

Maennig, Wolfgang

**Working Paper**

## Public referenda and public opinion on Olympic Games

Hamburg Contemporary Economic Discussions, No. 57

**Provided in Cooperation with:**

University of Hamburg, Chair for Economic Policy

*Suggested Citation:* Maennig, Wolfgang (2017) : Public referenda and public opinion on Olympic Games, Hamburg Contemporary Economic Discussions, No. 57, ISBN 978-3-942820-29-5, University of Hamburg, Faculty of Business, Economics and Social Sciences, Chair for Economic Policy, Hamburg

This Version is available at:

<https://hdl.handle.net/10419/175037>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



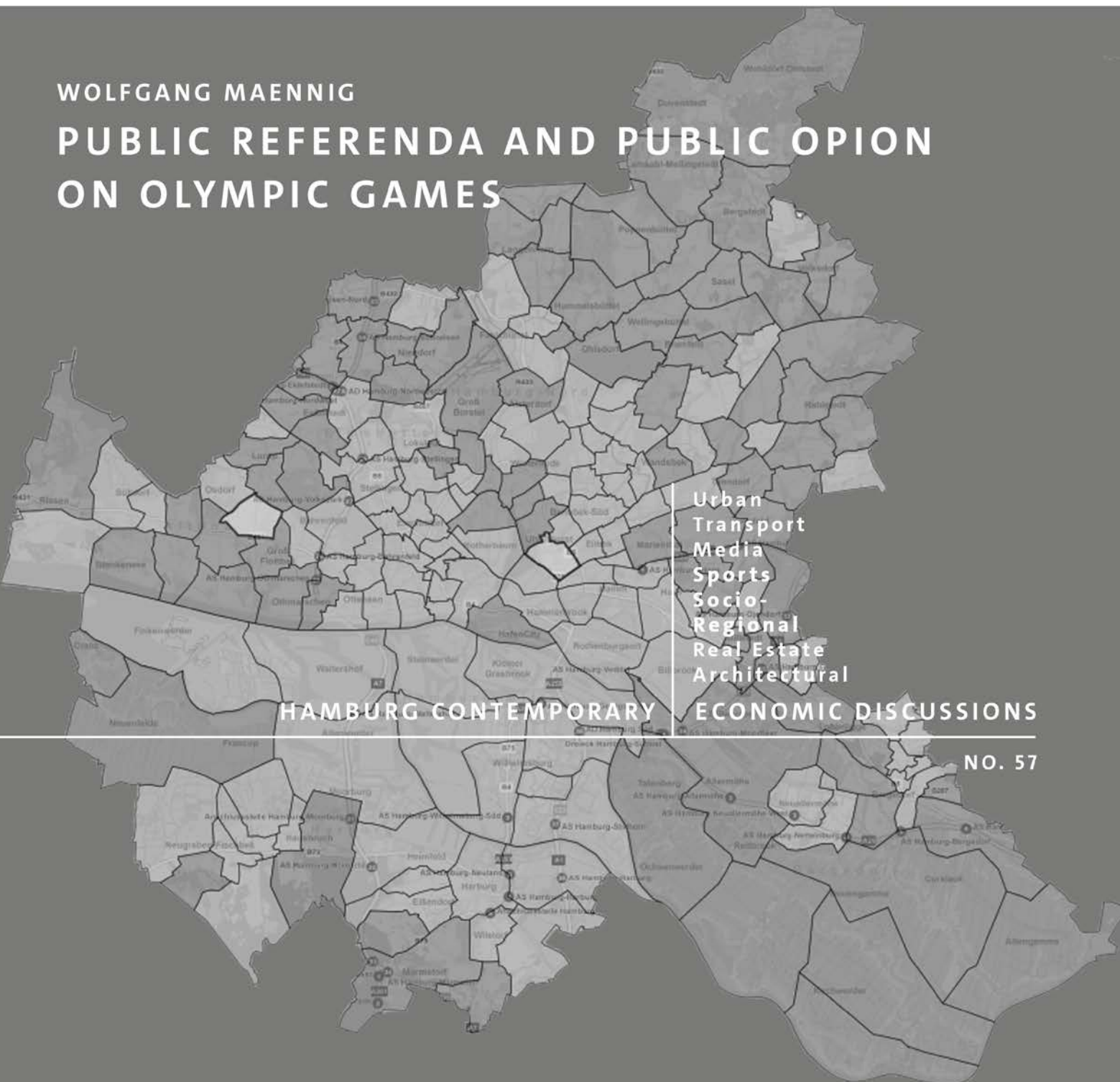
Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

Faculty of Business,  
Economics and Social Sciences  
Chair for Economic Policy

WOLFGANG MAENNIG

# PUBLIC REFERENDA AND PUBLIC OPION ON OLYMPIC GAMES



Urban  
Transport  
Media  
Sports  
Socio-  
Regional  
Real Estate  
Architectural

HAMBURG CONTEMPORARY

ECONOMIC DISCUSSIONS

NO. 57

**Hamburg Contemporary Economic Discussions**

University of Hamburg

Faculty of Business, Economics and Social Sciences

Chair for Economic Policy

Von-Melle-Park 5

20146 Hamburg | Germany

Tel +49 40 42838 - 4622

Fax +49 40 42838 - 6251

<https://www.wiso.uni-hamburg.de/en/fachbereich-wvl/professuren/maennig/home.html>

Editor: Wolfgang Maennig

Wolfgang Maennig

University of Hamburg

Faculty of Business, Economics and Social Sciences

Chair for Economic Policy

Von-Melle-Park 5

20146 Hamburg | Germany

Tel +49 40 42838 - 4622

Fax +49 40 42838 - 6251

[wolfgang.maennig@wiso.uni-hamburg.de](mailto:wolfgang.maennig@wiso.uni-hamburg.de)

ISSN 1865 - 2441 (Print)

ISSN 1865 - 7133 (Online)

ISBN 978-3-942820-28-8 (Print)

ISBN 978-3-942820-29-5 (Online)

Wolfgang Maennig

## **Public Referenda and Public Opinion on Olympic Games**

*Version: June 2017*

Public referenda on Olympic bids have drawn considerable interest in the recent past, also because – with few exceptions – the voters decided against the Olympic ambitions of the local governments and/or local bid committees. For example, within the last five years before the finalizing of this text, voters in Vienna and Hamburg decided against bids for Olympic Summer Games in 2028 and 2024, respectively. Ambitions for Olympic Winter Games have been ended by referenda in Graubünden 2026 (Switzerland), Munich 2022 (Germany), St. Moritz / Davos / Graubünden 2022, and Krakow 2022 (Poland).

Table 1 presents the data of the history of Olympic referenda and clarifies that Olympic referenda are by no means an innovation of recent times: The oldest reported referenda are from the 1960's. All public referenda were held on Olympic Winter Games, with the exception of the two Summer Games referenda for Vienna 2024 and Hamburg 2024 mentioned above. There was a balance between positive and negative referenda for Olympic Games bids up to the 1970s. Since the 1980s, the number of negative referenda has clearly outperformed the number of positive referenda.

