



Economic Effects of Football World Cups Experiences from France 1998 and Germany 2006

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**Nelson Mandela Metropolitan University
Port Elisabeth, march 31st, 2010**

German Academic Exchange Service
German-South African Lecture Series on Soccer

Structure of presentation

1. Hardly any ex-post evidence for income or employment effects of mega sport events
2. Evidence for positive feelgood effects and image effects of mega sport events
3. Urban economic effects of sport facilities
4. Conclusion and outlook

Ex-ante forecasts of economic effects of World Cup 2010

Grant Thornton, 2004

R 1.8 billion investment costs for the stadia

190.000 overseas tourists (each watching 4 matches), staying 15 days

43.000 african tourists (~~3 matches~~), staying 15 days

Income impact of R21.3 billion (=1.5% increase in SA GDP)

Bohlmann and van Heerden (2005)

+0.94% of GDP , 50 000 jobs.

Grant Thornton, 2008

~~R 17,4 billion investment costs for the stadia and infrastructure~~

>480,000 WC tourists (more than 300.000 from overseas)

R 51,1 billion GDP impact, 381.000 jobs created

Grant Thornton, 2009

~~crowding out normal tourism by around only 20%.~~

R 55,7 billion GDP impact, additional 415.000 jobs, add. tax income of R 19,4 billion

~~GDP impact of net additional foreign spend R 11,5 billion~~

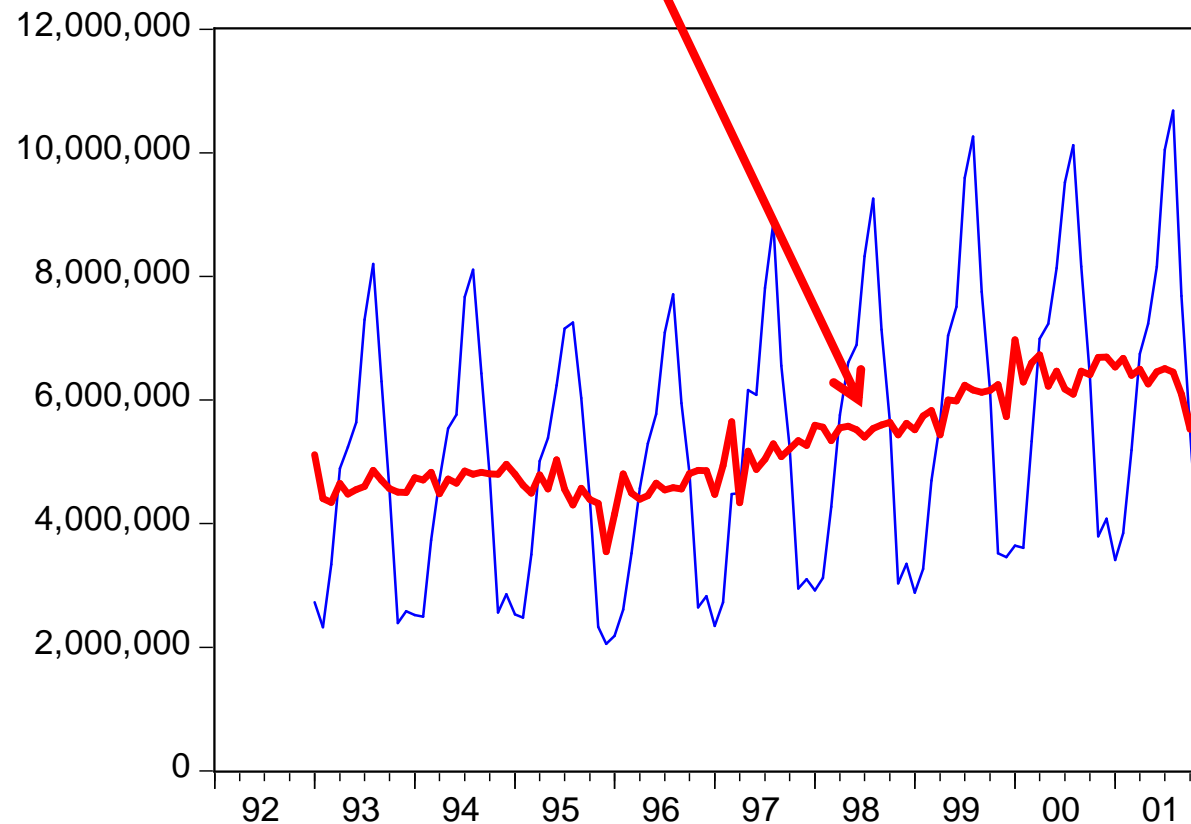
Employment sustained by net additional spend: 144.000

Ex-ante estimates of economic benefits of WC 2006

- DFB/ Rahmann et al (1997)
 - about 340,000 foreign tourists,
 - spending between US-\$ 0.62 and 1.1 billion
 - Additional income of 0 up to 3,5 bn € from tourists and constructions
- German Association of Chambers of Industry and Commerce (2006):
 - 60,000 new jobs
- Postbank (2005, 2006)
 - 1 mio. foreign tourists
 - Spending 850 mio. €
 - GDP +0,3%
- German Federation of Hotels (2006)
 - 3,2 mio. foreign tourists
 - 5 mio. additional hotel beds to be sold
 - Each tourist to spend 150-200 € per day
 - 3,4 bn. € additional income

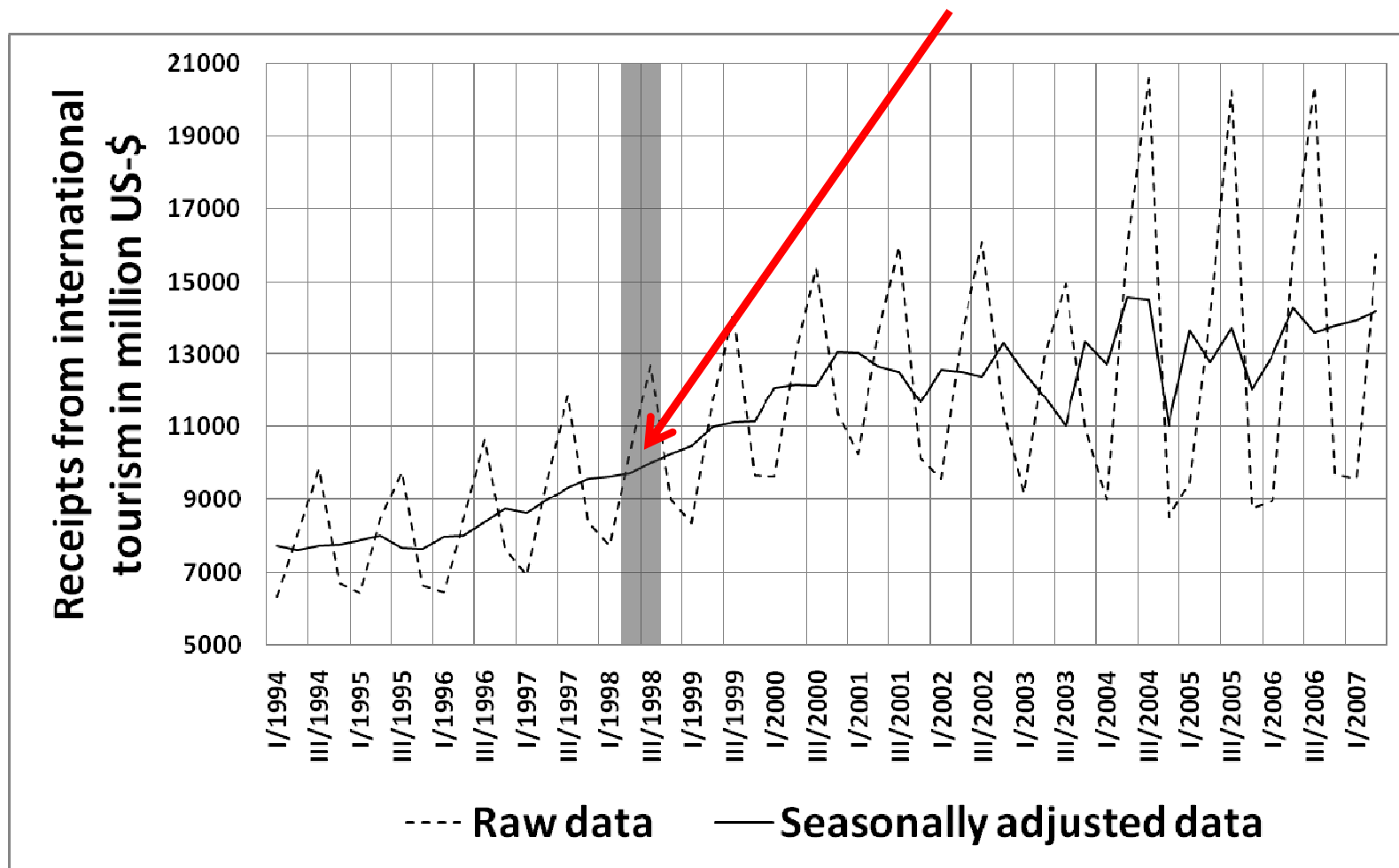
Ex-post evidence of economic benefits

Overnight stays of non-residents in France (Hotels and similar) since 1993: **Crowding-out of normal tourism**



