2003), present some ideas that point out potential differences. They define a list of factors that support or oppose the idea that the Mega-events can support development in the developing world.

Factors against Mega-events in developing world:

1. The cost of the events would be higher than usual: it is likely that all the sports infrastructure would have to be build from scratch, while in the developed countries the existing stadiums can be used. The amount of investment into transport and other infrastructure would also be higher.
2. The opportunity costs of public spending on the mega-event are much higher in countries at a lower stage of development, because the population can benefit more from additional investment into social, transport or hygiene infrastructure, which is often insufficient in the developing world.
3. The immediate economic gains of the events might be low, as purchasing power of local population is short of western standards, and the inflow of tourists might be low due to safety issues and poorer quality of services. The benefits to the local economy can also be crowded due to the domination of imported goods and services (Preuss, 2004).

Factors supporting hosting the mega-events in the developing world:

1. Low local wages would mean lower construction costs. But still high charges from visitors (mostly foreign), so there is a possibility of high profit margins (Ibid.).
2. The spending on non-sport infrastructure can be a significant contribution in places where its initial state wasn’t that good. But the essential infrastructure rather than the exclusive fancy leisure facilities should be prioritised (Preuss, 2000).
3. Places characterised by high unemployment can benefit more as people wouldn’t have to be drawn from other jobs.
4. A developing country can utilise mega-events to broadcast a particular messages about itself such as compliance with international law and respect for human rights, by selecting the bid IOC puts a “stamp of approval” on the country. (Greene, 2003)

The interest in the developing country context in this study comes from recognition of the fact that cities in such areas tend to be less economically competitive. Thus the need for structural change and adaptation to global trends is crucial but the obstacles are very significant. Are the Olympic Games a tool to overcome these obstacles? The lack of evidence doesn’t allow answering this question yet. But if it is proven that the Games have facilitated structural change in the Western world cities, it becomes obvious that the potential impact of Olympics in the global south deserves further investigation, and this is what the next chapter of this paper focuses on.

NOTES TO CHAPTER 2

1. Though distinguishing between the Games related and unrelated expenditure – is a tough challenge, and various approaches have been used for it. (Preuss, H. 2000).
2. Preuss (2004) points out that if all construction of permanent facilities before the Games is treated as cost, this implies that all buildings are completely depreciated within two weeks. As this is economically inaccurate this expenses shouldn’t be treated as Games-related. And if only operational costs are considered – most Games actually make profits.
3. For example in situation of full employment any additional job would either crowd out an existing job or will draw immigrants into the area, who will most likely take money out of the local economy afterwards, so the effect would be very limited. Yet if unemployment is significant effect would be more noticeable. (Preuss, H. 2000)
4. Smith (2001) has proved that images are easily adopted by people if transmitted through something they really care about. As there are hundreds of millions off sports fans around the world, sport – is a really strong tool for project city images.
5. For instance the attention is attracted through constructing of landmark structures and upgrades of built environment.
6. Low attendance at 2002 Football World Cup at matches that took place in South Korea is an example.
3. A structuralist perspective on the Olympic games

3.1. Basic concepts of structural economics

It is well known that neoclassical economics assumes that substitution elasticity between products is rather high and resources flow rather freely into more productive uses. The structural approach in development economics contradicts this by suggesting that sectors are not equal, due to variations in asset endowments, resources and other conditions like nature of the markets, thus sectors matter. (Chenery & Srinivasan, 1988)

“Structural transformation” as defined by Chenery and Srinivasan (1988, p. 199): “describe(s) the set of structural changes which are deemed essential for continued growth. These changes both contribute to and are affected by the economic growth. Thus economic development is understood as a continuous process of structural transformations that accompany growth”.(Syrquin, 1988, p. 205) Central idea behind this is that resources should constantly be redistributed to sectors with higher productivity.

The economic structure is understood as the contributions of different sectors to the economy, both in terms of the use of factors of production and output. The change in the composition of sectors (in any of the mentioned measurements) is known as the “structural change”. It is only one of the components of the “structural transformation”, with others being: demographic transition, income redistribution and others. (Syrquin, 1988)

The structural change won’t necessarily happen naturally. It can be restricted by the poor mobility of resources, market barriers, and even cultural factors like pessimism and distrust. The policy interventions should be used to facilitate the process; they can aim to remove the barriers or stimulate change, by facilitating a change in demand, trade and resource distribution through various measures. This may be accomplished through extreme methods, like Stalinist command planning approach or import substitution policies, yet those are obviously not the only options (Ibid.).

Kuznets and Chenery have extensively studied patterns of structural transformation; their studies have confirmed that a number of universal features explain commonality in long-term transformation patterns in different countries and that it is highly likely that they are not repeated by accident or coincidence (Ibid.). The logic of the structural transformation can be applied at various levels: state, regional, local. In this study metropolitan area level would be considered.

3.2. Recent patterns of structural transformation and the emergence of the Olympic Games as an economic policy tool

In recent decades the emergence of the global production system, austerity measures, improvement in transportation and communication technologies have led to significant changes at a city level. Buck, Drennan, & Newton (1992) summarised them into following major processes:

- Deindustrialisation together with the spatial restructuring that featured a shift away from the industrial agglomeration to the concentration of control functions.
- Growth of importance of the producer services, which lead to a new urban hierarchy being established. This together with the increased complexity of the global financial system has led to the emergence of the global cities as the dominants of the international economy.
- Increased vulnerability of urban areas due to austerity measures imposed on local governments from a national level.
- Changed patterns of urban consumption due to replacement of the blue-collar jobs by the better-paid white-collar jobs.
- Decentralisation of government can also be added, as it has brought a major change of the political landscape in a number of large economies. (Townroe, 1996).

While the major world cities like London and New York were able to adapt to the change described above by developing financial and business service clusters (Buck, Drennan, & Newton, 1992), a number of industrial cities in the western world faced a tough challenge. De-industrialisation in the developed world cities was caused according to Harris & Fabricius (1996) by a series of shocks between mid 70s and early 80s, which affected industrial centres established at various stages of industrial revolution. The decline of industrial sectors was rapid and can best be explained by the inability to compete on international markets (mentioned in literature as failure thesis), and can hardly be
seen as a part of the natural development process (maternity thesis). (Lever, 1991) This can be accompanied by the notion that the beginning of the XXI Century should have been the time when a new Kondratiev cycle should have started, which supposedly should have created incentives to support development of new sectors (such as communication technology and biotechnology) that should become the key source of economic growth in the next 50-60 years (Syrquin, 1988; Montgomery, 2008).

The urban governments were facing a tough challenge of rebuilding the city economy. As the markets globalised cities had to face tougher competition for investment or spending. The popular policy options of responding to the challenge included focus on tourism, cultural and innovative sectors. (Harris & Fabricius, 1996).

As the urban governments gained greater authority and faced greater challenges, they started taking up leadership roles in urban development, rather than just function of service provision. This has led to introduction of much riskier development strategies at city level, which was conceptualised by Harvey (1989) as “urban entrepreneurialism”.

This is when the Olympic Games were first considered as a policy tool. With the increased commercialisation of Sports and the technological capacity to attract global attention and use it for marketing purposes sport mega-events happened to fit interests of both business and public sector which is why they were considered as a suitable development strategy (Hall, 2006; Hiller, 2006). The Games are usually seen as a component of a strategy that focussed on establishing a city as a centre of leisure and consumption and thus attracting tourists. (Burbank, Andranovich, & Heying, 2002). But literature also offers various reflections on the role of mega events in the development process. Ley & Olds (1988, cited in Hiller, 2000, p. 440) interpreted Mega-events as an instrument of hegemonic powers, and a strategy that ignores community needs. The Games have also been accused of being a tool for extending the process of capital accumulation (Andranovich, Burbank, & Heying, 2001). Several authors used the Urban Regime Theory approach to discover hidden motivations for Olympic bids (Cochrane, Peck, & Tickell, 1996; Schimmel, 2001). Lenskyj (2002) in her study of Sydney Olympic Games claims that contemporary Olympics are shaped by media, which uses it’s overwhelming power to communicate imagery, that has little to do with the sport or the Olympic spirit. Lenskyj puts media in the centre of the “Olympic industry”, the term she uses to emphasise the commercialised nature of the Olympic movement of today.

The Cities that chose hosting sports events as the centre piece of their development approach: Indianapolis, Sheffield, Manchester, - were heavily scrutinised by researchers (Cochrane, Peck, & Tickell, 1996; Schimmel, 2001; Shibli & Gratton, 2001), and even though results these cities achieve are controversial particularly in relation to significance of the sports events contribution to the outcomes, it is hard not to acknowledge that at a certain level these strategies were beneficial. Today there are more cities undertaking similar strategy (e.g. Kazan in Russia).

How can the Olympic Games facilitate structural change? This section will attempt to show that the Olympic Games give cities a number of tools that when put together wisely fulfil all of the prerequisites needed to change the economic structure. For this purpose of this chapter the definition of the structural change needs to be simplified (keeping in mind the postfordist transition context) as establishing of new or extension of existing service clusters that is accompanied by diminished importance of the traditional sectors of the economy, particularly manufacturing.