With the exception of the two positive referenda of Salt Lake City 2002 and Vancouver 2010 as well as the negative referendum of Denver 1976, all referenda took place in central European locations. The case of Denver 1976 is outstanding in another respect: While all other referenda were concerning Olympic bid campaigns, the Denver referendum took place long after the International Olympic Committee (IOC) had awarded the Games to Denver city, and only a little more than three years before the

planned opening of the 1976 Olympic Winter Games. The IOC decided to shift the Games to Innsbruck, which also had organized the Winter Games of 1964 and had most of the sporting facilities at hand.

Beyond that, it is hard to draw systematic conclusions from the descriptive data in Table 1. For example, a positive or negative attitude does not seem to depend on the size of the bidding city. In addition, the tightness of the referenda results does not seem to be connected with the size of the bidding city or to the year of the referendum or to the sign (yes/no) of the result.

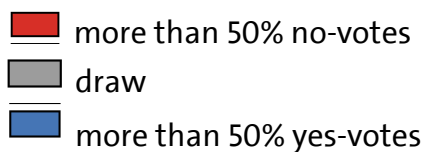
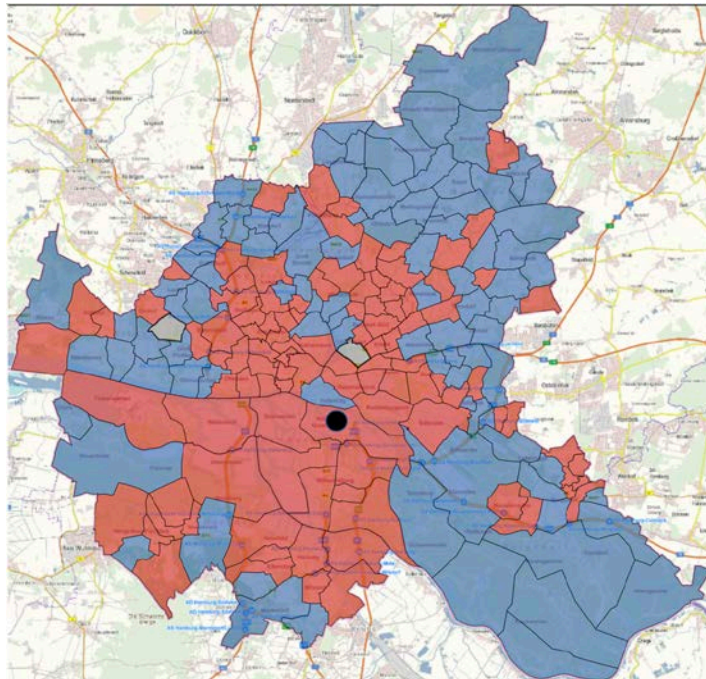
In the only multivariate econometric study concerning Olympic referendums known by the author, Coates & Wicker (2015), analyzing the Munich 2018 referendum, try to shed light on the determinants of the voting outcome. They find a significantly negative effect of the share of leftist voters and of the number of hotel beds per capita on the Yes-votes, but a positive impact of unemployment. A positive impact of liberal voters as well as a negative impact of the share of green voters did not turn out to be robust. In a robustness test, farm property tax per capita (+) as well as real property tax per capita (-) turned out to be significant, which is interpreted as an indication of a more positive attitude toward the Munich Olympic bid in rural areas than in urban areas. Other variables such as gender, conservative or social democratic voters, and age structure of the population (for which the share of 18-64-year-olds serves as a proxy) did not have a significant impact.

Further insights may be derived from earlier econometric studies of referenda on major (sport) infrastructure. Again, in a case study of the city of Munich, Ahlfeldt & Maennig (2012) find in a spatial analysis at the precinct level of the 2001 referendum of the Allianz Arena that voters in proximity of the proposed site opposed the project. At the city level and in proximity of alternative sites, voters supported the sports arena, indicating that residents expected net costs in proximity to stadiums and engaged in the referendum in order to shift the stadium away from their neighborhood. Sport facilities may thus exhibit a NIMBY (Not In My Backyard) character. A similar result was found in the case of the Seahawk stadium in Seattle, WA, USA, where support for the stadium was highest

at 10-30 miles driving distance from the stadium, and beyond that distance, voting support fell off (Horn, Cantor, & Fort 2015). By contrast, Coates & Humphreys (2006) found net benefits of proximity to stadiums in Wisconsin, Texas and Florida, USA. Proximity costs and benefits of sports facilities apparently may thus vary across sports and countries, and the selection of the suggested locations may influence the outcome of referenda.

The case of the negative referendum on Hamburg 2024 may illustrate the case. Figure 1 depicts the outcomes of the Hamburg 2024 referendum. The dark dot represents the projected Hamburg Olympic Center at Kleiner Grasbrook. Kleiner Grasbrook seems to be centrally located, but in the perception of many inhabitants of Hamburg, their city is divided between the richer areas in the north of the river Elbe (flowing from east to west, more or less halving the city) and southern areas, characterized by a population with lower incomes and higher shares of unemployment. Indeed, the Hamburg Olympic concept was regarded as a part of the (many decades long, and up to now less successful) attempt of a regeneration of the southern areas (“Sprung über die Elbe” (Jump over the river Elbe)). Rejection of the Olympic ambitions was most prevalent in the densely populated precincts neighboring Kleiner Grasbrook as well as in the south of Hamburg. Indeed, the 10 voting places with the highest shares of no-votes, ranging from 71.7% to 83.1% no-Votes, were located at distances of a maximum of some 2.5 kilometers from Kleiner Grasbrook. This evidence is in certain contrast to the findings of Coates and Wicker (2015) of a positive effect of higher unemployment rates on the support of Olympic bids.

**Figure 1: Results of the Referendum on the Bid for the Olympic Games in Hamburg 2024 (November 29, 2015)**  
 Yes/No Votes at the voting places



Source: [http://www.statistik-nord.de/fileadmin/maps/election\\_2015\\_hh\\_ref2/print.html?0|0,10000,0,9643.807,0|th0=1,th0-0=1,th0-1=0,th0-2=0,th1=0,th1-0=1,th1-1=0,th1-2=0,th1-3=0,th2=1,th2-0=1,th2-0-0=1||th0-0xth0xxth1-0xth1](http://www.statistik-nord.de/fileadmin/maps/election_2015_hh_ref2/print.html?0|0,10000,0,9643.807,0|th0=1,th0-0=1,th0-1=0,th0-2=0,th1=0,th1-0=1,th1-1=0,th1-2=0,th1-3=0,th2=1,th2-0=1,th2-0-0=1||th0-0xth0xxth1-0xth1), from Nov. 30, 2017.