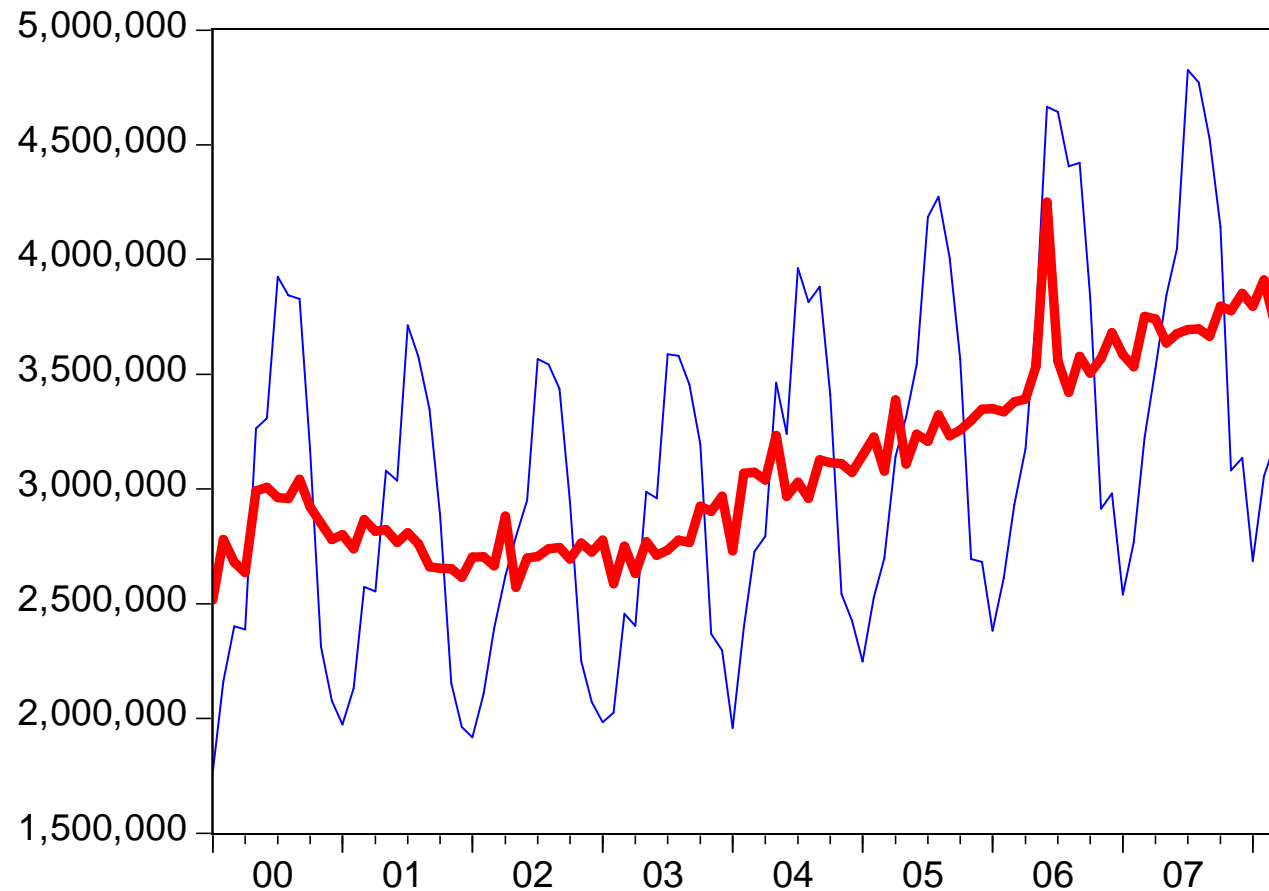
Source: Allmers and Maennig (2009)

Tourism income in France since 1994



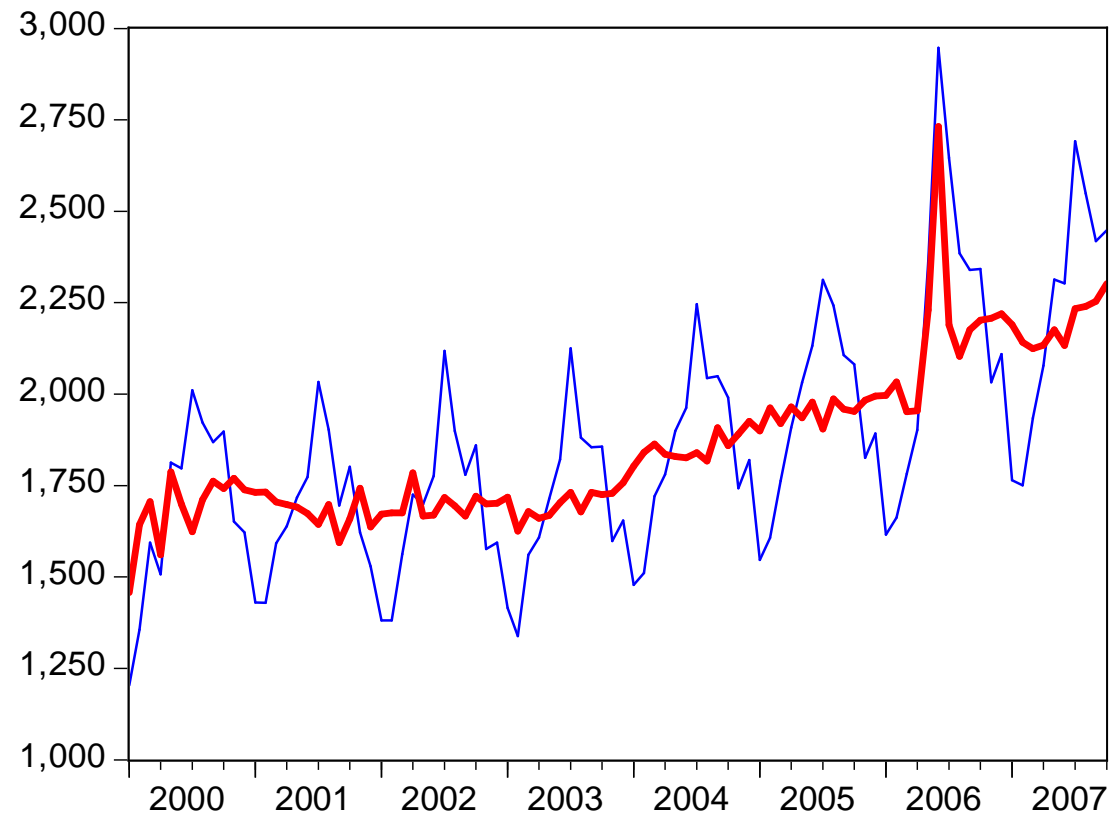
Data origin: Eurostat: Current account, Services, Travel; retrieved 14 December 2007.

Overnight stays of foreigners in Germany in hotels and similar since 2000



Source: Allmers and Maennig (2009)

Tourism income in Germany since 2000



















Source: Allmers and Maennig (2009)


World Cup 2010 Tourist Packages: The case of Germany









Cheapest Package: Including two tickets of first round



Reisepaket 1 


Kategorie 1	2x				4.999 € <small>pro Person im Doppelzimmer</small> <small>Code: WM-2010-01-01-DZ</small>	2.699 € <small>Einzelzimmer-Zuschlag</small> <small>Code: WM-2010-01-01-EZ</small>
Kategorie 2	2x				3.999 € <small>pro Person im Doppelzimmer</small> <small>Code: WM-2010-01-02-DZ</small>	1.899 € <small>Einzelzimmer-Zuschlag</small> <small>Code: WM-2010-01-02-EZ</small>
Kategorie 3	2x				2.979 € <small>pro Person im Doppelzimmer</small> <small>Code: WM-2010-01-03-DZ</small>	1.399 € <small>Einzelzimmer-Zuschlag</small> <small>Code: WM-2010-01-03-EZ</small>
Kategorie 1-3      						

Route


Spiele garantiert:
 vs.  13.06.2010
 Moses Mabhida Stadion, Durban, 20.30 h
 vs.  16.06.2010
 Loftus Versfeld Stadion, Pretoria, 20.30 h

Abflugtag
 03.06.2010 


Ankunftstag
 18.06.2010 




Package with the most tickets (four)

Kategorie 1	4x 		3x 	4.499 € pro Person im Doppelzimmer Code: WM-2010-04-01-DZ	2.199 € Einzelzimmer-Zuschlag Code: WM-2010-04-01-EZ
Kategorie 2	4x 		3x 	4.199 € pro Person im Doppelzimmer Code: WM-2010-04-02-DZ	1.699 € Einzelzimmer-Zuschlag Code: WM-2010-04-02-EZ
Kategorie 3	4x 		3x 	3.699 € pro Person im Doppelzimmer Code: WM-2010-04-03-DZ	1.399 € Einzelzimmer-Zuschlag Code: WM-2010-04-03-EZ
Kategorie 1-3	     				