Three affects associated with the Olympics will be covered in this chapter. First two were mentioned before: direct economic effect in form of demand increase, and the opportunity for improving the image of the place. Extra demand allows businesses to make greater profits and

Figure 3.1. Model of city dynamics. Source: (Montgomery, 2008)
reinvest into expansion. The new image may allow city to attract tourist, investment and talent thus directly creating opportunities for growth of new sectors.

The third factor is the urban regeneration associated with the Games that may include construction of new facilities and infrastructure. The mechanism behind this effect must be explained in more detail. It has been proved that the infrastructure and construction in general can’t be seen as a source of sustained growth (Arsen, 1997). But Montgomery’s (2008) understanding of the postmodern city dynamics (figure 3.1) that the built environment adequate to the activity city accommodates (or wants to accommodate) is an essential component of economic development.

To provide further explanation ideas of Edward Glaeser (2009) can be applied. He identifies two new types of cities that have emerged in the post-fordist world: the consumption cities and the skilled cities. The consumption cities attract people by quality of amenities (Glaeser emphasises the importance of good climate, yet quality of infrastructure, public spaces and architectural landmarks is also important). The skilled cities accumulate smart people and help them form networks that produce innovation. This happens because in the world of today it pays off to be smart, but you can only benefit from it if you are around other intelligent people. Glaeser suggests that high quality infrastructure and built environment is crucial for a city that aims to develop any of the two suggested types of economies. The amenities help attract tourists and consumers supporting a visitor economy, but amenities can also create a more comfortable living environment and attract the smart and the creative to move to a place thus improving city’s skill profile and giving it a new source of economic growth. The three major effects discussed trigger the key drivers of structural transformation: the investment (both public and private) and the attraction of qualified migrants, which create conditions for the development or expansion of high value services or other post-industrial sectors. (Figure 3.2)

Two important considerations should be expressed in the end:

1. Jane Jacobs (cited in Montgomery, 2008, p. 28) has stated that the biggest obstacle for development of new sector is the resistance of the ones that are already in place. The urban regime theory suggests that if the Games can be used for the purposes of the established business elite (for instance some researchers suggest that the Manchester Olympic bid was aimed at attracting more investment from the national budget into the city) – if this is the case, structural change can hardly be expected.

2. When applying the suggested framework to the developing country context it is important to keep in mind that it describes situation in cities undergoing post-industrial transition and might not be relevant for the cities at lower levels of development. Structural change as such shouldn’t be perceived as the ultimate good, it should be clearly understood what kind of activity a city wants to develop, how is it going to be sustained, which resources is it going to use, and which markets will it serve.

3.3. Methodology for case studies

The next chapter of this paper will be devoted to the case studies of the Olympic cities. The goal of the case studies is to evaluate whether structural change has taken place in selected Olympics cities. Dynamic analysis of employment and output structures will be conducted to tackle the question. The analysis of the Games-related conditions that might have had effect on the outcome would be targeted with the use of the modified version of the linkage model developed by Hiller (1998) as a framework for mega-event analysis. (Annex 1).
This study will use the Hiller’s concepts of backward and forward linkages. The backward linkages (factors linking games and pre-existing conditions) analysis will include a review of macroeconomic indicators that will be used to understand the conditions in which the Games preparation took place and identify the motivation for the Olympic bid and contrast it with the way the Olympics were promoted locally and internationally. (Annex 2). The forward linkages (factors linking the Games themselves to what happens after them) analysis will use quantitative and qualitative techniques to look at the effects of the Games discussed in the framework including tourist inflow, employment generation and physical regeneration. (Figure 3.3)

The parallel linkages will be interpreted differently than suggested by Hiller. This paper will not understand them as the unintended outcomes of the event, but rather as the results that are related to the Games, but are not uniquely specific to them. This will include such factors as change of the city image, change of skill levels of the population and investment attraction. The structural change wouldn’t be seen as an indirect effect (like Hiller suggests), as this study assumes that it is the major outcome of the Games, which is most likely to be achieved if deliberately targeted through event planning and management and their integration into broader urban strategy. In addition to the three types of linkages, the case studies will include a discussion of the management and planning approaches used by the event organisers and the general quality of organisation as well.

The significant limitations of the suggested research methodology have to be listed:

1. The only way to understand the true impact of the Olympic Games is to compare the “Games held” and the “no Games held” scenarios in the same city. Unfortunately this is impossible. This means that the effect of the Olympic Games can never be separated from effect of multiple other factors, yet an attempt will be made to understand whether the Games contribution was significant in the cases considered.

2. Unfortunately even the developed countries, cases from which are covered in this paper do not collect comprehensive economic data at a city level. Ideally, the analysis would require yearly time series data on employment and output by subsectors for metropolitan areas. Unfortunately this information is not available in full extent, which makes the conclusions drawn less reliable.

Figure 3.3. Coordination of theoretical concepts of structural change facilitated by the Olympic Games and the linkage model analytical framework. Source: Elaborated by author

NOTES TO CHAPTER 3

1. Each of Kondratiev cycles is associated with major technological innovations, when the cycle starts policy tools should be used to facilitate development of technological clusters that will dominate for the next 50-60 years.

2. This simplification is in line with current trend of development in post-modern cities.

3. According to Montgomery (2008), for all cites it is essential to maintain a balance of dynamic economy, cultural life and built environment that would suit the previous two. limited. Yet if unemployment is significant effect would be more noticeable. (Preuss, H. 2000)
4. Olympic Cities

4.1. Criteria for case study selection

The following criteria were taken into account when choosing the cases:

1. Only the Summer Olympic Games were considered, as they are regularly taking place in major metropolitan areas, their scale and popularity allows for a greater physical and economic impact than the Winter Olympics.
2. Only the Games of the recent period in the history of modern Olympic movement, starting from 1988, were considered. This is because during this period the Games were not influenced by international politics as much as previously, and reached the scale at which their influence is significant enough to facilitate transformational effects.
3. The methodology chosen requires data for at least 4-5 years before and after the event. The Beijing’08 Olympic Games couldn’t be chosen because there is still not enough data to evaluate their impact. Seoul Games were eliminated due to the lack of data as well.
4. As the capacity of this study is limited – only two cases can be considered. The decision was made to consider cases that are recognised as more successful legacy-wise as they are more likely to produce positive results in terms of the structural transformation and prove that such results are achievable. On this basis Barcelona’92 and Sydney’00 were chosen over Athens’04 and Atlanta’96.

4.2. Barcelona 1992

Barcelona stands out from the list of the Olympic cities. Barcelona is considered as an etalon when it comes to the Olympic legacy and the quality of event planning and management. A number of studies have pointed out that the Barcelona’92 Games have made a great contribution to the economic performance and overall development of Barcelona. (London East Research Institute, 2007; Brunet, 2005; Brunet, 1995; Duran, 2005). At the same times the evidence that points at shortcomings in the way the event was planned and organised is rather limited, particularly compared to the other Olympic Games.

Historical and political background (Backward linkages). Barcelona is the city that throughout it’s history has been facing the need to facilitate economic activity to support a vast metropolitan area, while lacking the benefits of being a political centre of the country. Hosting Mega-events has been chosen as a response to this challenge on multiple occasions. In the last 150 years Barcelona has hosted 8 mega-events including The Universal Exhibitions of 1888 and 1929. (Brunet, 1995; Duran, 2005) Yet there is no doubt, that the 92 Summer Olympics were by far the biggest and the most impactful of them.

The success of the Barcelona Games is often attributed to the unique circumstances that came together when the decision to bid for the Games was made. Firstly, in 1975 Spain went through political transition, which marked the end of the Franco regime. The newly re-established democratic principles were valued particularly high at that point, which meant that the civic movements did have significant influence (Monclus, 2003). At the same time the city, was suffering the decline of the industrial core, rapid suburbanisation, diminishing population, the poor quality of infrastructure and amenities (Monclus, 2007; Brunet, 1995). All of these factors led to the creation of a coalition around the Olympic bid driven by city authorities and backed at the state and the regional levels, and supported by the public, which agreed that the Games could bring the needed change to the city. The Games have achieved a unique level of consent of the public(Brunet, 1995; Monclus, 2007). In 1987 61,4% of the citizens questioned were expecting that the Games would bring change to the city. Half a year before the Games in 1992 87% of population thought that Barcelona would host the event successfully. The average grade given to the Games after the Games was 8.78 out of 10. (Brunet, 1995) In the circumstances described the identification of the “backward linkages” in a political sense is of little use, as the political motivation for the Games (urban renovation and general revitalisation of the city) hasn’t contradicted the way they have been communicated to the public. There is little use for the urban regime approach as well. Participation of private sector was significant, as OCOG (Organising Committee of Olympic Games) was run as a public private partnership. (Brunet, 1995). Yet the public sector role was more significant in terms of responsibility, risk, and investment (Preuss, 2000). The interests of the business elite even though considered, were never domi-
nant. The relationships between three levels of public administration were regulated through an inter-institutional agreement, which helped to avoid major conflicts (Brunet, 2005).