The case of the more pronounced resistance in the poorer southern parts of Hamburg, which were supposed to particularly benefit from the re-urbanizing Olympic concept, draws attention to the potential role of gentrification. Voters, particularly in the proximity of new Olympic facilities, may expect rising rents and real estate prices. Indeed, rising land values and property prices induced by sporting facilities have been identified by Ahlfeldt & Kavetsos, 2014; Ahlfeldt & Maennig, 2009 and 2010; Carlino & Coulson 2004; Dehring, Depken, & Ward 2007; Feng & Humphreys (2012) and Tu (2005). According to the home voter hypothesis (Fischel, 2005), homeowners should be in favor of such stadium projects. Several studies suggest that projected house price capitalization effects significantly influence the degree of support for public initiatives

and projects (Ahlfeldt, 2011; Brunner & Sonstelie, 2003; Brunner, Sonstelie, & Thayer, 2001; Dehring, Depken, & Ward, 2008; Hilber & Mayer, 2009). More generally, the literature on the political economy of housing markets suggests that a strong link exists among the nature of the political process, the ownership of land, and patterns of development (e.g., DiPasquale & Glaeser, 1999; Solé-Ollé & Viladecans-Marsal, 2013). However, in renter-dominated communities, it is worth differentiating explicitly between home voter and lease voter behavior in a public referendum. Ahlfeldt & Maennig (2015), on the occasion of a referendum on the closure of Tempelhof airport in the city of Berlin, found home voters to be more likely to support or oppose initiatives that positively or negatively affect the amenity value of a neighborhood because some of the related benefits or costs of lease voters are neutralized by adjustments in market rents. By contrast, Horn et al. (2015) on the above-mentioned case of the Seahawk stadium in Seattle, USA, find little effect of the proportion of renters relative to homeowners.

Apart from spatial determinants of support or resistance Ahlfeldt & Maennig (2012) find that people aged 25 to 35 exhibited a relatively lower share of yes votes for the new Munich football stadium, whereas the share of yes votes is increased in precincts with a higher proportion of people aged 18 to 25 or 60 and above, or precincts that are characterized by a large share of male or unemployed population, while the opposite is true for precincts with a particularly high purchasing power per capita. Horn, Cantor, & Fort (2015) also find an increased support for the new stadium in older demographic precincts. An – at least – non-negative impact of elderly on the outcomes of referenda concerning sporting issues is also confirmed in a meta study by Ahlfeldt, Maennig & Steenbeck (2016), who nevertheless warn that the generational shift in most western democracies may heavily impact the implementation of additional larger infrastructures (see also Kotlikoff & Burns, 2005).

In addition, on occasion of the referendum of the Allianz Arena, Ahlfeldt, Maennig, & Ölschläger (2014) find that the preference for the professional football stadium is characteristic of substrata or middle strata lifestyle groups with a limited modernity



orientation. Compared to established economic variables such as income, the application of indicators of value and strata orientation outperform the traditional indicators of economic wealth, in terms of capturing the spatial distribution of support and opposition. The authors highlight the importance of accounting for lifestyle compatibility as a criterion in choosing locations for (public) facilities with local costs (and benefits).

### **Public support**

Public support is a criterion in the decision process of the International Olympic Committee (IOC), but there is an open debate on the extent of its importance. Hiller & Wanner (2017) find that public support “is not valued highly in the final decision” of the IOC, but Maennig & Vierhaus (2017), concluding their multivariate econometric study of the chances of winning Olympic bids, find that support of at least 67% is crucial. For example, they argue that bids of New York 2012 (support of 59% in the Candidate city phase) and Tokyo 2016 (56%) may have failed due to the relatively low support. The Tokyo 2020 bid had the support of 70% and easily won.

There are hardly any (published) results polls on Olympic bids commissioned by local bid committees, local authorities or local media worldwide that show support of less than 50%. Note that support is almost always lower according to polls commissioned by the IOC compared to support according to polls commissioned by local bid committees, etc. (Hiller & Wanner, 2017). In such polls, there seems to exist some type of a time dependency, if not time inconsistency. Ritchie & Lyons (1990) undertook yearly surveys on the occasion of the Winter Games of Calgary 1988 and demonstrated that support grew from 84.7% in 1983 to some 88% in 1987, although support did not grow consistently. Most bidding cities experience decreasing support in the years before the IOC decision (Hiller & Wanner, 2017), but support may increase during the Games (Hiller & Wanner, 2011). Comparing before and after the Games, negative opinions on Olympic Games are considerably muted after the event (Hiller & Wanner, 2017). Ritchie & Lyons (1990) even found 97.8% support some weeks after the Games of Calgary 1988. These

comparative findings ex-ante versus ex-post are in line with findings for the World Cup 2006 in Germany. In this case, willingness to pay was significantly higher ex-post, indicating that a major event may have the characteristic of an “experience good” (Süssmuth, Heyne, & Maennig, 2010).

The reported degrees of support found by polls stand in certain contrast to the results in referenda depicted in Table 1, at least for more recent Olympic bids. One striking case of such a gap between polls and the referendum results occurred in the case of the Olympic Bid of Hamburg 2024: On the day of the referendum, public support of some 56% was published (N.N., 2015). In the official referendum results, the share of “YES”-Votes was at 48.4%.<sup>1</sup> There are also indications that leaders for politics and media may have a biased estimation on people’s opinion (Trosien 2016).

Having mentioned the limited parallels of Olympic polls and referenda, it may nevertheless be indicative to monitor analysis of polls of Olympic Games. In the following, we also include studies that attempt to measure the willingness to pay (WTP) in addition to support/no-support polls.

Opposition to the Olympic bids of Los Angeles (1984), Atlanta (1996), and Salt Lake City (2002) has been identified in an attempt to deflect or mitigate the negative consequences of a particular development project, but no indication of a general anti-growth movement could be identified (Burbank, Heying, & Andranovich, 2000). Note that there is little to no empirical proof for any significant → economic impact on of

---

<sup>1</sup>Such striking gaps between poll data and voting results have occurred on many other occasions recently, with the most prominent cases of the BREXIT and the 2016 US-American presidential elections (e.g., Chalabi 2016; Mercer, Deane, & McGeeney, 2016). Possible causes for this gap may lie, for example, in the personal reluctance to speak up against the officially propagated activity that is at the same time often perceived as the majority of the public opinion (David Rothschild & Neil Malhotra, 2014)). Further, the powerful tool of a vote as an expression of discontent with the current situation – not necessarily related to the voting topic – is not used very often. A further aspect may be a selection bias in the opinion polls, as most of them try to represent all eligible voters in their results (Wang, Rothschild, Goel, & Gelman, 2015)). However, there are crucial differences between eligible voters and actual voters in general (Petrocik, 1991; Freedman & Goldstein, 1996; Rothschild & Malhotra, 2014; Gelman & King, 1993), most of them due to age (e.g., Keeter, 2006; Gutsche, Kapteyn, Meijer, & Weerman, 2014), educational level (Reedy, Gastil, & Moy, 2016; Rosenstone & Hansen, 1993, among others), and employment status (Gutsche et al., 2014). Homeowners tend to have higher voter participation (Brunner, Sonstelie, & Thayer, 2001). Further, referenda may be a powerful tool as an expression of discontent with the current political situation.

major events such as the Olympic Games. However, perceptions of the local populations may well differ from ex-post realities, and they may well do so because of the boosting of expectations usually disseminated by the local bid committees and other local authorities.