Spiele garantiert:

 vs.  , 23.06.2010
Soccer City Stadion, Johannesburg, 20.30 h

 vs.  , 24.06.2010
Ellis Park Stadion, Johannesburg, 16.00 h

a)* 1/8-Finale  1. Gruppe D 27.06.2010,
Free State Stadion, Bloemfontein, 16.00 h

b)* 1/8-Finale  2. Gruppe D 26.06.2010,
Royal Bafokang Stadion, Rustenburg, 20.30 h

1/8-Finale F1 – E2 (Evtl.  vs. ),
Loftus Versfeld Stadion, Pretoria, 16.00 h

Abflugtag
22.06.2010

Ankunftstag
01.07.2010



„Semi-Final and Final“ Packages

Reisepaket 8

Kategorie 1	2x 1		4x	7.499 € <small>pro Person im Doppelzimmer Code: WM-2010-08-01-02</small>	2.499 € <small>Einzelzimmer-Zuschlag Code: WM-2010-08-01-02</small>
Kategorie 2	2x 2		4x	6.399 € <small>pro Person im Doppelzimmer Code: WM-2010-08-02-02</small>	2.399 € <small>Einzelzimmer-Zuschlag Code: WM-2010-08-02-02</small>
Kategorie 3	2x 3		3x	5.699 € <small>pro Person im Doppelzimmer Code: WM-2010-08-03-02</small>	1.699 € <small>Einzelzimmer-Zuschlag Code: WM-2010-08-03-02</small>
Kategorie 1-3					

Spiele garantiert:

a)* Deutschland Sieger Gruppe D:
Halbfinale, 07.07.2010,
Moses Mabhida Stadion, Durban, 20.30h

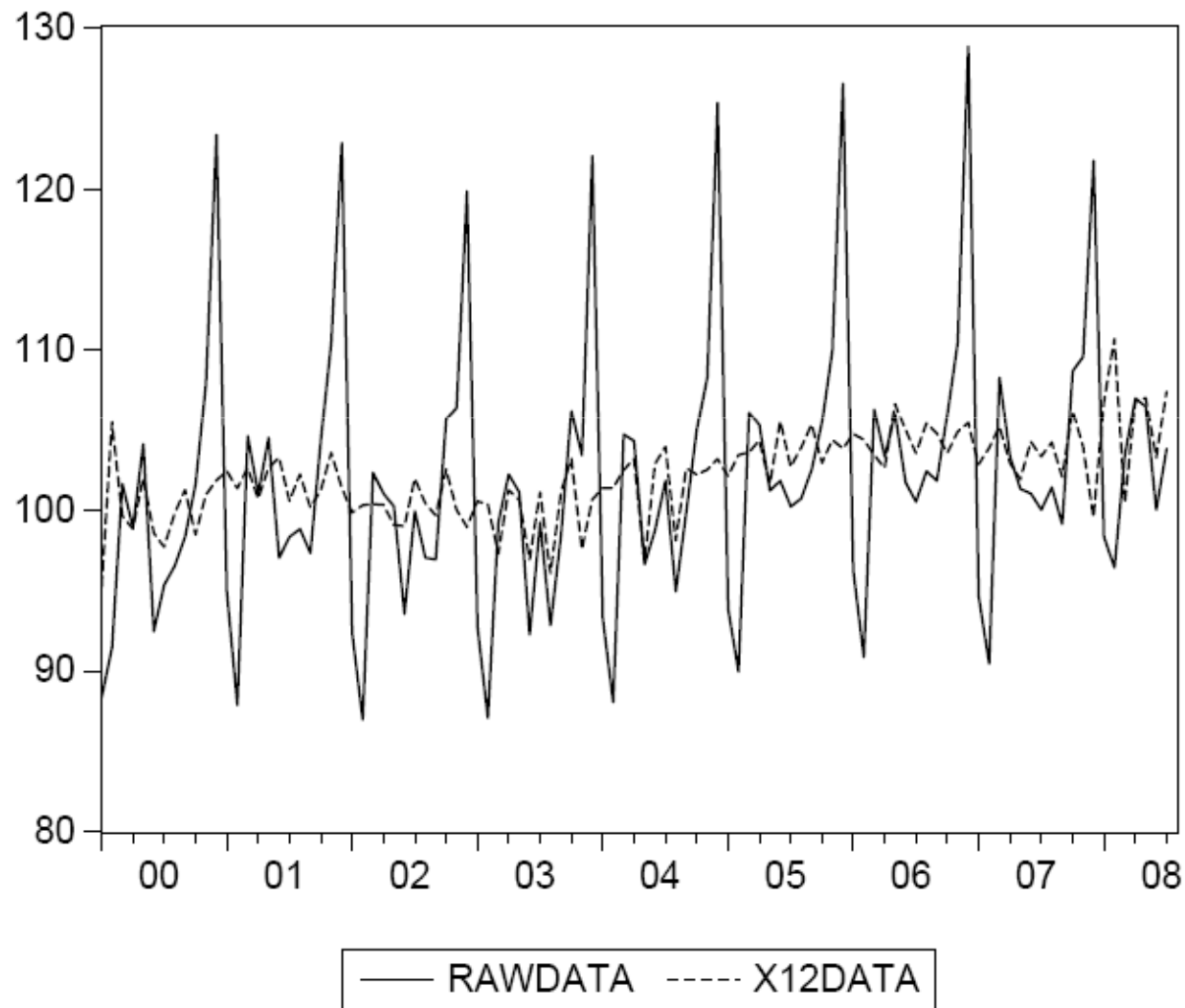
b)* Deutschland 2. Gruppe D:
Halbfinale, 06.07.2010,
Green Point Stadion, Kapstadt, 20.30h

a)* & b)* Finale, 11.07.2010
Soccer City Stadion, Johannesburg, 20.30 h

Abflugtag
03.07.2010

Ankunftstag
13.07.2010

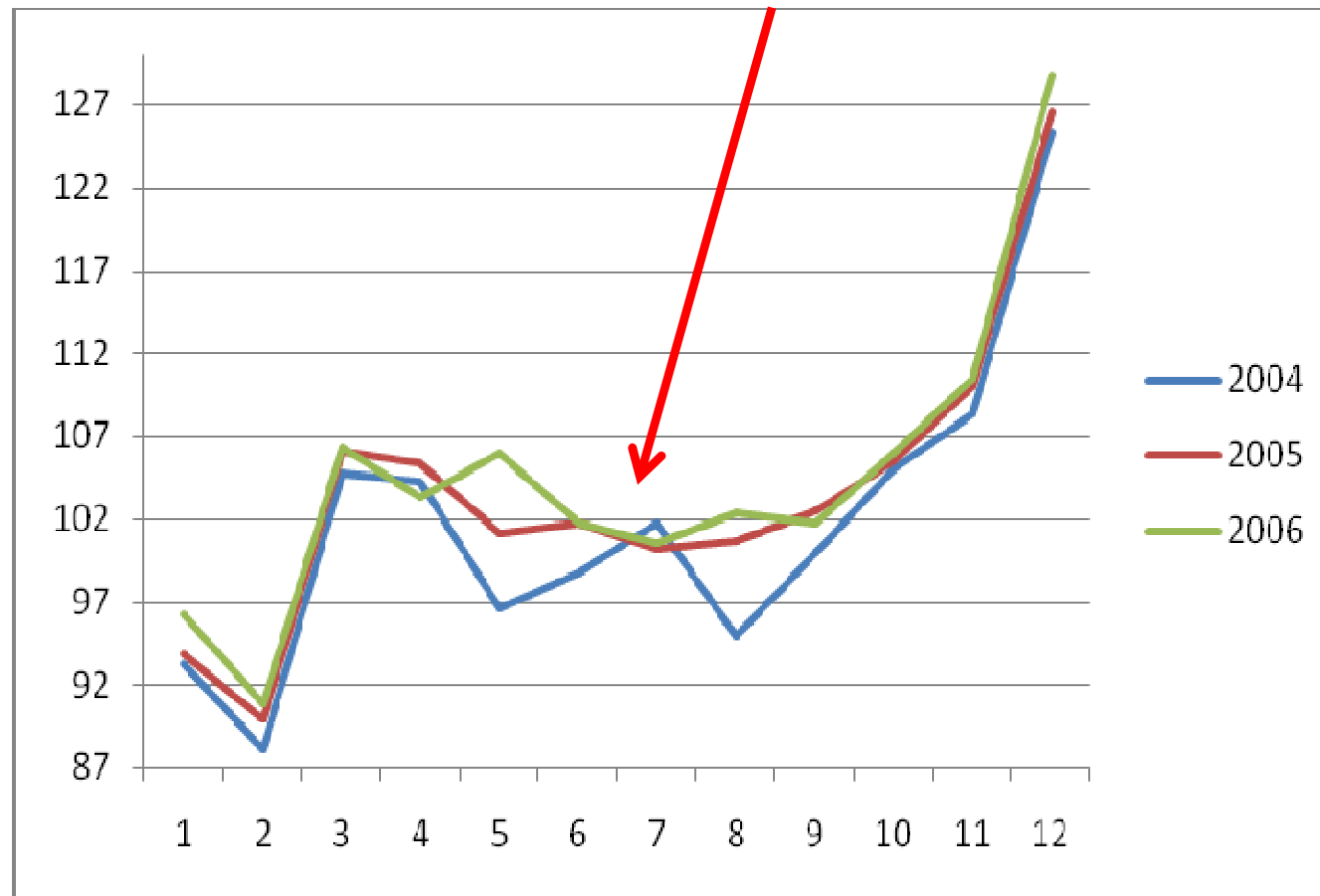
Retail sales in Germany



Quelle: Allmers und Maennig (2009)