The developments in the urban planning field at the time are also important for the analysis of the Barcelona Olympic legacy. After a period when planning regulations were very inefficient (Franco period) (Monclus, 2003) change was needed. The first step was made with the adoption of the Plan General Metropolita (PGA) in 1976. The document was developed during the Franco period, when participatory mechanisms were non-existent. Still it was a professionally prepared document of high standard that introduced basic principles of zoning and priority given to public space. (McDonogh, 1991) The PGA also included plans to host several international festivals, and can be seen as the point of re-introduction of mega-event strategy in Barcelona. (Cahyadi & TenBrink, 2004) In the early 80s after the democratisation of municipal governance a party representing “the left” principles took control of the municipality, which coincided with the change of the mainstream paradigm in urban planning. The European cities were not growing as fast as they used to and planning was for the first time seen as a tool for facilitating growth rather than accommodating it. (Monclus, 2003) Maragall saw public spaces as a potential tool for solving the economic and social problems of the city. In the condition of the economic slump of the early 80s the emphasis in Barcelona was made on small-scale public space regeneration projects, which characterised planning policy in 1982-86, and were a successful contribution to the urban environment and the city’s administrative capacity. (Monclus, 2007; 2003). During this period planning was depoliticised and has developed a fundamental R&D basis. (McDonogh, 1991) The success of the Olympic bid and the change of the economic conditions allowed the city to continue the same policy but increase the scale of the projects in entailed. So the success of the Olympic redevelopment has to be attributed to the events of the previous decade (Ibid.).

Figure 4.1. Quarterly GDP of Spain 1980-1992 in constant prices 1995. Source: (Instituto Nacional de Estadistica, 2011)

Figure 4.2. Budgets of Olympic Games 1964-2004 (million US$ 2000). Source: (Brunet, 2005)
Economic background and the Games finance. Barcelona is the city that throughout its history has been facing the need to facilitate economic activity to support a vast metropolitan area, while lacking the benefits of being a political centre of the country. Hosting Mega-events has been chosen as a response to this challenge on multiple occasions. In the last 150 years Barcelona has hosted 8 mega-events including The Universal Exhibitions of 1888 and 1929. (Brunet, 1995; Duran, 2005) Yet there is no doubt, that the 92 Summer Olympics were by far the biggest and the most impactful of them.

This favourable economic climate made it possible for Barcelona to assemble a budget that was considered the biggest in the history of the Olympics at the time. (Figure 4.2)

All the Games related spending was broken down into the organizational costs and the investment with lasting impact – “legacy costs”. All the spending related decisions were guided by the aim to minimize organizational costs and maximize the “legacy costs”(Brunet, 1995), which in the end accounted for 85.5% of the Olympic budget. (Figure 4.2.)

Barcelona was very successful both in attracting money from private sponsors and generating income. The Organising Committee of the Olympics Games (OCOG) reported revenue of $1530 Million, which exceeded the organizational costs of $1364 Million. 30% of this came from the broadcasting rights sales. The total revenue exceeded that of Seoul by 50% to become the greatest in history at the time. (Figures 4.3,4.4)

The private sector contributed 28% to the total budget, and combined with the contribution of the state owned companies accounted for 40% of the budget, which equalled the total contribution from the public budgets of different level. (Figure 4.3)

Planning and management. Barcelona is the city that throughout its history has been facing the need to facilitate economic activity to support a vast metropolitan area, while lacking the benefits of being a political centre of the country. Hosting Mega-events has been chosen as a response to this challenge on multiple occasions. In the last 150 years Barcelona has hosted 8 mega-events including The Universal Exhibitions of 1888 and 1929. (Brunet, 1995; Duran, 2005) Yet there is no doubt, that the 92 Summer Olympics were by far the biggest and the most impactful of them.

The administration and management of the Games, was run by a joint venture with public and private participation. Two separate bodies were responsible for the Games-related investment programme and the organisation of the event itself. This turned out to be an innovation that helped overcome the conflict between the short-term and the long-term objectives. (Brunet, 1995)

The other innovations included decentralised decision-making process, staffing policy that featured use of highly motivated recent graduates and volunteers, and restructuring of the OCOG for the operational period 6 months before the Games. (Botella, 1995)

One of the factors that ensured the high quality of planning and management of the Barcelona Olympics can be found in the simplicity of the objectives: “organisational excellence and urban impact”, which emphasised both importance of the Games and their intermediate status in relation to the long term development ambition for the city. (Brunet, 2005)

Direct effects of the Games (Forward linkages).

Urban regeneration. The strategy of maximizing “legacy” costs has ensured that the Barcelona Olympic
Games facilitated a dramatic change of the built environment, infrastructure, housing, commercial and public space.

The infrastructure projects including transport, telecommunications and sewage system upgrades accounted for 61.5% of the Olympic spending. At the same time less than 10% of the investment went to sports facilities (figure 4.4) (Brunet, 1995).

The Games were hosted in 4 different locations around the metropolitan area. Investment projects of smaller scale were taking place all around the Barcelona region (Gold & Gold, 2006). (Figure 4.5) The Games-related investment had a significant transformational impact on the built environment not just at particular sites but on a city-wide scale (Monclus, 2007).

The landmark project of the Games was the Olympic village, built on a redeveloped industrial site. The project involved relocation of a train line and recovery of 5.2 km of the coastline. The project is still considered one of the best examples of mixed-use redevelopment of industrial areas (Chalkley & Essex, 1999). It helped provide perfect conditions for the athletes and leave a lasting legacy: reopened of the city to the sea and established a new commercial and entertainment district of the Olympic Harbour, providing high quality public space and accessible housing (Carbonell, 2005).

Tourism impact. Tourism was one of the areas targeted by Barcelona when preparing for the Olympics. The Games were seen as an opportunity to expand the sector. Turisme de Barcelona was established in 1993, to maximize the benefits of Olympic image gains for the tourism sector. (Duran, 2005) Yet the results Barcelona has achieved are rather controversial. Between 1990 and 1992 more than 30 new hotels appeared in the city, bringing the amount of hotel beds from 18,596 to 25,055 (Ibid). Yet the Olympic year didn’t bring significant increase in incoming tourists. (Figure 4.6) even though about 400000 tourists and 55000 athletes and support staff visited Barcelona in 1992 it is possible that a large number of regular tourists were crowded out.

But in years after the event numbers of incoming tourists were increasing rapidly, but it is hard to judge how significant was the role of the Olympics in this. The growth of the tourist inflow ensured that the extension of the hotel network was made the best use of, occupancy rates reached 81.2% by 1998 after a post-Olympic slump. (Duran, 2005) Duran argued that the Games helped Barcelona establish itself as a destination for recreational tourism, and corporate events. He also showed that Barcelona saw the largest growth in visitor numbers in Europe in 1990s and became the 8th most visited city on the continent. (Table 4.1)

A report by the European Tour Operator Association (2010) contradicts these findings by saying that the success of Barcelona as a tourism destination can hardly be Olympics-related, because during the first couple of years after the Games when the Olympic afterglow was still strong, growth of the tourist inflow was slower than that of the competitor cities: Venice and Lisbon. The report also shows that in relative terms Barcelona’s progress in post-Olympic decade wasn’t faster than that of Prague and Dublin.

However even though the causes are debated, it is clear that the tourism sector in Barcelona grew after the Olympics. This expansion might have been a product of

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**Figure 4.4.** Amount of tourists and overnight stays in Barcelona 1990-2004. Source: (Barcelona Turisme, 2011; Duran, 2005)

**Figure 4.5.** Geographical distribution of Games related investment. Source: (Brunet, 1995)
Employment. The employment boost of the Barcelona Games as suggested by the literature was mostly short term. The number of jobs created directly or indirectly due to the Games preparation process at its peak exceeded 90000. (Figure 4.7) and helped decrease the unemployment rate in the metro area from 18.4% to 9.8% between 1986 and 1992, and bring it far below the national average of 15.5% (Brunet, 1995).

In a later study of the Olympic legacy of Barcelona Brunet (2005) argues that, even though most of the Olympic jobs were temporary, the Games related investment and expansion in the service industry has supported the creation of about 20,000 permanent jobs.

Indirect and intangible effects of the Barcelona '92 Games (Parallel linkages)

Image. As any intangible phenomenon, the change of the city image is hard to measure. The most commonly used methods would usually imply conducting surveys which should be done before and after the event, to track the change in perception of the target audience (Auruskiviciene et. al, 2010) But it is impossible to accomplish that kind of study for an event which has the entire world population as the target audience like the Olympics do, so only indirect evidence can be used.

A rough assessment of the image impact of the Games can be made based on the organisational quality of the Games and the way they were covered in the media. Barcelona has done really well in this sense. The organisational excellence and absence of major incidents, the memorable opening and closing ceremonies, the landmark Olympic village project - all created a base for a positive change in perceptions. (Brunet, 2005)

Another possible tool for evaluation of the city image is the performance of the city in various international rankings. According to the European City Monitor rating (Cushman & Wakefield, 2010) Barcelona has gone from 11th to 5th (even 4th in 2009) place in Europe in the ranking of potential business locations between 1990 and 2010. Currently Barcelona also holds 1st place in Europe in the Cushman & Wakefield liveability index, enjoys a high rankings for the quality of the internal and the external transport links, it is also positioned 5th in the European city of the future ranking. (Clark, 2011) Barcelona is also ranked 10th most attractive destination globally in 2006.(Bremner, 2007)

Considering global city rankings, Barcelona currently occupies 115th place in the Global connectivity ranking 46th in the business connectivity ranking and 148th in the world university rankings.(Clark, 2011) This confirms Brunet’s suggestion (2005) that a lack of international business representation and relatively poor inclusion into the international city network is one of the major problems for Barcelona today, and the Olympic legacy didn’t help the city solve it. Overall it seems that Barcelona has produced an image of a place – interesting to visit and great to be in, but has failed to established itself as a competitive business location, thus limiting potential economic benefits of the new image.