Positive intangible effects are usually the (only) significant effect of mega sporting events found in academic studies, and their expectation may increase WTP (Wicker, Whitehead, Johnson, & Mason, 2015). A positive effect of higher incomes is found for the support as well as the willingness to pay for Olympic Games (Atkinson, Mourato, Szymanski, & Ozdemiroglu, 2008; Coates & Szymanski, 2015; Hiller & Wanner, 2011; Preuss & Werkmann, 2011; Walton, Longo, & Dawson, 2008; Wicker, Whitehead, Johnson, & Mason, 2015). Age is generally found to have no significant effect on WTP (e.g., Atkinson et al., 2008; Preuss and Werkmann, 2011, for an exception, see Walton et al. (2008).

Concerning other socio-economic variables, attending free unticketed events and supporting the Liberal party were found to be positively significant for supporting the Vancouver 2010 Games, whereas educational levels, gender and age were of minor or less robust influence (Hiller & Wanner, 2011). Full-time employees had a lower WTP in the case of the London 2012 Games, while homemakers had a higher WTP (Walton et al., 2008). Females have a lower WTP (Cotes & Szymanski, 2015, for mixed evidence: Wicker et al., 2015). Being from one of the finalist US cities for the 2024 Games bid (San Francisco, Los Angeles, Boston, and Washington) had no impact on WTP for Olympic Games in the United States (Coates & Szymanski 2015). A general interest in sports was not found to have a significant effect on WTP for Olympic Games in Germany, while active participation in a sport does (Wicker et al., 2015).<sup>2</sup>

---

<sup>2</sup> For more information about surveys on Olympic Games, see Deccio & Baloglu (2002), Guala (2009), Preuss & Solberg (2006), Mihalik (2001, 2003) and Scamuzzi (2006).

### **Political implications**

In sum, distinct types of households derive different net utilities from Olympic Games and their legacies such as stadiums (Coates & Humphreys 2006). The net utilities may depend on the members' preferences for the consumption benefits of sports and proximity costs (or benefits). Ahlfeldt & Maennig (2015) argue that in the long run, a political process based on referenda will not necessarily lead to the allocation of local public goods according to their welfare impact. If the perceived costs and benefits also depend on experiencing the Olympic Games, people may systematically underestimate the net benefits associated with the major events, which may cast doubt on the efficiency of public referenda (and public polls as an indicator for political desirability). The potential political implications are of a wide range. Referenda may be regarded as inferior to decisions based on social cost–benefit analyses, particularly those based on revealed preference approaches (Osborne & Turner, 2010). In a more extreme view, the “rule of knowers” may be called for (Brennan 2016).

In an opposing attitude IOC, FIFA and other sporting institutions could declare ex-ante referenda or other participation processes, adapted to the nations' usances, as a precondition for bidding. The quality of the bids might increase: Interested cities/nations will need to invest more resources in developing bidding concepts that convince their own populations (and, consequently, the deciding bodies in the sporting federations). Having the majority backing them, the organizing will afterwards be smoothed. It may occur that more effort will be saved during the bidding and organizing period than is invested in the pre-bidding period. The people's participation and inclusion of the views of more milieus on urban development may well increase the perceived quality of the concepts. Particularly in the case of urban development, the competences of the formal elites in politics and administration are not accepted anymore to be superior by a growing number of milieus.

The ideas upcoming in such participation processes may well induce painful information on the weak points of major sporting events. For example, there may be requests to plan Olympic facilities in a way that makes them useable by sports for all afterwards.

Compensating measures may not be asked exclusively in the ecological sphere but also in social respects, for example, in order to face the fear of increasing rents and real estate prices by many persons. There may even be demands for a downsizing of the Games, and there may be demands for a private financing of such major sporting events, not further stressing public finances (Maennig, 2016). In the end, more participation may strengthen the bidding concepts for major sporting events.

**Table 1**

**Positive Referenda**

City	Summer/Winter Games	Date of Referendum	Result of Referendum	Turnout (Eligibles)	Data source	Successful?
Oslo (NOR)	Winter Games 2022	10.09.2013	YES: 53,6% NO: 46,4%	66%	<a href="https://www.ssb.no/en/valg/statistikker/folkavs_kostraaar/2014-06-03">https://www.ssb.no/en/valg/statistikker/folkavs_kostraaar/2014-06-03</a>	No, Beijing
Munich (GER)	Winter Games 2018	08.05.2011	YES: 58,07% NO: 41,93%	59,64% in Garmisch-Partenkirchen (20918)	<a href="https://www.merkur.de/lokales/garmisch-partenkirchen/olympia-buergerentscheidder-abstimmung-1234301.html">https://www.merkur.de/lokales/garmisch-partenkirchen/olympia-buergerentscheidder-abstimmung-1234301.html</a>	No, PyeongChang
Vancouver (CAN)	Winter Games 2010	22.02.2003	YES: 64% NO: 36%	46% (293263)	Hiller and Wanner (2011)	Yes
Sion (CH)	Winter Games 2006	08.06.1997	YES: 67% NO: 33%		<a href="https://www.valais-wallis-digital.ch/de/a/#!/explore/cards/161">https://www.valais-wallis-digital.ch/de/a/#!/explore/cards/161</a>	No, Turin
Salt Lake City (USA)	Winter Games 1998 and 2002	09.11.1989	YES: 57% NO: 43%		<a href="http://articles.latimes.com/1989-11-09/sports/sp-1649_1_salt-lake-city">http://articles.latimes.com/1989-11-09/sports/sp-1649_1_salt-lake-city</a>	1998: No, Nagano 2002: Yes
St. Moritz / Graubünden (CH)	Winter Games 1976	09.11.1969	YES: 70,1% NO: 29,9%	54%	Burgener et al. (1972)	No, Denver
Sion (CH)	Winter Games 1976	13.07.1969	YES: 68,7% NO: 31,3%	41,81%	Burgener et al. (1972)	No, Denver