Retail sales in Germany:

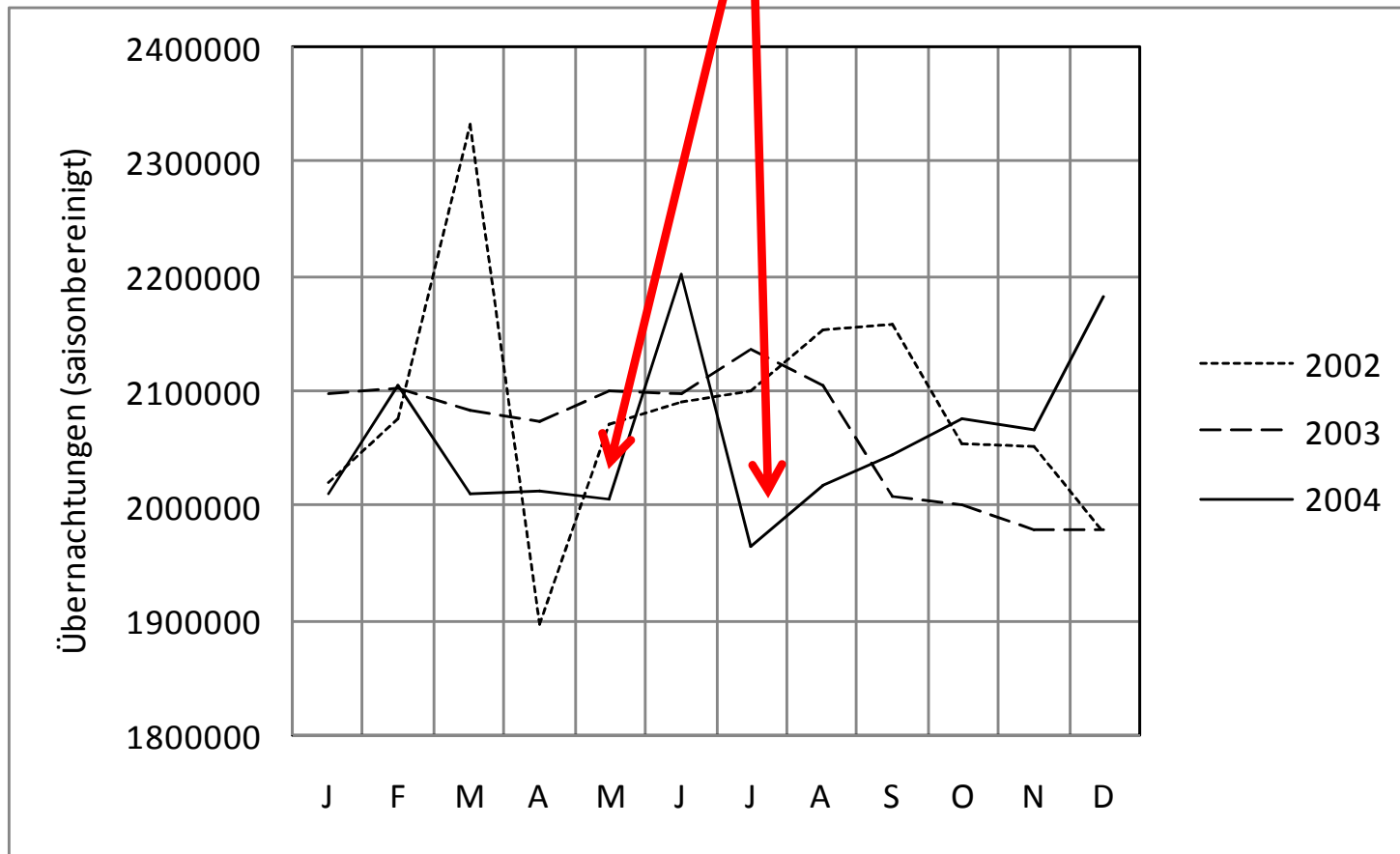
Couch potato effect



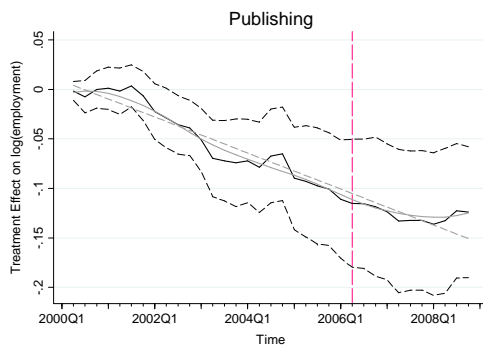
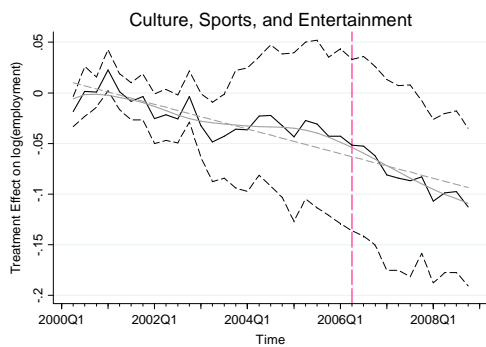
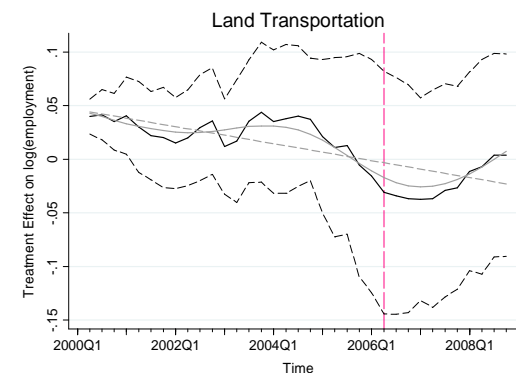
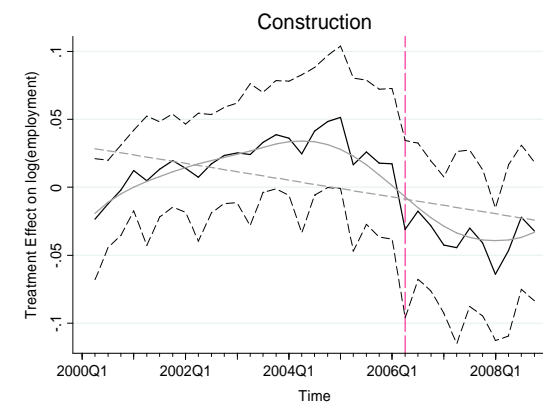
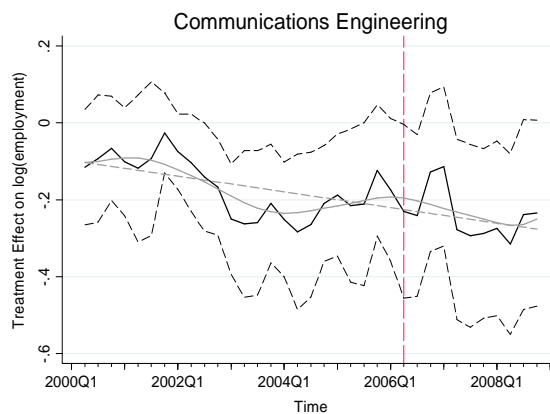
Data origin: Eurostat: Retail trade, except of motor vehicles, motorcycles and trade at filling stations, retrieved 12 august 2008

Time-Switching (the case of EC Portugal 2004)