Table 4.1. Increase of number of overnight stays in leading tourist destinations in Europe. Source: (Brunet, 2005)

<table>
<thead>
<tr>
<th></th>
<th>Visitors 1990</th>
<th>Visitors 2000</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>91,300,000</td>
<td>120,400,000</td>
<td>31.87%</td>
</tr>
<tr>
<td>Paris</td>
<td>31,166,172</td>
<td>31,633,273</td>
<td>1.50%</td>
</tr>
<tr>
<td>Dublin</td>
<td>15,359,000</td>
<td>16,898,000</td>
<td>10.02%</td>
</tr>
<tr>
<td>Rome</td>
<td>12,915,225</td>
<td>14,781,281</td>
<td>14.45%</td>
</tr>
<tr>
<td>Madrid</td>
<td>9,481,728</td>
<td>12,655,413</td>
<td>33.47%</td>
</tr>
<tr>
<td>Berlin</td>
<td>7,243,638</td>
<td>11,412,925</td>
<td>57.56%</td>
</tr>
<tr>
<td>Prague</td>
<td>4,524,000</td>
<td>7,921,953</td>
<td>75.11%</td>
</tr>
<tr>
<td>Barcelona</td>
<td>3,795,522</td>
<td>7,777,580</td>
<td>104.91%</td>
</tr>
</tbody>
</table>

Figure 4.7. Number of jobs generated in Barcelona due to Olympic games preparation.Source: (Brunet, 1995)
Migration and skills of the population. The Barcelona case contradicts the idea that a strong image and high quality of amenities can attract people to the city. Net migration to the Barcelona municipality was negative in the early 90’s, and reached the lowest level right after the Games (Figure 4.8) This could have been a result of the increased cost of living (Brunet, 2005). For the wider metropolitan area net migration was negative but the rate of depopulation was much lower, which suggest that suburbanisation was an on-going process for Barcelona throughout the 90s and can explain part of the out migration from the Barcelona municipality.

The share of Barcelona population with university degrees has been steadily growing since mid 80s. (Figure 4.9) This effect is hard to relate to the Games because of the negative net migration after the Games that couldn’t have increased the number of graduates in the city.

Investment. Data on foreign direct investment (FDI) into Catalonia, has only been collected after 1995 and can’t be used for analysis of Olympic impact, as there are no pre-Olympic reference points. The anecdotal evidence shows that there could have been a positive impact on investment, for instance 1/3 of all of the Olympics-related private investments came from foreign sources. (Cahyadi & TenBrink, 2004) It is also reported that 200 new FDI projects were located in the Barcelona area after the Olympics, but their scale is unknown. (Locate in Kent, 2009).

Evidence of structural change. This section presents the analysis of the structural change in Barcelona’s economy before and after the Olympic Games. Figure 4.10 show that the data on employment structure doesn’t present the evidence of structural change in the period prior to the Games. At all geographical

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**Figure 4.8.** Net migration to the Barcelona Municipality and Metropolitan area. Source:(Idescat, 2011)

**Figure 4.9.** Share of population with university degrees in Barcelona Municipality and Metropolitan area. Source:(Idescat, 2011)
levels the most noticeable development in this period is
the increased share of construction sector, which cap-
tures the contribution of the Olympic regeneration. It
is also interesting to point out that the construction in-
dustry was expanded at all territorial level, which shows
the geographical spread of the Olympic regeneration.

The change in employment counts by sub-sector
(Figures 4.11, 4.12) reveals, that the period before the
Games was characterised by an expansion across all
sectors, which is natural for the growth period of an
economic cycle. The faster growing manufacturing
sectors were food and drinks (can be related to pre-
Olympic investment), and electronics (hard to relate to
Olympics). The fastest expanding services sub-sectors
were consumer and public services: trade, rentals,
hospitality, health (all can be related to the Olympics).

In the post Olympic decade the evidence of structural
change can be found both at the Municipality and the
Metropolitan area level. (Figure 4.10) Throughout this
period the share of manufacturing jobs was decreas-
ing while the share of service jobs was growing. The
fluctuations in construction sector can be related to
macroeconomic dynamics – its share has shrunk dur-

Figure 4.10. Change of Employment structure in Barcelona at different territorial levels. Source: (Idescat, 2011)
has expanded after five years of sustained economic growth between 1996 and 2001 (Figure 4.13).

As seen in figures 19-20 the employment dynamics in 1991-2001 were quite different at municipal and metropolitan levels. (Figure 4.14) At the municipality level employment in services contracted in the first four years after the Olympics, while it was growing in a wider geographical area, this confirms that the city was hollowing out during this period. The hospitality, trade and transport sectors contracted the most, which could be a result of the recession and the decline in tourist inflow.

But what were the growth sub-sectors in services? Overall the sub-sector structure of service employment was rather static. (Figure 4.15) The biggest share increase between 1991 and 2001 was in healthcare and business services, yet all of these changes improved the employment shares of these industries by less than 2%.

Are the changes revealed significant enough to register the emergence of a new leading sector? Comparison with the economic transition that happened during the same period of time in London leads to a negative answer. (Figure 4.16) The famous financial cluster in}

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**Figure 4.11.** Change of Employment structure by industrial subsectors 1986-1991. Source: (Idescat, 2011)

**Figure 4.12.** Change of Employment structure by service subsectors 1986-1991. Source: (Idescat, 2011)

**Figure 4.13.** Change of Employment structure 1991-2001. Source: (Idescat, 2011)

Figure 4.15. Employment structure by services sub-sector, Barcelona Metropolitan area. Source: (Idescat, 2011)

![Barcelona Municipality vs Barcelona Metropolitan Area Employment](image)

Figure 4.16. Change of Employment structure London vs. Barcelona. Source: (Office for National Statistics, 2001), (Idescat, 2011)

Figure 4.17. Change of Value Added structure by major sectors of economy for Barcelona municipality. Source: (Idescat, 2011)

![London vs Barcelona Value Added Change](image)

Figure 4.18. Gross Value Added Annual Change in real terms (%). Source: (London East Research Institute, 2007)
the UK capital expanded from a share of 25 to 32% of total employment in the city during the same decade, while the most dynamic sector in Barcelona only gained 2% of all jobs in the city. (Buck, Drennan, & Newton, 1992)

Unfortunately the sectoral structure of gross value added (VA) for Barcelona is only available at municipal level and only for major sectors. The figure 4.17 confirms the deindustrialization trend, identified earlier.

In conclusion, the Barcelona Olympics definitely had a significant impact on the city. Direct economic and physical effects are unquestionable. The Olympic impulse is said to be the main reason for the speed with which Barcelona recovered from the recession of the mid-1990s. (Figure 4.18) Yet when it comes to structural change, the deindustrialization trend is present both before and after the Games and no significant change in the restructuring process is found. The pre-Games period saw a significant growth in consumer and hospitality services, which wasn't sustained after the Games. Most significantly, there is no evidence to suggest that the Games supported the growth of high value services.

Finally, it can be concluded that the Barcelona Games have delivered a significant transformational potential for the city, with increased tourist inflows, upgraded built environment and boosted image, yet from a structural economics standpoint this potential has been underutilized. The true meaning of the Games for Barcelona might be intangible and hard to capture with data analysis, but there is no evidence proving that the Games have triggered structural transformation in the city, even though conditions and policy in relation to the Games and the post-Games development were as good as they have been in the history of the modern Olympics.

4.3. Sydney 2000

The Sydney 2000 Olympic Games were much more controversial than Barcelona in terms of the way academics have reacted to them. It seems like there has been a significant contradiction between the glossy image of the Games, that communicated environmental values and respect for indigenous aboriginal culture, and a number of concerns about the way the Games were prepared and the legacy they’ve created. (Lenskyj, 2002) For the purposes of this paper the case of the Sydney Olympics is interesting because it used a different approach. Unlike in Barcelona lower priority was given to urban regeneration and the main focus was on marketing, promotion and creating opportunities for local businesses.

Motivation and politics (Backward linkages). A peculiar thing about Australia is that it is probably the country with the closest connections with the Olympic movement. Australia is only one of the two countries that participated in all of the modern Olympics. Australians are passionate about sport and they have a certain appreciation for the Olympics engraved in the national culture (Haynes, 2001; Garcia, 2007).

Before the Games came to Sydney Australia had been bidding for the Olympics since the 1988 campaign, but bids from Melbourne and Brisbane were unsuccessful. Sydney considered applying for the Games in 1972 and 1988 before the idea to bring the Olympics to the country’s leading economic nod finally prevailed. Actually the bid for 2000 Olympics was prepared even before Melbourne lost in the run for 1996 Games (Jobling, 2000; SOCOG, 2001).