**Negative Referenda**

City	Summer/Winter Games	Date of Referendum	Result of Referendum	Turnout (Eligibles)	Source
Vienna (A)	Summer Games 2028	12.03.2013	YES: 28,06%, NO: 71,94%	31,54% (1,15 Mio)	<a href="https://kurier.at/chronik/wien/volksbefragung-in-wien-klares-nein-zu-olympia/4.695.888">https://kurier.at/chronik/wien/volksbefragung-in-wien-klares-nein-zu-olympia/4.695.888</a>
Graubünden (CH)	Winter Games 2026	12.02.2017	YES: 39,9%, NO: 60,1%	51%	<a href="https://www.nzz.ch/schweiz/abstimmung-graubuenden-das-olympia-flaemmchen-ist-erloschen-ld.145131">https://www.nzz.ch/schweiz/abstimmung-graubuenden-das-olympia-flaemmchen-ist-erloschen-ld.145131</a>
Hamburg (GER)	Summer Games 2024	28.11.2015	YES: 48,40 %, NO: 51,60 %	50,2% (1,3 Mio)	<a href="http://www.hamburg.de/pressearchiv-fhh/4655260/2015-12-15-bis-pm-olympia-referendum-endgueltiges-ergebnis/">http://www.hamburg.de/pressearchiv-fhh/4655260/2015-12-15-bis-pm-olympia-referendum-endgueltiges-ergebnis/</a>
Krakow (POL)	Winter Games 2022	25.05.2014	YES: 30,3%, NO: 69,7%	36%	<a href="http://www.zeit.de/sport/2014-05/olympische-winterspiele-krakau-referendum">http://www.zeit.de/sport/2014-05/olympische-winterspiele-krakau-referendum</a>
Munich (GER)	Winter Games 2022		<u>Munich</u> YES: 47,9%, NO: 52,1% <u>Garmisch</u> YES: 48,44%, NO: 51,56% <u>Traunstein</u> YES: 40,33%, NO: 59,67% <u>Berchtesgadener Land:</u> YES: 45,9%, NO: 54,1%	Munich: 28,8% Garmisch: 58,8% Traunstein: 39,98% Berchtesgadener Land: 38,25 %	<a href="http://www.olympia-nein.ch/go/aktuelles/meldungen/Ozu4.php">http://www.olympia-nein.ch/go/aktuelles/meldungen/Ozu4.php</a>
St. Moritz / Davos / Graubünden (CH)	Winter Games 2022	03.03.2013	YES: 47,3%, NO: 52,7%	59,14%	<a href="http://www.srf.ch/news/schweiz/abstimmungen/abstimmungen-gr/buendner-sagen-nein-zu-olympischen-spielen">http://www.srf.ch/news/schweiz/abstimmungen/abstimmungen-gr/buendner-sagen-nein-zu-olympischen-spielen</a>
Bern (CH)	Winter Games 2010	22.09.2002	YES: 21,2%, NO: 78,8%		<a href="https://www.nzz.ch/sport/olympische-spiele-in-der-schweiz-ld.149399">https://www.nzz.ch/sport/olympische-spiele-in-der-schweiz-ld.149399</a>
Innsbruck (A)	Winter Games 2006	09.03.1997	YES: 47,3%, NO: 52,7%	35,7% (80246)	<a href="https://www.innsbruck.gv.at/data.cfm?vpath=redaktion/ma_i/allgemeine_servicedienste/statistik/dokumente38/wahle_n2/innsbrucker-volksbefragungenpdf">https://www.innsbruck.gv.at/data.cfm?vpath=redaktion/ma_i/allgemeine_servicedienste/statistik/dokumente38/wahle_n2/innsbrucker-volksbefragungenpdf</a>
Innsbruck (A)	Winter Games 2002	17.10.1993	YES: 26,6%, NO: 73,4%	45,20%	<a href="https://www.innsbruck.gv.at/data.cfm?vpath=redaktion/ma_i/allgemeine_servicedienste/statistik/dokumente38/wahle_n2/innsbrucker-volksbefragungenpdf">https://www.innsbruck.gv.at/data.cfm?vpath=redaktion/ma_i/allgemeine_servicedienste/statistik/dokumente38/wahle_n2/innsbrucker-volksbefragungenpdf</a>
Aosta Valley (I)	Winter Games 1998	19.06.1992	YES: 15,3%, NO: 84,7%	60,70%	<a href="http://www.storiavda.it/novecento-2.html">http://www.storiavda.it/novecento-2.html</a>
Lausanne (CH)	Winter Games 1994	26.06.1988	YES: 38%, NO: 62%	45,80%	<a href="https://serval.unil.ch/resource/serval:BIB_7E35973521A1.P001/REF;http://doc.rero.ch/record/110462/files/1988-06-27.pdf">https://serval.unil.ch/resource/serval:BIB_7E35973521A1.P001/REF;http://doc.rero.ch/record/110462/files/1988-06-27.pdf</a>
Chur / Graubünden (CH)	Winter Games 1988	02.03.1980	YES: 23%, NO: 77%		<a href="http://www.srf.ch/news/schweiz/abstimmungen/abstimmungen-gr/buendner-sagen-nein-zu-olympischen-spielen">http://www.srf.ch/news/schweiz/abstimmungen/abstimmungen-gr/buendner-sagen-nein-zu-olympischen-spielen</a>
Denver (USA)	Winter Games 1976	07.11.1972	YES: 40,56%, NO: 59,44%		<a href="https://ballotpedia.org/Colorado_Winter_Olympic_Games_Funding_and_Tax_Measure_8_(1972)">https://ballotpedia.org/Colorado_Winter_Olympic_Games_Funding_and_Tax_Measure_8_(1972)</a>
Zürich (CH)	Winter Games 1976	02.11.1969	YES: 22%, NO: 78%		Burgener et al. (1972)
Interlaken / Bern (CH)	Winter Games 1976	26.10.1969	YES: 48,4% , NO: 51,6%		Burgener et al. (1972)
Sion / Wallis (CH)	Winter Games 1968	08.12.1963	YES: 49,4%, NO: 50,6%		Burgener et al. (1972)

## References

- Ahlfeldt, G. M. (2011). Blessing or Curse? Appreciation, amenities and resistance to urban renewal. *Regional Science and Urban Economics* 41, 32-34.
- Ahlfeldt, G. M., & Kavetsos, G. (2014). Form or function? The effect of new sports stadia on property prices in London. *Journal of the Royal Statistical Society A*, 177(1), 169-190.
- Ahlfeldt, G., & Maennig, W. (2009). Arenas, arena architecture and the impact on location desirability: The case of 'Olympic Arenas' in Prenzlauer Berg, Berlin. *Urban Studies*, 46(7), 1343-1362.
- Ahlfeldt, G., & Maennig, W. (2010). Impact of sports arenas on land values: Evidence from Berlin. *The Annals of Regional Science*, 44(2), 205-227.
- Ahlfeldt, G., & Maennig, W. (2012). Voting on a NIMBY Facility: Proximity Cost of an "Iconic" Stadium. *Urban Affairs Review*, 48(2), 205-237.
- Ahlfeldt, G., & Maennig, W. (2015). Homevoters vs. leasevoters: A spatial analysis of airport effects. *Journal of Urban Economics*, 87, 85-99.
- Ahlfeldt, G., Maennig, W., & Ölschläger, M. (2014). Measuring and quantifying lifestyles and their impact on public choices: The case of professional football in Munich. *Journal of Economic and Social Measurement*, 39(1-2), 59-86.
- Ahlfeldt, G., Maennig, W., & Steenbeck, M. (2016). Après Nous le Déluge? Direct Democracy and Intergenerational Conflicts in Ageing Societies. CESIFO WORKING PAPER NO. 5779, ISSN 2364-1428.
- Atkinson, G., Mourato, S., Szymanski, S., & Ozdemiroglu, E. (2008). Are we willing to pay enough to 'back the bid'? Valuing the intangible impacts of London's bid to host the 2012 Summer Olympic Games. *Urban Studies*, 45, 419-444.
- Brennan, J. (2016). *Against democracy*. Princeton University press.
- Brunner, E., & Sonstelie, J. (2003). Homeowners, property values, and the political economy of the school voucher. *Journal of Urban Economics*, 54(2), 239-257.
- Brunner, E., Sonstelie, J., & Thayer, M. (2001). Capitalization and the voucher: an analysis of precinct returns from California's proposition 174. *Journal of Urban Economics*, 50(3), 517-536.