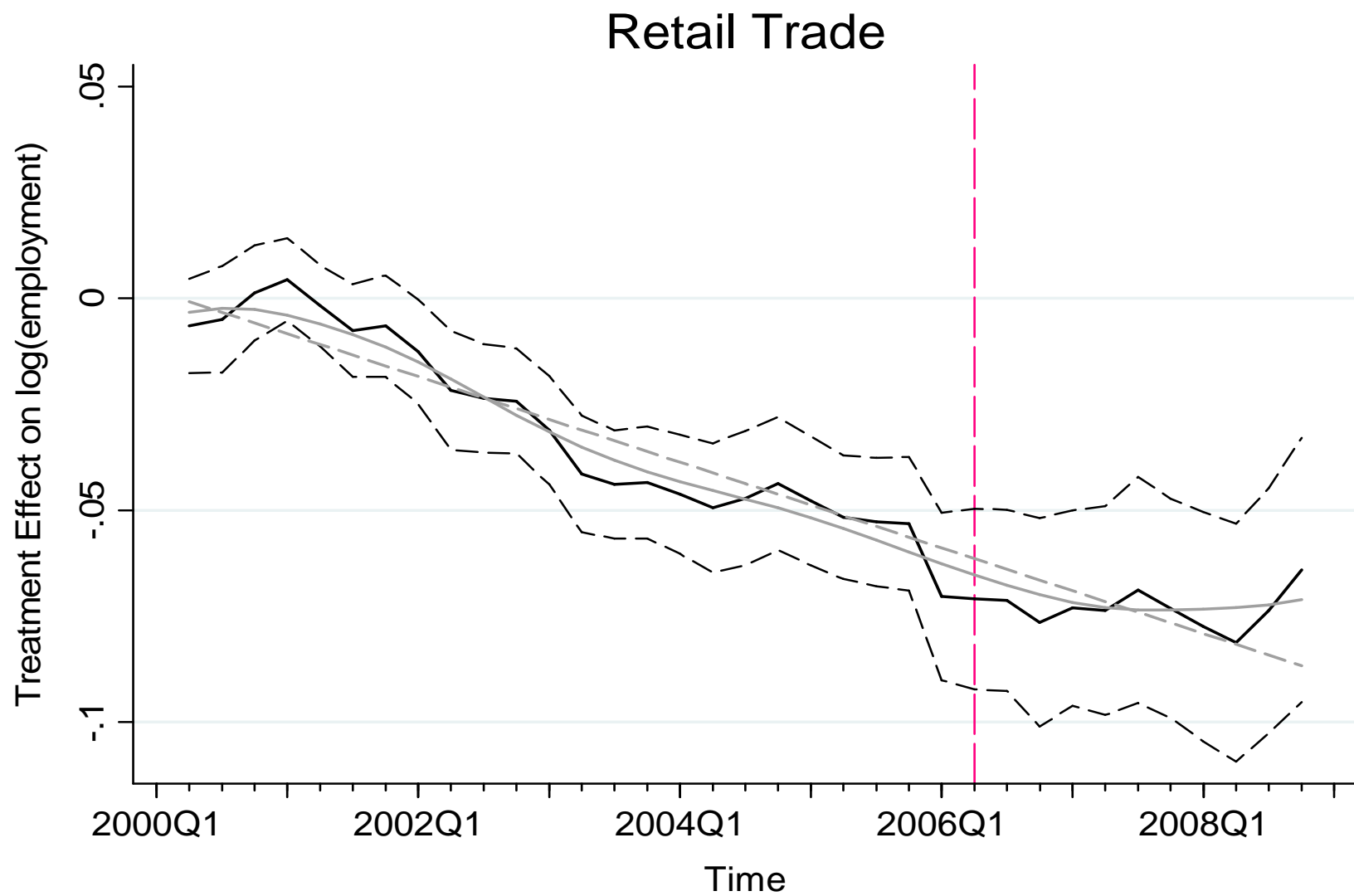
... and the Carneval effect



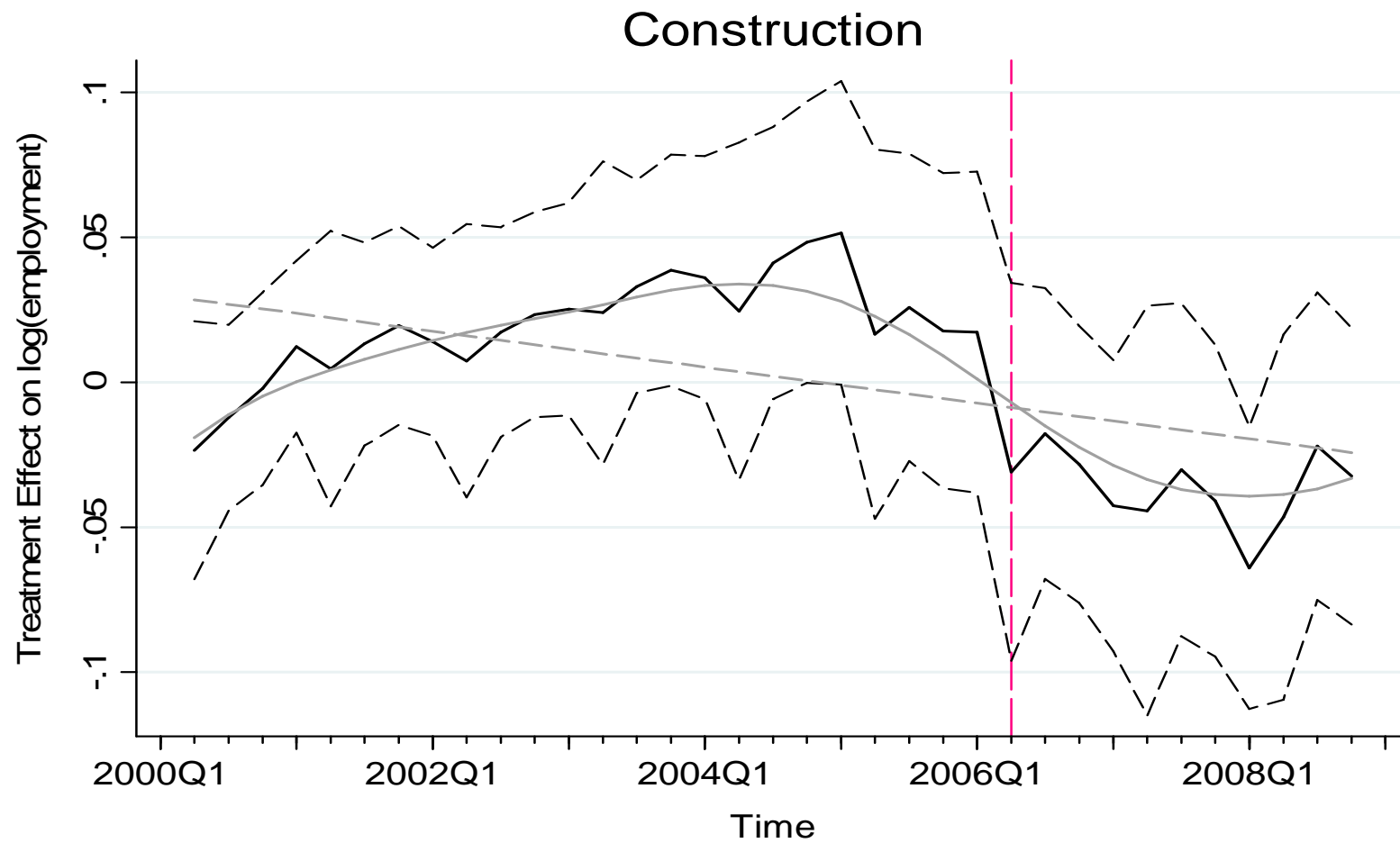
The World Cup 2006 and sectoral employment in Germany



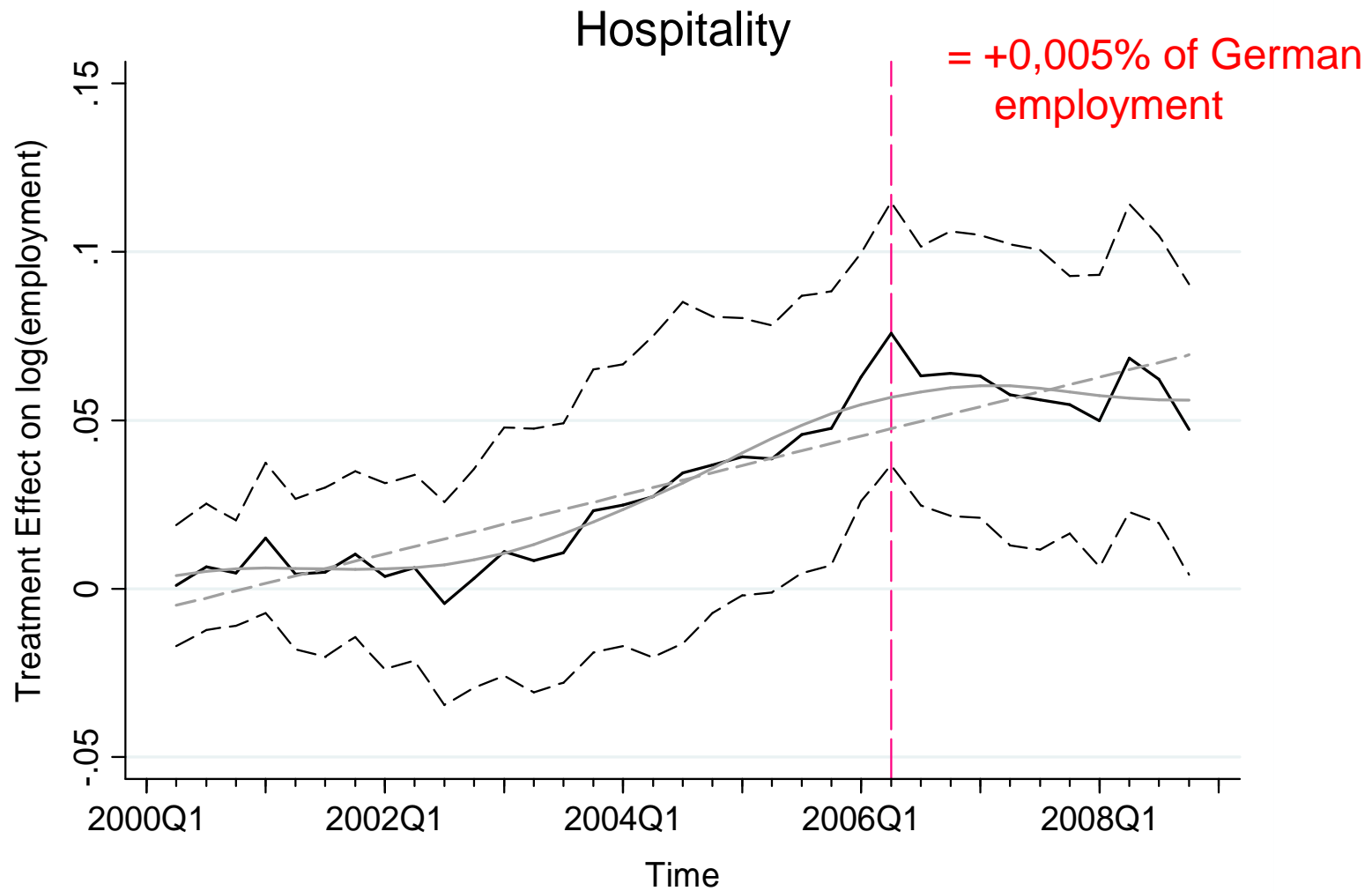
Source: Feddersen
and Maennig (2010)