The Australian Olympic Committee (AOC) and the Government of New South Wales simultaneously considered the bid opportunity for Sydney. (SOCOG, 2001) The initiative didn’t originate at the city level, and there is no evidence of business interest groups playing a part. This also explains why the legacy ambitions of the Sydney Games were largely of a national rather than city scale.

Sydney’s bidding experience is interesting due to the difference in messages that the organisers were communicating to different audiences:

- On the international stage the promotion messages of the Games included the depth of the Olympic tradition in Australia, economic and political stability9, and perfect conditions created for the athletes (Jobling, 2000). But the greatest emphasis was given to the environmental agenda (Sydney Olympics are still known as the first “Green games”) and the message of great respect to the Australian aboriginal culture. (SOCOG, 2001)
- Within Australia the following benefits of the Games were used for promotion:
  - A boost to the city and national economies, through increasing international tourism and reaching out to the Asian markets for business services (London East Research Institute, 2007).
  - An improved international profile of the city, establishing the image of a young dynamic entrepreneurial society (Ibid.).
  - The regeneration of a former wasteland site for future use, development of a new residential suburb (the Olympic Village) (Jobling, 2000).
- Promotion of the bid locally within Sydney was based on the notion of Olympic Spirit. The success of this strategy can be related to aforementioned Australian connection with the Olympic values. The overall support for the Games was rather high
throughout the Olympic cycle even though multiple issues aroused. Lenskyj (2002) claims, that the public appreciation of the games was so high that some protest groups devalued their position significantly, by trying to oppose certain developments related to the Olympics.

Planning, financing and management. In Sydney the regional (not city) government was the major initiator of the Games. Urban and national authorities were involved through an agreement between three levels of public administration similar to that used in Barcelona (SOCOG, 2001). Several purpose built entities were established including: SOCOG – responsible for programming, operating and managing the Games, Olympic Coordination Authority (OCA) – responsible for design and construction of the Olympic facilities and the Olympic Road and Transport Authority (ORTA). The City of Sydney Council was responsible for beautification of the Central Business District and the cultural festivals (PriceWaterhouseCoopers, 2007). Even though all the key managing bodies represented the public sector, involvement of the private sector was significant particularly in terms of funding.

The operational costs of the Sydney Games reached US$ 2.04 Billion and were covered by the revenues of SOCOG. (Figure 4.19)

The overall cost of the Games came up to US$ 3.825 billion, which was much less than the Barcelona’92 budget. Preuss(2000) estimates that 70% of funding came from the private sources. But, if the Game’s revenues are included the direct contribution of private funds only accounts for 1/7 of the Olympic budget. (Figure 4.20) (PriceWaterhouseCoopers, 2007)

The Games related costs were so much smaller than in Barcelona because urban regeneration wasn’t perceived as the major goal and image effects were given higher priority. Economic situation can’t really be used as justification for this change in agenda as before and after the Games Australia was enjoying steady economic growth. (Figure 4.21)

The organisation of the Sydney Olympics was far from perfect, and can’t be compared to Barcelona. Famous problems included:

- Poor administration of ticketing process. (Haynes, 2001)
- Budget blowouts – the planned budget was exceeded multiple times and additional funds were provided from the regional budget (Ibid.)
- There were concerns that the environmental legacy, one of the key marketing messages of the Games, wasn’t perceived properly. Reports claim that the wasteland site on which the Olympic park was built wasn’t cleaned properly, and there were concerns about the toxicity of the water in the bay next to it. (Lenskyj, 2002)

Lenskyj (2002) also reports that there were significant infringements of human rights and social responsibility principles throughout the Olympic cycle. The legislation passed to enforce security measures during the Games didn’t meet international human rights standards. The rents around the Olympic park skyrocketed before the Olympics, and there was nothing done to protect the low-income residents. Finally, the aboriginal population, even though their imagery and culture was widely used in the Olympics ceremonies, didn’t benefit from the event, and no major change in policy regarding the indigenous

Figure 4.19. Revenue of Sydney Olympic games Organising Committee (Million US$). Source: (London East Research Institute, 2007)

Figure 4.20. Sources of Finance of Sydney 2000 Olympic Games. Source: (London East Research Institute, 2007)
minority has occurred. One can expect that all of these developments should have harmed the image of the city, but it wasn’t the case.

**Direct effects of the Games (Forward linkages)**

**Urban regeneration.** Sydney never aimed to use the Games primarily as a regeneration tool. The infrastructure costs and other investment only compiled 45% (compared to 85% in Barcelona) of the Olympic budget, and most of this amount was spent on sports venues. (Figure 4.22)

Most of the new development took place on the Home-bush Bay site of the Olympic Park some 14 km away from the Sydney Central Business District. The exclusiveness of the Sydney Games was in the very compact location of almost all venues, which was very convenient for the athletes and spectators. Yet the downside of the compact Games was that impact on the built environment of the city was only marginal. The site for Olympic park was previously occupied by a combination of industrial and wasteland uses, so cleaning it up was a significant part of the project. (Coaffee, 2007) The site was vacant and in line for redevelopment since early 1970s so occupying it for Olympic purposes was a significant accomplishment. After the Games the use of the Olympic park was quite limited which led to even more concerns about the efficiency of the Olympic investment (Jobling, 2000).

The Olympic village was the other major development site. After the Games the site was turned into an elite residential suburb, which some consider a success (London East Research Institute , 2007), while Lenskyj (2002) saw this as an example of the unjust distribution of public funds.

The biggest infrastructural project of the Games was the construction of the new media centre, which according to some reports had a significant impact for cities attractiveness as a business location. (PriceWaterhouse-Coopers, 2007)

A package of smaller infrastructure investment project worth US$1,5 in total was also undertaken in the City as a part of preparation process. (PriceWaterhouseCoopers, 2007) This included airport expansion and refurbishing, which responded to the needs of the tourism industry.

Tourism. Tourism promotion was one of the major ambitions of the Games. Mr. Michael Payne, the IOC Director of Marketing claimed: “Australia is the first Olympic host nation to take full advantage of the Games to vigorously pursue tourism for the benefit of the whole country”. (Haynes, 2001, p. 7). This quote reflects the scale of Sydney’s tourism promotion campaign. The strategy was centred on aggressive use of media attention that the city received. Incentives were put in place to bring more foreign journalists to Australia to maximise the media attention and ensure that a positive image of Australia as a place to visit is communicated. (London East Research Institute , 2007). The total budget on all the promotion campaigns came up to US$ 3,8 Million. According to the PWC (2007) estimates, the Olympics attracted 110000 international tourists and helped Sydney attract US$ 650 million in conference business between 2000 and 2007.

The analysis of the post-Games trends show that the spike in the international arrivals was rather short and included the Olympic fortnight and the following 2 months. Overall a 15% increase in the number of international arrivals was recorded.
visitors was registered in 2000. The evidence also sug-
gests that time-shifting effect was significant, as years
before and after the Olympics saw much lower visitor
numbers than usual (figure 4.23) (European Touropera-
tor Association, 2010).

The occupancy rates in hotels in the Sydney area
dropped to about 60% after December 2000. This
proved that investment into construction of 30 addi-
tional hotels to serve the needs of Olympic tourists was
excessive, 10 hotels were transformed into apartment
blocks in the following years. (London East Research
Institute, 2007)

The best illustration of the unconvincing results of the
promotion campaign of the Sydney Games is that in the
years after the Olympics the number of people visiting
New Zealand grew faster than number of tourists com-
ing to Australia. (Figure 4.24)

Employment. The employment benefits of the Sydney
Games just as in Barcelona seem predominantly short
term. The Sydney economy was rather close to full em-
ployment before 2000 with unemployment rate about
4% (London East Research Institute, 2007), which ac-
cording to Preuss (2000) restricts potential employment
effects.

The Games strategy included investment promotion
events and campaigns. A post-game investigation con-
firmed that 1150 permanent jobs were created by in-
vestment facilitated by the Games, and 1219 more jobs
through relocation of 19 businesses. (London East Re-
search Institute, 2007) Yet, official unemployment sta-
tistics do not register any significant employment effects
related to the Games (Figure 4.25)

Indirect and intangible results of the Sydney’00
Games (Parallel linkages)

Image. The image effects were the main legacy ambi-
tion of the Sydney Games. The ambition of changing
perceptions of the city was addressed through specifi-
cally designed tourism promotion (mentioned earlier) and
business promotion programs. Even though the Games
management wasn’t perfect, the proactive and smart
marketing strategy has overpowered the potential nega-
tive effects.

The New South Wales government together with the pri-
ivate sector partners initiated more than a dozen cam-
paigns to promote Australian industrial products, support
innovative businesses, attract media attention to the local
enterprises and provide international networking oppor-
tunities for local businesses. One example is the Aus-
tralian Technology Showcase (ATS) programme that was
initiated in 1998 to help small innovative businesses use
the Olympics for the purposes of expansion and attrac-
tion of international attention, resources and expertise.
(PriceWaterhouseCoopers, 2007) The attempt was made
to use the Sydney Games both as means of place pro-
motion and product promotion.