- Burbank, M. J., Heying, C. H., & Andranovich, G. (2000). Antigrowth Politics Or Piecemeal Resistance? Citizen Opposition to Olympic-Related Economic Growth. *Urban Affairs Review, (35)3*, 334-357.
- Burgener, L. (1972). Quatre référendums suisses sur les Jeux Olympiques. *Revue économique et sociale: bulletin de la Société d'Etudes Economiques et Sociales, 30*, 2.
- Carlino, G., & Coulson, N. E. (2004). Compensating Differentials and the Social Benefits of the NFL. *Journal of Urban Economics, 56*, 25-50.
- Chalabi, M. (2016). Why were the election polls so wrong? How Donald Trump defied predictions. In *The Guardian*, 09.11.2016. Retrieved from: <https://www.theguardian.com/us-news/2016/nov/09/donald-trump-exit-polls-data-us-election> on 29 May 2017.
- Coates, D., & Humphreys, B. R. (2006). Proximity benefits and voting on stadium and arena subsidies. *Journal of Urban Economics, 59*, 285-299.
- Coates, D., & Szymanski S. (2015). Willingness to pay to host the Summer Olympic Games. Working Paper, University of Maryland Baltimore County, USA.
- Coates, D., & Wicker, P. (2015). Why were voters against the 2022 Munich Winter Olympics in a referendum? *International journal of sport finance, 10(3)*, 267-283.
- Deccio, C., & Baloglu, S. (2002). Nonhost community resident reactions to the 2002 Winter Olympics: The spillover impacts. *Journal of Travel Research, 41(1)*, 46-56.
- Dehring, C. A., Depken, C. A., & Ward, M. R. (2007). The Impact Of Stadium Announcements On Residential Property Values: Evidence From A Natural Experiment In Dallas-Fort Worth. *Contemporary Economic Policy, 25(4)*, 627-638.
- Dehring, C. A., Depken, C. A., & Ward, M. R. (2008). A direct test of the homevoter hypothesis. *Journal of Urban Economics, 64(1)*, 155-170.
- DiPasquale, D., & Glaeser, E. L. (1999). Incentives and social capital: are homeowners better citizens? *Journal of Urban Economics, 45(2)*, 354-384.
- Feng, X., & Humphreys, B. R. (2012). The impact of professional sports facilities on housing values: Evidence from census block group data. *City, Culture and Society, 3*, 189-200.

- Fischel, W. A. (2005). *The Homevoter Hypothesis*. Harvard University Press.
- Foster, M. (1976). Colorado's defeat of the 1976 Winter Olympics. *Colorado Magazine*, 53, 163-86.
- Freedman, P., & Goldstein, K. (1996). Building a probable electorate from preelection polls. *Public Opinion Quarterly*, 60, 574-587.
- Gelman, A., & King, G. (1993). Why Are American Presidential Election Campaign Polls so Variable When Votes Are so Predictable? *British Journal of Political Science*, 23, 409-451.
- Guala, C. (2009). To bid or not to bid: Public opinion before and after the Games: The case of Turin. In J. Kennell, C. Bladon, & E. Booth (Eds). *The Olympic Legacy: People, Place, Enterprise*. London: University of Greenwich, 21-30.
- Gutsche, T. L, Kapteyn, A., Meijer, E., & Weerman, B. (2014). The RAND continuous 2012 presidential election poll. *Public Opinion Quarterly*, 78, 233-254.
- Hilber, C. A. L., & Mayer, C. J. (2009). Why do households without children support local public schools? *Journal of Urban Economics*, 65(1), 74-90.
- Hiller, H. H., & Wanner, R. A. (2011). Public Opinion in Host Olympic Cities: The Case of the 2010 Vancouver Winter Games. *Sociology*, 45, 883-899.
- Hiller, H. H., & Wanner, R. A. (2017). Public Opinion in Olympic Cities: From Bidding to Retrospection. *Urban Affairs Review*, 1-32, DOI: 10.1177/1078087416684036.
- Horn, B. P., Cantor, M., & Fort, R. (2015). Proximity and voting for professional sporting stadiums: The pattern of support for the seahawk stadium referendum. *Contemporary Economic Policy*, 33(4), 678-688.
- Keeter, S. (2006). The impact of cell phone noncoverage bias on polling in the 2004 presidential election. *Public Opinion Quarterly*, 70, 88-98.
- Kotlikoff, L. J., & Burns, S. (2005). *The coming generational storm: what you need to know about America's economic future*. Cambridge, Mass.: MIT Press.
- Maennig, W. (2016). Preventing corruption in the planning of major sporting events: open issues. In Transparency International (Ed), *Global Corruption Report Sport*, 169-173.

- Maennig, W., & Vierhaus, C. (2017). Winning the Olympic host city election: key success factors. *Applied Economics*, 49(31), 3086-3099.
- Mercer, A., Deane, C., & McGeeney, K. (2016). Why 2016 election polls missed their mark. Hg. v. Pew Research Center. Retrieved from: <http://www.pewresearch.org/fact-tank/2016/11/09/why-2016-election-polls-missed-their-mark/> on 9 November 2016.
- Mihalik, B. (2001). Host population perceptions of the 1996 Atlanta Olympics: Attendance, support, benefits and liabilities. *Tourism Analysis*, 5(1), 49-53.
- Mihalik, B. (2003). Host population perceptions towards the 1996 Atlanta Olympics: Benefits and liabilities. In M. De Moragas, C. Kennett, & N. Puig (Eds.), *The Legacy of the Olympic Games 1984–2000*. Lausanne: International Olympic Committee, 339-345.
- N.N. (2015). ZDF-Prognose: 56 Prozent für Olympia in Hamburg (ZDF-Forecast: 56 percent in favor of Olympics in Hamburg), <http://www.sueddeutsche.de/news/politik/sportpolitik-zdf-prognose56-prozent-fuer-olympia-in-hamburg-dpa.urn-newsml-dpa-com-20090101-151129-99-01886>.
- Osborne, M. J., Turner, M. A. (2010). Cost benefit analyses versus referenda. *Journal of Political Economy*, 118(1), 156-187.
- Petrocik, J. R. (1991). An algorithm for estimating turnout as a guide to predicting elections. *Public Opinion Quarterly*, 55, 643-647.
- Preuss, H., & Solberg, H. (2006). Attracting major sporting events: The role of local residents. *European Sport Management Quarterly*, 6(4), 391-411.
- Preuss H.; & Werkmann, K (2011). Erlebniswert Olympischer Winterspiele in München 2018. *Sport und Gesellschaft* 8(2): 97-123.
- Reedy, J., Gastil, J., & Moy, P. (2016). From the Secret Ballot to the Public Vote: Examining Voters' Experience of Political Discussion in Vote-by-Elections. *Political Communication*, 33, 39-58.
- Ritchie, J. R. B., & Lyons, M. (1990). Olympulse VI: A post-event assessment of resident reaction to the XV Olympic Winter Games. *Journal of Travel Research*, 28(3), 14-23.