Source: Feddersen
and Maennig (2010)

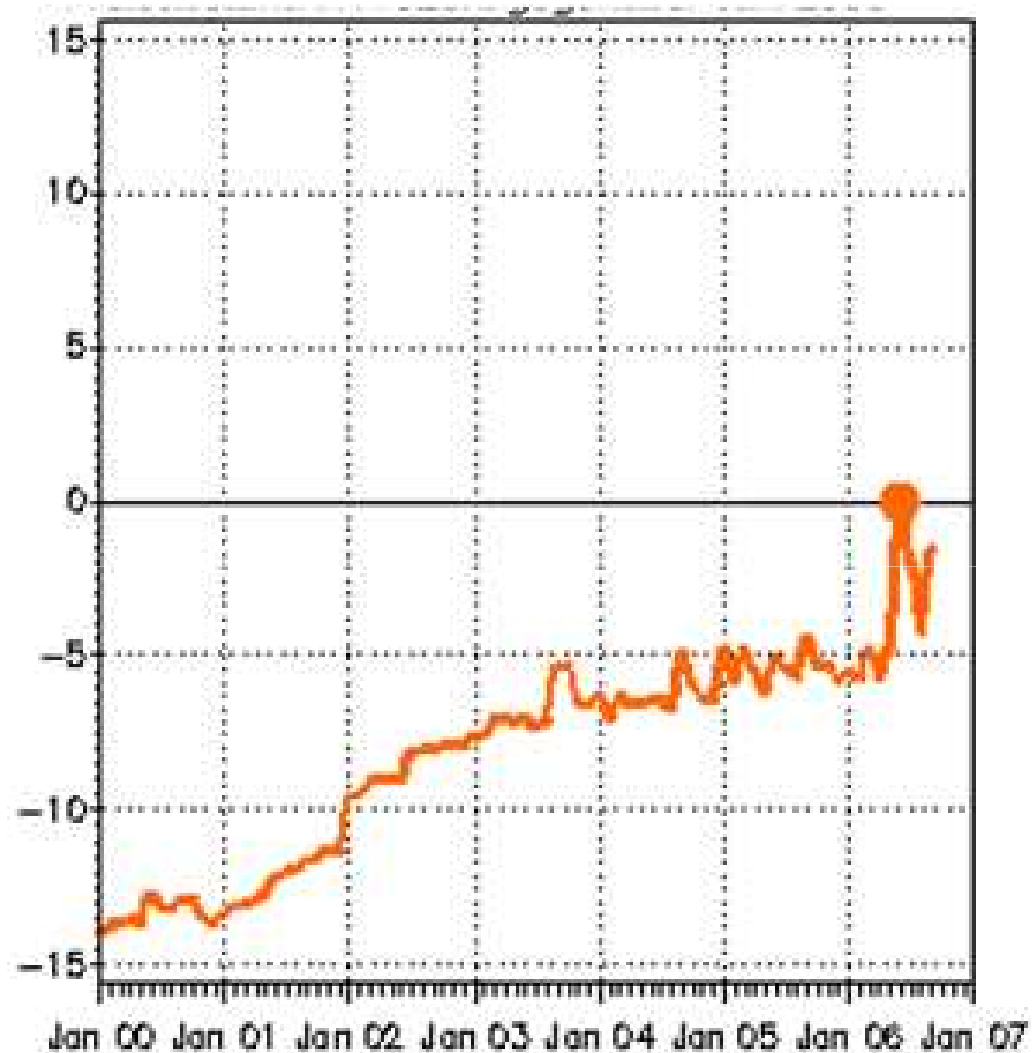


Source: Feddersen
and Maennig (2010)



Source: Feddersen
and Maennig (2010)

Soccer WC
2006:
*Hotel Prices
Differences
to June 2006*



<http://www.destatis.de/indicators/d/vpigraf07.htm>, nov 3rd, 2006

Explaining the „paradoxical“ econometric evidence

- Crowding-out, couch-potatoe, time-switching, carnaval effects
 - Auction character of event allocation
 - Compensating differentials
 - Inefficient allocation of public budgets and /or tax increases
 - Diversion decreases productivity
 - Harmful redistribution
-
- Over-supply of sport facilities, decreasing productivity
 - „wrong“ architecture and urban planning
 - Quality of data
 - Methodological problems and data (in)variance

Evidence for auction character: FIFA contract and obligations for Capetown

- Sufficient back-up power grids to deal with any power failure
- No construction within the host city for the entire duration of competition
- Billboards up to 1 Km from stadium and along mayor routes for FIFA-approved advertisers only – income goes to FIFA
- Free office space with food, beverages for local OC
- „no limit“ telephone, internet, and communication equipment
- Special traffic lanes for FIFA teams and officials
- City has to supply a „fenced fan-park“
- Budweiser the only beer for the event

- → „From the contract it appears that the potential spin-offs ... won't be accruing to the host cities and neither will local business be able to cash in.“

Source: Weekend Argus, 25/26th march, 2006, pp.1+3

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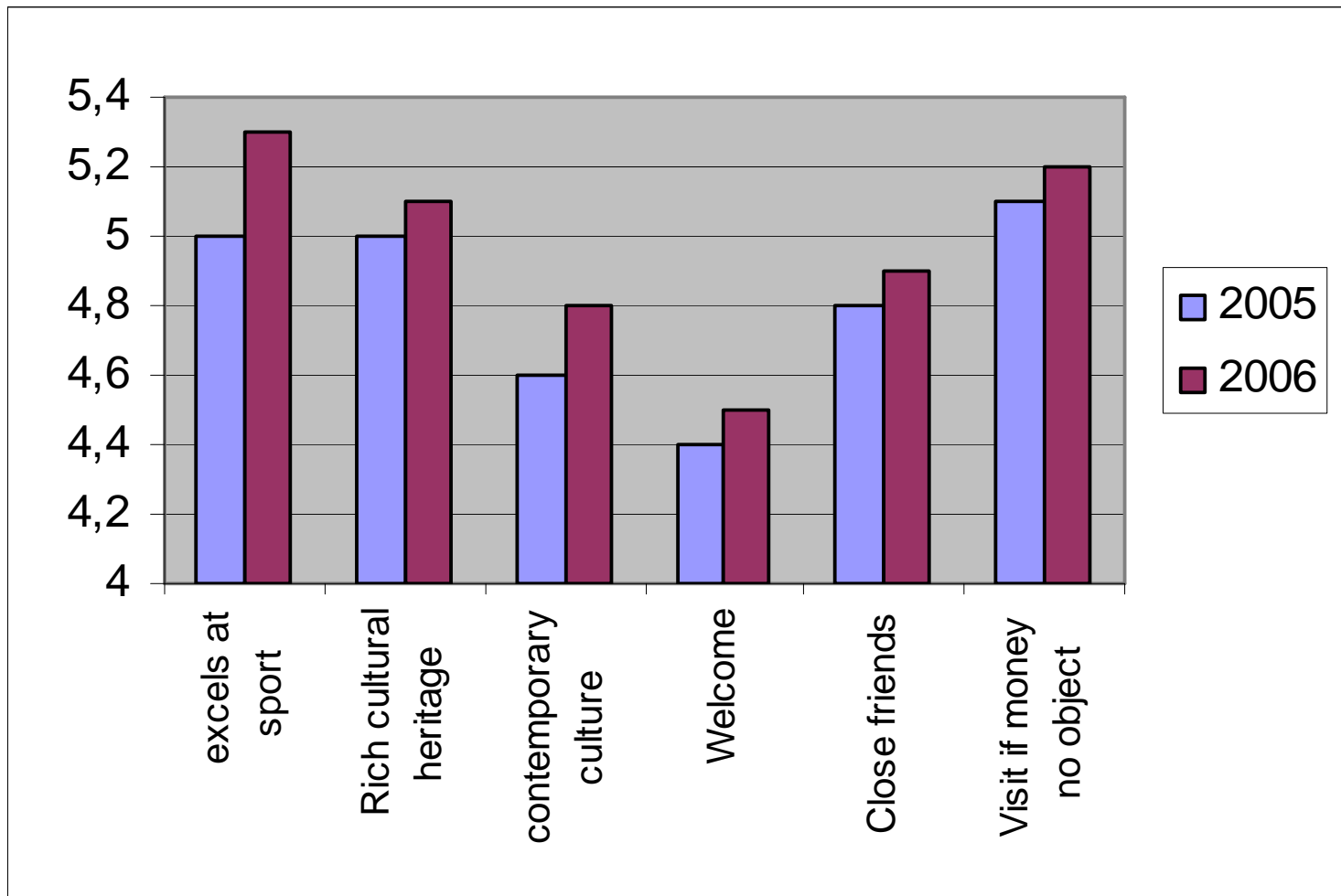
Feelgood effects as major impact