Did the effort put into promotion pay off? The lack of
any image studies and time series data makes it hard to
evaluate. Yet overall Sydney is well positioned in various
international rankings. It falls into the Alpha + World
city category, next to Hong Kong Singapore and Tokyo and
only trailing to New York and London (Global and World
Cities Research Network, 2010). It is ranked 14th in the
Global City Power Ranking. This is confirmed by the sta-
tus of a prime business location, Sydney accommodates
82% of headquarters of Australian banks and 70% of re-
gional headquarters of Asian companies in Australia. (City of Sydney, 2010). Sydney is also positioned 10th and 9th in two different global liveability rankings (The Economist, 2008; Mercer Inc., 2010). It has dropped down from holding respective 4th and 5th places in 2004-2005. (City of Sydney, 2010). Sydney was also recognised as the top city brand in the world in 2007 and 2008 by the survey of more than 10000 people in 20 countries (Ibid.). Sydney came ahead of London, New York, Rome and Barcelona. Even though the contribution of the Olympics is hard to quantify it looks like promotional effort associated with the Games had a strong impact.

Migration and skilled population. Sydney has been attracting international migrants throughout its recent history. Interestingly enough in decade after the Olympics positive net international migration was the main driver of population growth in the city, while net internal migration was negative (people were moving from Sydney to the rest of Australia). (Figure 4.26) The Olympics could have supported inflow of international migrants; the negative internal trend can’t be explained without more detailed understanding of the local context.

The share of Sydney population with university diplomas has also been growing consistently during the post-Olympic decade. (Table 4.2) While there is no way to draw a connection between this trend and the Games, it suggests that the incoming migration flow mostly consisted of highly qualified people who can contribute positively to city’s transformative potential.

Investment. The evidence about the results of the investment promotion efforts at the city level is limited. The ATS program has reported signing up 300 technology companies and producing benefits of US $ 166 million, exceeding all of the goals set beforehand. (PriceWaterhouseCoopers, 2007) The total amount of business investment associ-

Figure 4.25. Unemployment rate in Australia and State of New South Wales. Source: (Australian Bureau of Statistics, 2011)

ated with the Olympics is evaluated at US$ 345 million. The Sydney Games are considered the most successful games in attracting investment. (Locate in Kent, 2009)

Overall the Sydney Olympics have generated transformational capacity, but through means different from the Barcelona Games. For the Spanish city urban regeneration was the driving force, while in Sydney international promotion has had the biggest impact.

Evidence of structural change. As in case of Barcelona, available economic structural data for Sydney is fragmented. For dynamic analysis the regional data for New South Wales would be used.

First of all, according to the population census employment data by industry for 1996, 2001 and 2006 Sydney hardly experienced any change in economic structure at all. (Figure 4.27) Yet, there are several things that can explain rather static employment structure. First of all the considered time period was characterised by stable economic growth (figure 4.22), and when the market conditions are more or less favourable and drastic declines in certain sectors do not occur, significant change of employment structure is unlikely. During the first part of this period the unemployment rate was declining, and after 2000 it stayed at a rather low level (figure 4.25). It should also be understood that Sydney’s economy in the beginning of this period was already dominated by services and has passed the stage of rapid deindustrialisation.

Table 4.2. Share of people with University degrees in Sydney region. Source: (Reginal Development Australia-Sydney, Inc, 2011)

<table>
<thead>
<tr>
<th>Sub Region</th>
<th>1996 (%)</th>
<th>2001 (%)</th>
<th>2006 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>33</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>Inner North</td>
<td>38</td>
<td>46</td>
<td>52</td>
</tr>
<tr>
<td>Inner West</td>
<td>33</td>
<td>37</td>
<td>48</td>
</tr>
<tr>
<td>North</td>
<td>23</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>North East</td>
<td>21</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>North West</td>
<td>12</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>South</td>
<td>20</td>
<td>24</td>
<td>33</td>
</tr>
<tr>
<td>South West</td>
<td>9</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Sydney City</td>
<td>32</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>West Central</td>
<td>13</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>Sydney Region</td>
<td>21</td>
<td>26</td>
<td>32</td>
</tr>
</tbody>
</table>

Figure 4.27. Change of Employment structure according to results of Australia population census. Source: (Australian Bureau of Statistics, 2011)

Figure 4.28. Value Added in manufacturing in New South Wales. 1990-2010. Source: (Australian Bureau of Statistics, 2011)

Figure 4.29. Number of Employees in selected service sectors in Sydney 1996-2006. Source: (Australian Bureau of Statistics, 2011)
Throughout the considered period gross value added in manufacturing was almost constantly improving in New South Wales (figure 4.28), which means that for the service industries to increase their share they had to grow at an even higher pace. Generally in the growing economy environment, structural changes tend to be more gradual than in more harsh economic conditions.

Still, the share of manufacturing jobs did continue to decline throughout the period, as services expanded.

In the circumstances described, there is a need to zoom in and look for less obvious trends. Figure 4.29 shows that change of absolute number of employees in high value added services. It reveals, that professional and financial business services have seen significant growth during the Games preparation period. Even though growth is not registered after the Games, we can see that these sectors enjoyed greater stability than the communications and hospitality sectors, which contracted once the Games were over.

Unlike the employment data, the value added statistics present evidence of much more significant structural change that was driven by the expansion of the high value added services. (Figure 4.30) Even though this trend can be identified before the Games, it becomes stronger after the event. Most of expansion of the share of business services in the economy is compensated by the contraction of the role of manufacturing.

Figure 4.30. Structure of value added by sector in New South Wales (1990-2010). Source: (Australian Bureau of Statistics, 2011)


Figure 4.32. Value added in various business services in New South Wales. Source: (Australian Bureau of Statistics, 2011)
The absolute growth of the business service sector reveals that the growth rates were on average much higher after the Games, than before. The period of accelerated growth started around the time when the preparation for the Olympic Games entered its final stage – 3-4 years before the event. (Figure 4.32) The average rate of growth between 1990 and 1996 is 5.2% and increases to 9% between 1996 and 2004. Of course there is no reason to say that there is a direct causal relationship here, yet it is quite possible that two processes are more than just coincidental.

The Sydney Olympics Games present an example that contrasts that of the Barcelona Olympics. The Sydney Games were initiated at a regional level and the legacy goals pursued by the event initiators reached beyond the city limits and addressed regional and national agendas. Just like in Barcelona’s case the public sector led the organisation, but managed to get financial support from the private sector. Most significantly the Sydney Games, while being much cheaper and facilitating far less physical transformation in the host city, focused on promotional activities, which helped refresh the appeal of the city to tourists, investors and migrants and managed to overcome all of the organisational accidents and scandals in terms of overall image impact. The goal of using the Olympic publicity to promote local business and support Sydney’s status as a financial and service centre for business in the Asian-Pacific region was set before the Games, and according to analysis presented above it has accelerated the structural change that the city was experiencing prior to the event. Of course it has to be acknowledged that the Olympics didn’t change the trend, if there are structural effects – they are reinforcing rather than trend-changing. At the same time in the period of sustained economic growth many other factors could have caused the structural change observed. Unfortunately there is no possible way to separate the effect of the Olympics. Still the evidence presented can be sufficient to suggest that Olympics may have an effect on economic structure of the city.

NOTES TO CHAPTER 4

1. Pasqual Maragall was the major of Barcelona 1982-1997.
2. Beijing budget came up to $US 65 billion. (Upegui, 2008)
3. For detailed information on structure of revenues and spending of Barcelona Games see Annex 3.
4. The Organizing Committee of Olympic Games in Barcelona (OCOB) established the Barcelona Holding Olympic S.A. (HOLSA) - joint venture started by Barcelona government and national government, that included private sector representatives and was responsible for the Olympic investment programme.
5. For detailed breakdown of Games-related investment refer to Annex 4.
6. This doesn’t necessarily contradict data in Table 1 because different variables are used. Number of overnight stays may grow faster than number of incoming tourists because the length of an average stay increases, which in the case at hand could be the result of Barcelona gaining new attractions (including beaches and recreation facilities), that give people a reason to stay longer.
7. Yet this effect can’t be related to the Games exclusively, as economic growth throughout this period led to decreasing unemployment rates throughout the county.
8. Preuss (2004) Estimated that effect of short term Olympics-related employment was equivalent to creation of 7000 for 40 years in terms of income generated, which is better than any games until 2000.
9. See Annex 4 for details on data availability and definitions of Barcelona geographies.
10. This again, as in Barcelona case makes the applications of Urban Regime Theory to the case is impossible, which proves that this concept is tailored for the urban political set up, which is characteristic in the USA, while broader applications are unlikely.
11. This was important as Beijing was the major competition.
12. Just like in Barcelona case separate Authorities were responsible for operating the games and building the venues and infrastructure.
13. As the City and Metropolitan level data on Sydney is not available regional data for the North South Wales would be used. This is possible because the greater Sydney Metropolitan area contains 60% of the state population and around 70% of the state’s economic activity. (City of Sydney, 2010).
14. Figure 30 confirms that economic structures of Sydney Metropolitan area and New South Wales are very similar, which justifies further use of regional data for analysis.
5. Conclusion