- Rosenstone, S. J., & Hansen, J. M. (1993). *Mobilization, Participation, and Democracy in America*. New York: MacMillan.
- Rothschild, D., & Malhotra, N. (2014). Are public opinion polls self-fulfilling prophecies? *Research and Politics*, 1(2), 1-10.
- Scamuzzi, S. (2006). Winter Olympic Games 2006 in Turin. In N. Müller, M. Messing, & H. Preuß (Eds.), *Von Chamonix bis Turin*. Kassel: Agon Sportverlag.
- Solé-Ollé, A., & Viladecans-Marsal, E. (2013). Do political parties matter for local land use policies? *Journal of Urban Economics*, 78, 42-56.
- Süssmuth, B., Heyne, M., & Maennig, W. (2010). Induced Civic Pride and Integration. *Oxford Bulletin of Economics and Statistics*, 72(2), 202-220.
- Trosien, G., Pfeffel, F., & Ratz, M. (2016). Governance and Importance of Cooperation of Metropolitan Regions: Learnings from the failed Olympic Bid Hamburg 2024. Paper presented at SESM CONFERENCE, Berlin, 19th May 2016.
- Tu, C. C. (2005). How Does a New Sports Stadium Affect Housing Values? The Case of FedEx Field. *Land Economics*, 81, 379-395.
- Walton, H., Longo, A., & Dawson, P. (2008). A contingent valuation of the 2012 London Olympic Games: A regional perspective. *Journal of Sports Economics*, 9, 304-317.
- Wang, W., Rothschild, D., Goel, S., & Gelman, A. (2015). Forecasting elections with non-representative polls. *International Journal of Forecasting*, 31, 980-991.
- Wicker, P., Whitehead, J. C., Johnson, B. K., & Mason, D. S. (2015). Public support for hosting the Olympic summer games in Germany: the CVM approach. Appalachian State University, Department of Economics Working Paper Number 15-06, <http://econ.appstate.edu/RePEc/pdf/wp1506.pdf>.

# Hamburg Contemporary Economic Discussions

(Download: <https://www.wiso.uni-hamburg.de/en/fachbereich-vwl/professuren/maennig/research/hceds.html>)

- 57 MAENNIG, W.: Public Referenda and Public Opinion on Olympic Games, 2017.
- 56 MAENNIG, W. / WELLBROCK, C.: Rio 2016: Sozioökonomische Projektion des Olympischen Medaillenrankings, 2016.
- 55 MAENNIG, W. / VIERHAUS, C.: Which countries bid for the Olympic Games? Economic, political, and social factors and chances of winning, 2016.
- 54 AHLFELDT, G. M. / MAENNIG, W. / STEENBECK, M.: Après nous le déluge? Direct democracy and intergenerational conflicts in aging societies, 2016.
- 53 LANGER, V. C. E.: Good news about news shocks, 2015.
- 52 LANGER, V. C. E. / MAENNIG, W. / RICHTER, F. J.: News Shocks in the Data: Olympic Games and their Macroeconomic Effects – Reply, 2015.
- 51 MAENNIG, W.: Ensuring Good Governance and Preventing Corruption in the Planning of Major Sporting Events – Open Issues, 2015.
- 50 MAENNIG, W. / VIERHAUS, C.: Who Wins Olympic Bids? 2015 (3<sup>rd</sup> version).
- 49 AHLFELDT, G. M. / MAENNIG, W. / RICHTER, F.: Urban Renewal after the Berlin Wall, 2013.
- 48 BRANDT, S. / MAENNIG, W. / RICHTER, F.: Do Places of Worship Affect Housing Prices? Evidence from Germany, 2013.
- 47 ARAGÃO, T. / MAENNIG, W.: Mega Sporting Events, Real Estate, and Urban Social Economics – The Case of Brazil 2014/2016, 2013.
- 46 MAENNIG, W. / STEENBECK, M. / WILHELM, M.: Rhythms and Cycles in Happiness, 2013.
- 45 RICHTER, F. / STEENBECK, M. / WILHELM, M.: The Fukushima Accident and Policy Implications: Notes on Public Perception in Germany, 2014 (2<sup>nd</sup> version).
- 44 MAENNIG, W.: London 2012 – das Ende des Mythos vom erfolgreichen Sportsoldaten, 2012.
- 43 MAENNIG, W. / WELLBROCK, C.: London 2012 – Medal Projection – Medaillenvorausberechnung, 2012.
- 42 MAENNIG, W. / RICHTER, F.: Exports and Olympic Games: Is there a Signal Effect? 2012.

# Hamburg Contemporary Economic Discussions

(Download: <https://www.wiso.uni-hamburg.de/en/fachbereich-vwl/professuren/maennig/research/hceds.html>)

- 41 MAENNIG, W. / WILHELM, M.: Becoming (Un)employed and Life Satisfaction: Asymmetric Effects and Potential Omitted Variable Bias in Empirical Happiness Studies, 2011.
- 40 MAENNIG, W.: Monument Protection and Zoning in Germany: Regulations and Public Support from an International Perspective, 2011.
- 39 BRANDT, S. / MAENNIG, W.: Perceived Externalities of Cell Phone Base Stations – The Case of Property Prices in Hamburg, Germany, 2011.
- 38 MAENNIG, W. / STOBERNACK, M.: Do Men Slow Down Faster than Women? 2010.
- 37 DU PLESSIS, S. A. / MAENNIG, W.: The 2010 World Cup High-frequency Data Economics: Effects on International Awareness and (Self-defeating) Tourism, 2010.
- 36 BISCHOFF, O.: Explaining Regional Variation in Equilibrium Real Estate Prices and Income, 2010.
- 35 FEDDERSEN, A. / MAENNIG, W.: Mega-Events and Sectoral Employment: The Case of the 1996 Olympic Games, 2010.
- 34 FISCHER, J.A.V. / SOUSA-POZA, A.: The Impact of Institutions on Firms Rejuvenation Policies: Early Retirement with Severance Pay versus Simple Lay-Off. A Cross-European Analysis, 2010.
- 33 FEDDERSEN, A. / MAENNIG, W.: Sectoral Labor Market Effects of the 2006 FIFA World Cup, 2010.
- 32 AHLFELDT, G.: Blessing or Curse? Appreciation, Amenities, and Resistance around the Berlin “Mediaspree”, 2010.
- 31 FALCH, T. / FISCHER, J.A.V.: Public Sector Decentralization and School Performance: International Evidence, 2010.
- 30 AHLFELDT, G. / MAENNIG, W. / ÖLSCHLÄGER, M.: Lifestyles and Preferences for (Public) Goods: Professional Football in Munich, 2009.
- 29 FEDDERSEN, A. / JACOBSEN, S. / MAENNIG, W.: Sports Heroes and Mass Sports Participation – The (Double) Paradox of the “German Tennis Boom”, 2009.