“Anyone who spent any time in Germany during the last World Cup could not have failed to notice the feel-good factor around the nation” (Sturges and Brady 2006)²⁴

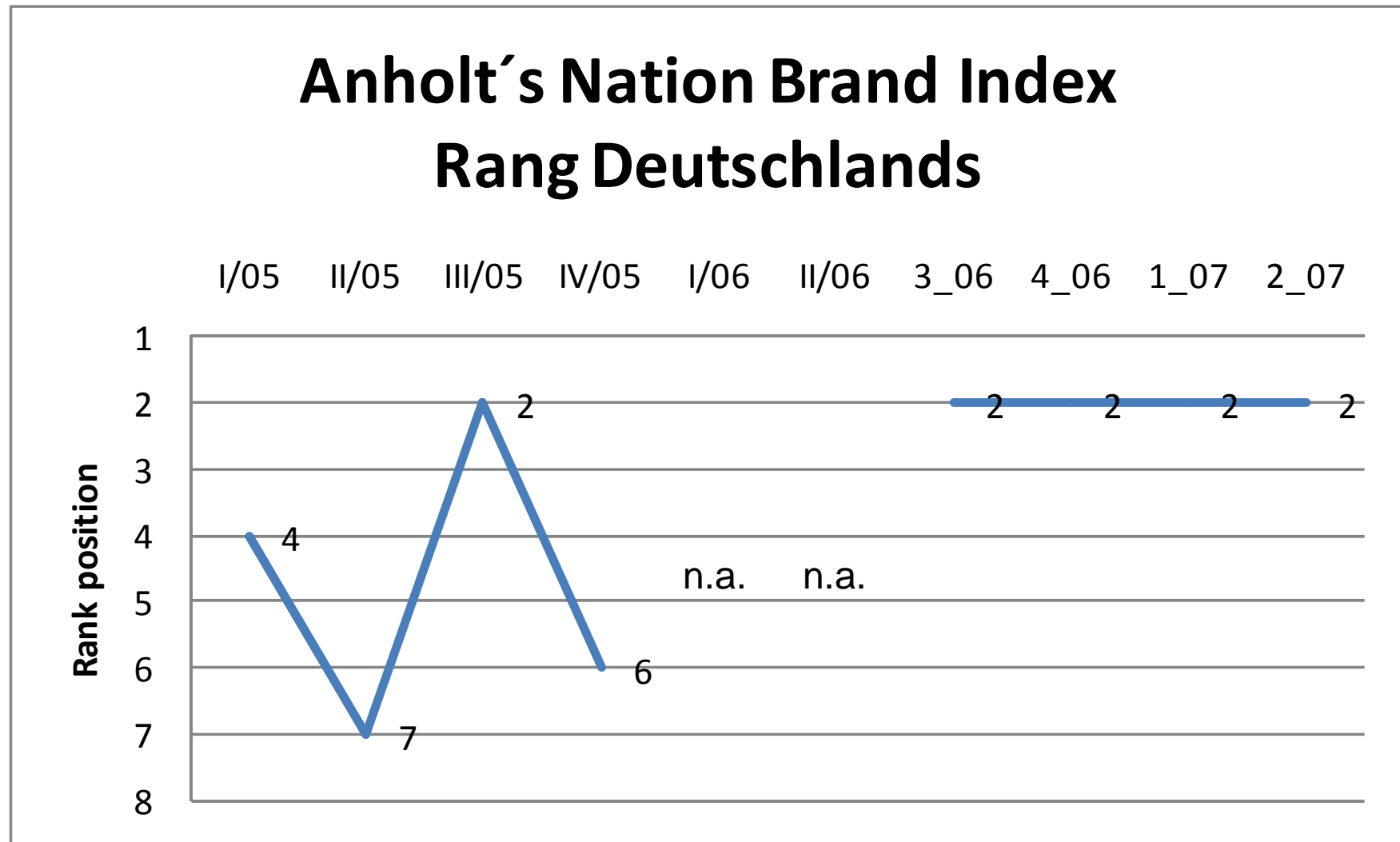
Image effects as major impact

International perception of Germany



Source: Wave 3/2005 and 3/2006 GMI-Anholt Nations Brand Index.

Image effects



Source: Wave 3/2005 and 3/2006 GMI-Anholt Nations Brand Index.

Feelgood and image effects as major impact

Willingness to pay of Germans for the World Cup 2006 before and after the event

Table 1. Censored regression models

	HECKIT Models						TOBIT Models		
	WTP1 indicator	WTP1 amount	WTP2 indicator	WTP2 amount	Δ WTP indicator	Δ WTP amount	WTP1	WTP2	Δ WTP
BENEFIT	0.719*** (3.03)		0.491*** (2.93)		0.350** (3.03)		30.892*** (2.76)	17.662*** (3.17)	3.247 (1.46)
AGE	-0.007* (-1.65)		-0.014*** (-3.79)		-0.017*** (-4.56)		-0.280 (-1.36)	-0.490*** (-4.00)	-0.150*** (-2.86)
EDU	0.157*** (2.46)	1.957 (0.87)	0.056 (0.99)	-1.735 (-1.12)	0.070 (1.23)	-4.822** (-2.26)	7.890*** (2.63)	0.463 (0.23)	-1.667** (-2.06)
MALE	-0.036 (-0.26)	8.638** (1.95)	0.252** (2.18)	1.983 (0.59)	0.224* (1.91)	2.060 (0.47)	2.853 (0.47)	9.212** (2.53)	2.275 (1.43)
BERLIN		-11.309* (-1.73)		-5.677 (-0.67)		-0.160 (-0.01)	-8.187 (-0.51)	-6.627 (-0.76)	-1.595 (-0.43)
EAST		-2.141 (-0.40)		8.243** (1.89)		10.672** (2.24)	-10.489 (-1.21)	3.633 (0.74)	4.644*** (2.14)
WORK		-2.718 (-0.63)		3.226 (1.02)		6.389 (1.52)	-0.773 (-0.12)	5.780 (1.54)	3.255** (1.98)
$\lambda/100$		-296.58 (-1.19)		-36.35* (-1.79)		-21.00 (-0.97)			
-ln L	230.0	411.5	324.2	936.3	311.0	843.3	584.3	1170.0	2105.6

WTP1 – ex-ante WTP, WTP2 – ex-post WTP, Δ WTP = (WTP2–WTP1), ‘indicator’ refers to 0/1 decision (Heckit Step I: Binary Probit); ‘amount’ refers to actual amount $\in [0,70]$ or $\in [-70,70]$ (Heckit Step II); *, **, *** denotes significance at 10, 5, 1% level; all estimates include a constant: values in parentheses give z-statistics for the censored models. else they represent corrected t-statistics: λ denotes the

Source: Heyne/ Maennig/ Suessmuth (in press)

Anholts Nation Brand Index

NBI overall ranking and scores 2007 Q3

Overall rank order			Total scores			Overall rank order			Total scores		
1	Germany		127.0			19.0	Wales		113.7		
2	UK		126.4			20.0	Portugal		111.2		
3	Canada		126.0			21.0	Brazil		107.3		
4	France		126.0			22.0	Russia		106.0		
5	Switzerland		124.0			23.0	Singapore		104.6		
6	Italy		123.8			24.0	China		104.5		
7	Sweden		123.7			25.0	Mexico		103.4		
8	Australia		123.6			26.0	India		103.1		
9	Japan		123.0			27.0	Poland		102.3		
10	United States		121.2			28.0	Egypt		102.0		
11	Netherlands		119.7			29.0	South Korea		101.8		
12	Norway		119.5			30.0	South Africa		99.3		
13	Denmark		118.7			31.0	Malaysia		97.8		
14	Spain		118.7			32.0	Turkey		96.6		
15	New Zealand		118.1			33.0	Estonia		95.7		
16	Finland		116.4			34.0	Lithuania		95.4		
17	Ireland		115.7			35.0	Latvia		95.3		
18	Belgium		114.6								