This paper attempted to apply the approach of economic structuralism to analyse the long-term economic consequences of Summer Olympic Games for the host cities. It aimed to reveal whether the evidence available to date could prove that the Olympic Games have facilitated structural change in host city economies. For this purpose, cases of the two most successful Olympic cities of the recent decades: Barcelona and Sydney were considered. Major findings of the case studies can be summarised in following points:

- The Sydney and the Barcelona Games were similar in terms of the political and economic context they took place in. Both were prepared during the period of stable economic growth, and initiated and organized by the public sector.
- Both of the Games enjoyed vast support of the general public, though in Barcelona it could be associated with recent political liberalisation and widely acknowledged need for urban change, while in Sydney it is closely connected with the strong appreciation of the Olympic values in the Australian society.
- The main focuses of the legacy strategies of the two Organisation committees were different. The Barcelona Olympics facilitated significant physical transformation in the city, 85% of the budget was spent on infrastructure and construction. The Sydney Olympics investment budget was three times smaller than Barcelona’s. As a result physical regeneration was very concentrated in space rather than citywide. The Sydney Gomes’s legacy strategy was focused on promoting the city and Australia as an appealing tourist destination and a favourable business environment, it also attracted attention to the local businesses and their products in order to re-establish Sydney’s status as a financial and business service centre for the Asian markets and increase its status and influence.
- The Barcelona Olympic strategy was characterised by high level of integration with the city development strategy and the preparation process was used to take forward large-scale projects that the city needed without regard to the event itself. There is no evidence that suggests that the Sydney’s strategy of preparing for the Games was coordinated with the city’s long-term development strategy, in fact the strategic legacy vision for the Games addressed regional and national rather than city level issues.
- Finally, the statistical analysis has shown, that Barcelona showed no significant evidence of structural change that can be related to the effects of the Olympics. After the Games the city’s economy continued de-industrialising as it was before the event. Yet, none of the post-industrial high value service sectors has shown signs of rapid expansion. On the other hand in the Sydney case a slight contribution of the Games to structural change was registered. After the Games the business services and the financial sector grew at a higher pace than before. The possible impact of the Games here is confirmed by the positive balance of international migration and improving skills of population, which is a proof of the transformational process as described by Glaeser (2009). Yet the effect registered was rather weak, it just reinforced the trend, rather than change it. As research tools were limited, there is no way to determine to what extent was the effect caused by the Olympics or by other factors.

Based on these findings the main question of this research can only be answered partially by saying that the evidence of causal relationship between the Games and the structure of the host city economy is weak. Even though the Sydney case has shown some positive correlation, further investigation is needed to identify the strength of the correlation and the nature of causation.

The results of the analysis also point at the effect of different Olympic preparation strategies on the legacy outcomes. The Sydney case has shown that targeting promotion of the business service sector did have some effect on the structure of the city economy. The Barcelona Olympic preparation was well integrated with the city development strategy and focused on delivering large infrastructure projects that the city needed. But Barcelona’s approach showed no focus on particular economic activity (except for tourism which saw some growth). Lack of significant structural effects in Barcelona case may also reveal that the vision of the sectors that can drive economic growth of the city in the future and a strategy that reflects this vision should be a part the mega event preparation programme if
structural change is recognised as one of the Olympic ambitions. This is not to suggest that Barcelona’s approach didn’t deliver economic benefits. The physical legacy of the Barcelona’92 Games have opened many opportunities for the city, but the analysis presented in this paper suggests that in order to support and direct economic transition in short and median term a more focused approach, than that of the Barcelona Olympics may be needed.

How can the findings listed above be applied to the development country context? How would they apply to Rio de Janeiro - the city, which is the next to host the Summer Olympics in the developing world?

To put it in brief, Rio is a spatially and socially segregated city. The Rio Favelas – slums occupied and controlled by drug-trafficking gangs, are notorious around the world. (O’hare, 2002) At the same time the city economy has been de-industrialising for last 2 decades (Figure 5.1), while losing in a competitive rivalry to its southern neighbour – Sao Paulo, the industrial and economic centre of modern Brazil. (Figure 5.2) Sao Paulo also hosts more high value added service activity, while Rio economy is dominated by consumer services oil industry and major state owned corporations. (The World Bank, 1999)

So what can Rio expect from the Games in terms of changing it’s economic structure?

1. Mathesson, Baade (2003) have suggested that in developing nations the physical regeneration of the city may have a more significant effect, as the quality of amenities prior to the Games is usually lower than in developed world cities. Even if it is true, the results of this study prove, that effects of physical change on economic structure

Figure 5.1. The economic structure of Rio de Janeiro metropolitan area. Source: (Instituto Brasileiro de Geografia e Estatística, 2011) (The World Bank, 1999)

![Economic Structure Chart](image)

Figure 5.1. Economic growth (metropolitan GDP). Source: (Instituto Nacional de Estadística, 2011)
are uncertain. In Rio’s case the transformational effect of investment into built environment is likely to be limited because most of regeneration is taking place in better-developed parts of the city (Gold J. R., 2011, Gaffney, 2010), and even though some infrastructure investment will have broader outreach, it is unlikely that the scale of city wide transformation will be comparable to what happened in Barcelona.

2. Mathesson and Baade (2003) also suggest, that the image impact of the Games for a developing world city can be unpredictable. There is high risks that incidents of crime and organisational shortfalls will overtake Olympic media headlines and outweigh the positive messages. Unfortunately this seems quite probable In Rio: the homicide rates in Rio are as high as 40 murders per 1000 people per year and favela wars are already getting a lot of media attention(The Economist, 2008,2010). At the same time the results of this study show that the image effects of the Olympics have potential to support structural transformation, so potential problems in Rio will limit the transformational potential of the Olympics.

3. Finally, Even in the Sydney case it has been shown, that if there was a structural effect – it was only a reinforcing one, not a trend changing. Question is, what kind of a structural change can Rio de Janeiro be looking for. The city’s strategy in recent years has been centred on facilitating development of cultural and tech clusters around city’s universities and promoting tourism and consumer services. (Jar, 2001) But the World Bank (1999) suggests that city should aim to re-establish it’s industrial and manufacturing base, which it has lost prematurely. The problem is that the second will definitely require a dramatic change of the recent trend, which based on the findings is unlikely to be facilitated by means of the Games, which are also known as a tool for post-industrial transition, not reindustrialisation. Regarding the first strategy, it has a potential to be targeted via the Games, through attracting investment and talented labour to the city. Yet this goal needs to be recognised by the organisation committee and targeted deliberately.

4. Another reason for concern is the ever more commercialised nature of the modern Olympics. The pressure from IOC and official sponsors do not only limit the ability of the city to pursue its development objectives, but also limits the direct benefits that the local economy gets from the Games. Large corporations that bargain exclusive rights for providing services on Olympics sights don’t allow local business to benefit and take profits out of the country, which limits the transformational potential of the Olympics.

Over all based on the Rio de Janeiro circumstances and the findings of this paper it is hard to expect Olympics to bring structural change to the city, because even if the goal would be clearly recognised, the tools available to achieve it would be heavily restricted

Preuss (2000,2004) acknowledges, that moving the Games to the developing world is essential for the Olympic movement, as this is the only way the Olympic principles wouldn’t be compromised by accusations of over-commercialisation and spreading of western values. The IOC needs the cities to be bidding for the Games, as this is the basis of it’s power, and the cities will only do it until the Games maintain their cultural appeal, which appears to be threatened if the developing world countries are excluded. Thus it is in the IOC’s interest to help the developing world cities benefit from the Games. Today with the Games scale exceeding all potential needs for infrastructure development in a city and the IOC gaining more and more control over the Games earnings and organisation – the benefits of hosting the Games are becoming less obvious, thus decreasing motivation to bid for the Games (Preuss, 2004).

A final remark should be made about the nature of academic research on Olympics. Lenskyj (2002) has suggested that a lot of the Olympic research is overly optimistic and biased as it is beneficial for the academics to be loyal to the Olympic movement and the IOC as they can become members of the Olympics family and get invited to events, ordered studies etc. But today the future of the Olympic movement heavily depends on the researchers’ ability to honestly look at what the morden Olympics and understand how they can be improved to remain the source of cultural unity and change for the better.

In conclusion it has to be pointed out, that apart from the other goals this research was aiming at introducing a new perspective of the economic structuralism to the analysis of Mega-events and the Olympic Games. Even though results at this stage are rather limited, this approach has great potential for further research, which will only grow, as data on recent and upcoming Olympics will become available.
Appendices

A 1. Linkage model for mega-event impact analysis

The Linkage-model for mega-event analysis is an analytical framework developed by Hirshman that takes an economic prospective on mega-events acknowledging that even though mega-events can be diverse and complex, initial motivations for hosting the events are mostly economic, as well as the major outcomes of mega-events. The framework is organised around the concept of linkages. It has to be mentioned that this has no relation to the concepts of forward and backward economic linkages developed by Hirschman (1958) and widely used in development economics. Hirschman defined linkages as the connections between industrial enterprises, which generate supply (forward linkages) or demand (backward linkages), that allows other enterprises reach the scale of production that pushes them over the threshold of survival, thus contributing to economic growth. In Hiller's framework "linkages" are understood as causal relations or connections between a Mega-event and events and conditions preceding and following them. Hiller identifies following types of linkages:

Forward linkages - The effects that are directly caused by event itself like tourist inflow, improved infrastructure, and employment growth. This impacts are "clearly intended and recognized and make clear recognizable difference" (Hiller, 1998, p. 49) Some forward effects might be not as easy to identify, yet infrastructure remains the most visible and easy proven of the legacies. Most of the formerly assessed economic impacts of Olympics would fall into this category.