# Hamburg Contemporary Economic Discussions

(Download: <https://www.wiso.uni-hamburg.de/en/fachbereich-vwl/professuren/maennig/research/hceds.html>)

- 28 AHLFELDT, G. / MAENNIG, W. / OSTERHEIDER, T.: Regional and Sectoral Effects of a Common Monetary Policy: Evidence from Euro Referenda in Denmark and Sweden, 2009.
- 27 BJØRNSKOV, C. / DREHER, A. / FISCHER, J.A.V. / SCHNELLENBACH, J.: On the Relation Between Income Inequality and Happiness: Do Fairness Perceptions Matter? 2009.
- 26 AHLFELDT, G. / MAENNIG, W.: Impact of Non-Smoking Ordinances on Hospitality Revenues: The Case of Germany, 2009.
- 25 FEDDERSEN, A. / MAENNIG, W.: Wage and Employment Effects of the Olympic Games in Atlanta 1996 Reconsidered, 2009.
- 24 AHLFELDT, G. / FRANKE, B. / MAENNIG, W.: Terrorism and the Regional and Religious Risk Perception of Foreigners: The Case of German Tourists, 2009.
- 23 AHLFELDT, G. / WENDLAND, N.: Fifty Years of Urban Accessibility: The Impact of Urban Railway Network on the Land Gradient in Industrializing Berlin, 2008.
- 22 AHLFELDT, G. / FEDDERSEN, A.: Determinants of Spatial Weights in Spatial Wage Equations: A Sensitivity Analysis, 2008.
- 21 MAENNIG, W. / ALLMERS, S.: South Africa 2010: Economic Scope and Limits, 2008.
- 20 MAENNIG, W. / WELLBROCK, C.-M.: Sozio-ökonomische Schätzungen Olympischer Medaillengewinne: Analyse-, Prognose- und Benchmarkmöglichkeiten, 2008.
- 19 AHLFELDT, G.: The Train has Left the Station: Real Estate Price Effects of Mainline Realignment in Berlin, 2008.
- 18 MAENNIG, W. / PORSCHE, M.: The Feel-good Effect at Mega Sport Events – Recommendations for Public and Private Administration Informed by the Experience of the FIFA World Cup 2006, 2008.
- 17 AHLFELDT, G. / MAENNIG, W.: Monumental Protection: Internal and External Price Effects, 2008.

# Hamburg Contemporary Economic Discussions

(Download: <https://www.wiso.uni-hamburg.de/en/fachbereich-vwl/professuren/maennig/research/hceds.html>)

- 16 FEDDERSEN, A. / GRÖTZINGER, A. / MAENNIG, W.: New Stadia and Regional Economic Development – Evidence from FIFA World Cup 2006 Stadia, 2008.
- 15 AHLFELDT, G. / FEDDERSEN, A.: Geography of a Sports Metropolis, 2007.
- 14 FEDDERSEN, A. / MAENNIG, W.: Arenas vs. Multifunctional Stadia – Which Do Spectators Prefer? 2007.
- 13 AHLFELDT, G.: A New Central Station for a Unified City: Predicting Impact on Property Prices for Urban Railway Network Extension, 2007.
- 12 AHLFELDT, G.: If Alonso was Right: Accessibility as Determinant for Attractiveness of Urban Location, 2007.
- 11 AHLFELDT, G., MAENNIG, W.: Assessing External Effects of City Airports: Land Values in Berlin, 2007.
- 10 MAENNIG, W.: One Year Later: A Re-Appraisal of the Economics of the 2006 Soccer World Cup, 2007.
- 09 HAGN, F. / MAENNIG, W.: Employment Effects of the World Cup 1974 in Germany.
- 08 HAGN, F. / MAENNIG, W.: Labour Market Effects of the 2006 Soccer World Cup in Germany, 2007.
- 07 JASMAND, S. / MAENNIG, W.: Regional Income and Employment Effects of the 1972 Munich Olympic Summer Games, 2007.
- 06 DUST, L. / MAENNIG, W.: Shrinking and Growing Metropolitan Areas – Asymmetric Real Estate Price Reactions? The Case of German Single-family Houses, 2007.
- 05 HEYNE, M. / MAENNIG, W. / SUESSMUTH, B.: Mega-sporting Events as Experience Goods, 2007.
- 04 DU PLESSIS, S. / MAENNIG, W.: World Cup 2010: South African Economic Perspectives and Policy Challenges Informed by the Experience of Germany 2006, 2007.
- 03 AHLFELDT, G. / MAENNIG, W.: The Impact of Sports Arenas on Land Values: Evidence from Berlin, 2007.



# Hamburg Contemporary Economic Discussions

(Download: <https://www.wiso.uni-hamburg.de/en/fachbereich-vwl/professuren/maennig/research/hceds.html>)

- 02 FEDDERSEN, A. / MAENNIG, W. / ZIMMERMANN, P.: How to Win the Olympic Games – The Empirics of Key Success Factors of Olympic Bids, 2007.
- 01 AHLFELDT, G. / MAENNIG, W.: The Role of Architecture on Urban Revitalization: The Case of “Olympic Arenas” in Berlin-Prenzlauer Berg, 2007.
- 04/2006 MAENNIG, W. / SCHWARTHOFF, F.: Stadium Architecture and Regional Economic Development: International Experience and the Plans of Durban, October 2006.
- 03/2006 FEDDERSEN, A. / VÖPEL, H.: Staatliche Hilfen für Profifußballclubs in finanziellen Notlagen? – Die Kommunen im Konflikt zwischen Imageeffekten und Moral-Hazard-Problemen, September 2006.
- 02/2006 FEDDERSEN, A.: Measuring Between-season Competitive Balance with Markov Chains, July 2006.
- 01/2006 FEDDERSEN, A.: Economic Consequences of the UEFA Champions League for National Championships – The Case of Germany, May 2006.
- 04/2005 BUETTNER, N. / MAENNIG, W. / MENSSEN, M.: Zur Ableitung einfacher Multiplikatoren für die Planung von Infrastrukturkosten anhand der Aufwendungen für Sportstätten – eine Untersuchung anhand der Fußball-WM 2006, May 2005.
- 03/2005 SIEVERS, T.: A Vector-based Approach to Modeling Knowledge in Economics, February 2005.
- 02/2005 SIEVERS, T.: Information-driven Clustering – An Alternative to the Knowledge Spillover Story, February 2005.
- 01/2005 FEDDERSEN, A. / MAENNIG, W.: Trends in Competitive Balance: Is there Evidence for Growing Imbalance in Professional Sport Leagues? January 2005.

ISSN 1865-2441 (PRINT)  
ISSN 1865-7133 (ONLINE)  
ISBN 978-3-942820-28-8 (PRINT)  
ISBN 978-3-942820-29-5 (ONLINE)

# Ha mbur g

Contemporary Economic Discussions