Backward linkages relate to the rational and justifications for hosting the Games as they are when the Olympic bid is put together, generally what the games were declared to achieve for the city, their ideology. Backward linkages may be presented in a form of a policy initiative that related to the Games, in a form of a declared desire to achieve something for the city through the Games etc. Yet, there are also hidden background factors that help to explain the decision to bid for the Games.

Parallel linkages – are understood as the side effects, that are not even necessarily acknowledged by event organizers. Some of these effects might only be perceived as related to the event, if the public attention is deliberately drawn to the connection. The natural response of the organizers would include rejecting connection with the negative impacts and taking credit for the positive ones. Typical examples include such externalities as inflation on certain markets or gentrification. Still, the key characteristic of parallel linkages is the indirect connection with the Games and the inability of the organisers to control them.


This Urban Regime Theory is a framework based on a notion that the often resource an capacity-starved urban governments need to rely on the groups that possess financial and human resources and the recognition (usually local business elites) in order to gain capacity needed to go ahead with large scale initiatives, like the Olympics. The theory developed by Stoker and Mossberger presents a classification of urban regimes, which are understood as the relationships, hierarchies and the dynamics within the “informal, yet relatively stable groups, with access to institutional resources that enable them to have a sustained role in making governing decisions” (Stoker & Mossberger, 1994, p. 197). 3 types of regimes: organic, instrumental and symbolic are identified through a set of criteria that define in which conditions they are formed and which policies and for which reasons they pursue. Two regimes: instrumental – aimed at short-term goals and project realization, and symbolic – facilitating change threw operating intangible values, can both use Olympics as development tools. Identifying theses regimes in the case studies of the Olympics Cities can give interesting insights into motivations, justifications and expectations of Olympic bids, that are captured within the backward linkages (see. Annex 1).
### A 3. Financing the Barcelona’92 Olympics

Table A3.1. Barcelona Olympic games Finance. Source: (Brunet, 1995)

<table>
<thead>
<tr>
<th>A. SOURCE OF FUNDING</th>
<th>US $ (000,000)</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>at 2000 rates</td>
</tr>
<tr>
<td><strong>9376 11532 100%</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1 Commercial income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Domestic private company investment</td>
<td>1714 2108</td>
<td>18.30% 30.60%</td>
</tr>
<tr>
<td>2. International private company investment</td>
<td>907 1116</td>
<td>9.70% 16.20%</td>
</tr>
<tr>
<td>3. Spanish state company investment</td>
<td>1092 1343</td>
<td>11.60% 19.50%</td>
</tr>
<tr>
<td>4. HOLSA income</td>
<td>354 435</td>
<td>3.80% 6.30%</td>
</tr>
<tr>
<td>5. COOB’92</td>
<td>1530 1882</td>
<td>16.30% 27.30%</td>
</tr>
<tr>
<td></td>
<td>454 558</td>
<td>4.80% 8.10%</td>
</tr>
<tr>
<td></td>
<td>487 599</td>
<td>5.20% 8.70%</td>
</tr>
<tr>
<td></td>
<td>356 438</td>
<td>3.80% 6.40%</td>
</tr>
<tr>
<td></td>
<td>169 208</td>
<td>1.80% 3%</td>
</tr>
<tr>
<td></td>
<td>65 80</td>
<td>0.70% 1.20%</td>
</tr>
<tr>
<td><strong>2 Government funding</strong></td>
<td>3778 4647</td>
<td>40.30% 100%</td>
</tr>
<tr>
<td>2.1. State funding for COOB’92</td>
<td>108 133</td>
<td>1.20% 2%</td>
</tr>
<tr>
<td>2.2. HOLSA: MEH and AB credit</td>
<td>943 1160</td>
<td>10.10% 25%</td>
</tr>
<tr>
<td>2.3. State budget investment</td>
<td>2727 3354</td>
<td>29.10% 72.20%</td>
</tr>
<tr>
<td></td>
<td>191 235</td>
<td>2% 5.20%</td>
</tr>
<tr>
<td>Barcelona City Hall (municipality)</td>
<td>1195 1470</td>
<td>12.70% 25.70%</td>
</tr>
<tr>
<td>Generalitat de Catalunya (regional government)</td>
<td>973 1197</td>
<td>10.40% 31.60%</td>
</tr>
<tr>
<td>Spanish state (central government)</td>
<td>68 84</td>
<td>0.70% 1.80%</td>
</tr>
<tr>
<td>European Union</td>
<td>300 369</td>
<td>3.20% 7.90%</td>
</tr>
<tr>
<td>Other public administration bodies</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. APPLICATION AND USE OF RESOURCES</strong></td>
<td><strong>9376 11532 100%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1 Organisation (COOB’92 programmes)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1. Competitions</td>
<td>118 145</td>
<td>1.30% 8.60%</td>
</tr>
<tr>
<td>1.2. Ceremonies and cultural events</td>
<td>76 93</td>
<td>0.80% 5.60%</td>
</tr>
<tr>
<td>1.3. Press, radio and television</td>
<td>153 188</td>
<td>1.60% 11.20%</td>
</tr>
<tr>
<td>1.4. Preparation of facilities (not including building work)</td>
<td>113 139</td>
<td>1.20% 8.30%</td>
</tr>
<tr>
<td>1.5. Technology</td>
<td>208 256</td>
<td>2.20% 15.20%</td>
</tr>
<tr>
<td>1.6. Olympic family service</td>
<td>310 381</td>
<td>3.30% 22.70%</td>
</tr>
<tr>
<td>1.7. Security</td>
<td>39 48</td>
<td>0.40% 2.90%</td>
</tr>
<tr>
<td>1.8. Management and corporate image</td>
<td>155 191</td>
<td>1.70% 11.50%</td>
</tr>
<tr>
<td>1.9. Support structures</td>
<td>192 236</td>
<td>2.00% 14.10%</td>
</tr>
<tr>
<td><strong>2 Resources applied to building work(public and private investment)= Olympic Legacy</strong></td>
<td>8012 9855 85.50% 100%</td>
<td></td>
</tr>
<tr>
<td>2.1. Roads and transport</td>
<td>3388 4167</td>
<td>36.10% 42.30%</td>
</tr>
<tr>
<td>2.2. Telecommunications and services</td>
<td>1033 1271</td>
<td>11.10% 2.90%</td>
</tr>
<tr>
<td>2.3. Coasts, recovery work and parks</td>
<td>506 622</td>
<td>5.40% 6.30%</td>
</tr>
<tr>
<td>2.4. Housing, offices and premises</td>
<td>1170 1439</td>
<td>12.50% 14.60%</td>
</tr>
<tr>
<td>2.5. Hotels</td>
<td>1004 1235</td>
<td>10.70% 12.50%</td>
</tr>
<tr>
<td>2.6. Sports equipment and facilities</td>
<td>733 902</td>
<td>7.80% 9.10%</td>
</tr>
<tr>
<td>2.7. Cultural and health facilities, and other</td>
<td>178 219</td>
<td>1.90% 2.20%</td>
</tr>
</tbody>
</table>

The Catalonia territorial and administrative structure is very complex because the regional and the national (Spanish) territorial structures overlap. Thus data on the economic performance of the city can be collected on 5 territorial levels. They are defined and explained in table A3.1.

Time series quality. The employment data for Barcelona is only available for 1986, 1991, 1996, 2001, 2006. But unfortunately between 1986 and 1996 the industry classification used in the data has been changed. Thus it is impossible to compare 1986 and 1996 data – that is why the analysis is conducted separately for the pre-games and post post-games periods.

<table>
<thead>
<tr>
<th>Territorial unit</th>
<th>Definition</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barcelona Municipality</td>
<td>The territory governed by the city council and the Mayor of Barcelona.</td>
<td>1,621,537</td>
</tr>
<tr>
<td>Barcelones</td>
<td>A Comarques (traditional Catalan division equivalent to counties or districts) that contains 6 municipalities, including Barcelona.</td>
<td>2,253,204</td>
</tr>
<tr>
<td>Barcelona Metropolitan Area (Ambit Metropolita)</td>
<td>One of seven territories defined by the regional Plan of Catalonia. Includes more than 100 municipalities. Includes territories of Barcelona Province and neighbouring provinces.</td>
<td>5,355,127</td>
</tr>
<tr>
<td>Barcelona Province</td>
<td>One of the units of national regional structure.</td>
<td>5,526,536</td>
</tr>
<tr>
<td>Catalonia</td>
<td>A national region.</td>
<td>7,535,251</td>
</tr>
</tbody>
</table>

Figure A4.1. Definition of statistical administrative areas containing Barcelona. Source: Wikipedia.com
Barcelona Metropolitan area

Barcelones and Barcelona Municipality
References


Crompton, J. L. (2001). Public subsidies to professional
team sport facilities in the USA. In C. Gratton, & I. P. Henry, Sport in the City (pp. 15-33). New York: Routledge.


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