Global Competitiveness Index 2007-2008

Country/Economy	Rank	Score
United States	1	5.67
Switzerland	2	5.62
Denmark	3	5.55
Sweden	4	5.54
Germany	5	5.51
Finland	6	5.49
Singapore	7	5.45
Japan	8	5.43
United Kingdom	9	5.41
Netherlands	10	5.40
Korea, Rep.	11	5.40
Hong Kong SAR	12	5.37
Canada	13	5.34
Taiwan, China	14	5.25
Austria	15	5.23
Norway	16	5.20
Israel	17	5.20
France	18	5.18
Australia	19	5.17
Belgium	20	5.10
Malaysia	21	5.10
Ireland	22	5.03
Iceland	23	5.02
New Zealand	24	4.98
Luxembourg	25	4.88
Chile	26	4.77
Estonia	27	4.74
Thailand	28	4.70
Spain	29	4.66
Kuwait	30	4.66
Qatar	31	4.63
Tunisia	32	4.59
Czech Republic	33	4.58
China	34	4.57
Saudi Arabia	35	4.55
Puerto Rico	36	4.50
United Arab Emirates	37	4.50
Lithuania	38	4.49
Slovenia	39	4.48
Portugal	40	4.48
Slovak Republic	41	4.45
Oman	42	4.43
Bahrain	43	4.42
South Africa	44	4.42
Latvia	45	4.41

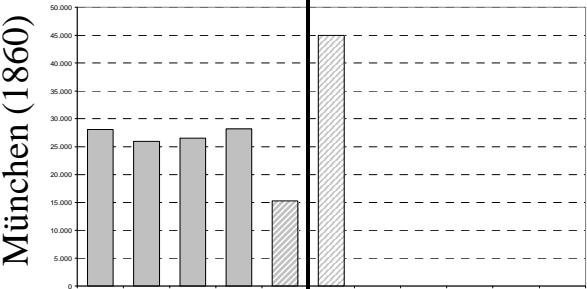
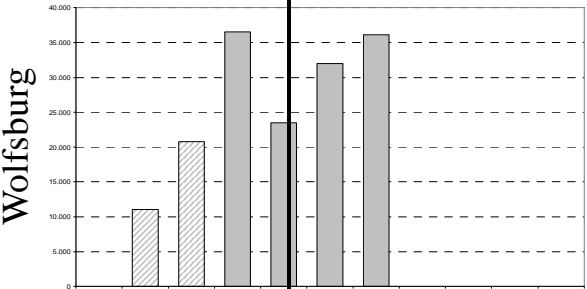
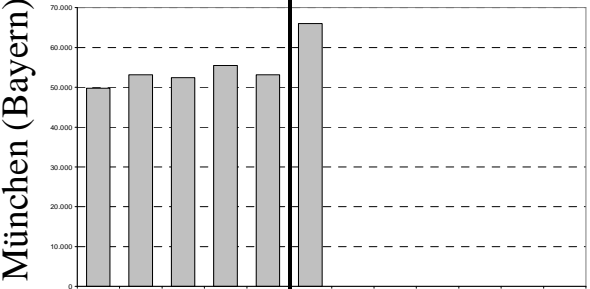
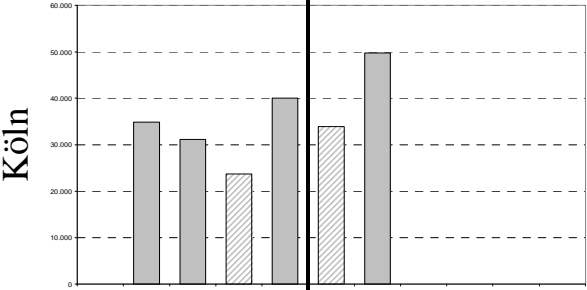
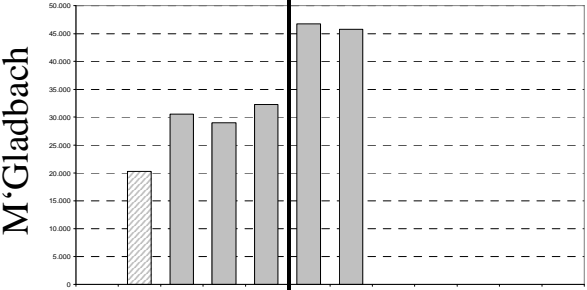
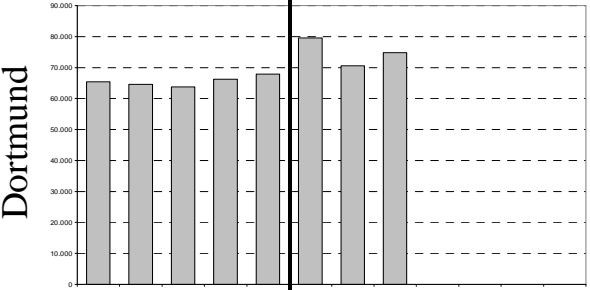
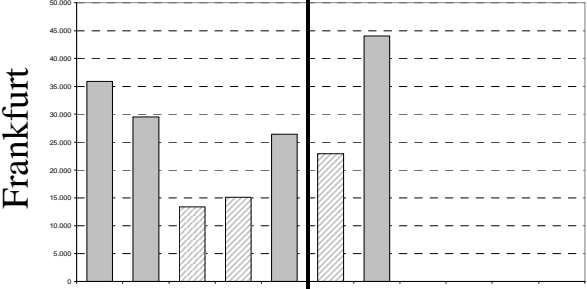
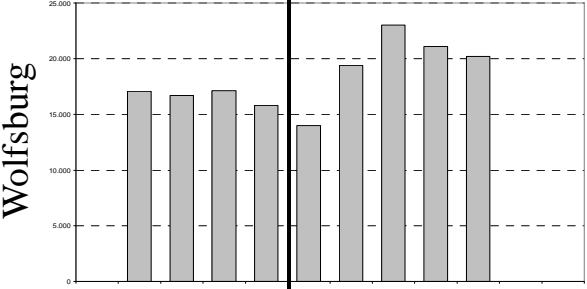
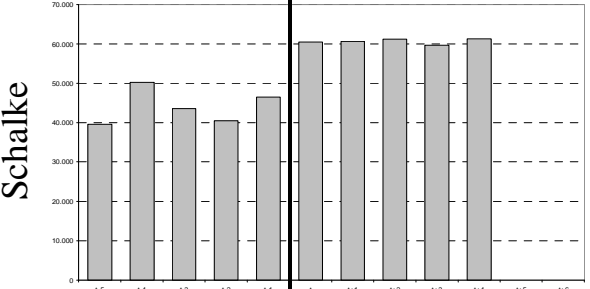
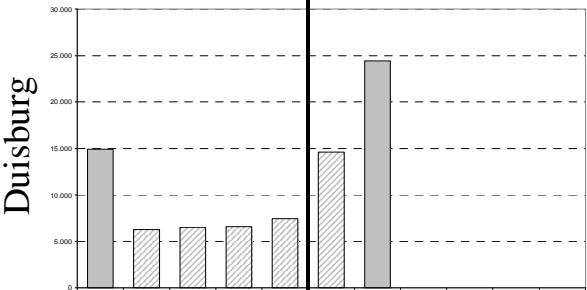
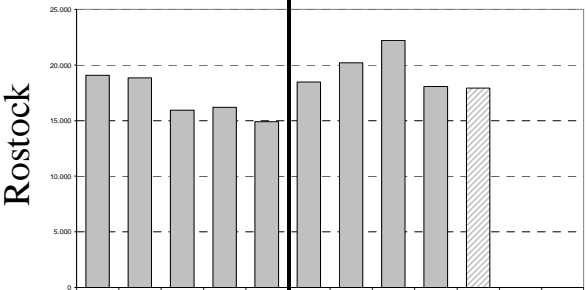
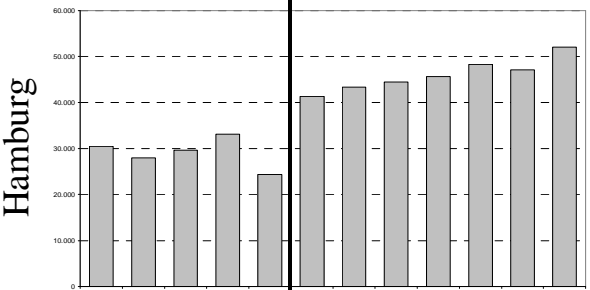
Source: World Economic Forum

Travel and Tourism Competitiveness Index

49	Mexico	4.38
50	Dominican Republic	4.35
51	Lithuania	4.34
52	Turkey	4.31
53	Latvia	4.31
54	Bulgaria	4.31
55	Panama	4.28
56	Uruguay	4.28
57	Morocco	4.27
58	Egypt	4.24
59	Brazil	4.20
60	Indonesia	4.20
61	Serbia and Montenegro	4.18
62	South Africa	4.18
63	Poland	4.18
64	Argentina	4.18
65	India	4.14
66	Georgia	4.13
67	Kuwait	4.08
68	Russian Federation	4.03
69	Guatemala	4.00
70	Botswana	3.99
71	China	3.97
72	Colombia	3.96

Source: World Economic
Forum

Novelty effects of stadia (re-)constructions: Germany World Cup 2006



Source: Feddersen, Maennig, Borchering (2006)

Urban economics: the role of integrated and iconic buildings
Guggenheim Museum Bilbao – Bilbao, Spain



Source: Frank Gehry, 1997, http://www.greatbuildings.com/cgi-bin/qbi.cgi/Guggenheim_Bilbao.html/cid_1028276211_Bilbao_017.qbi

Urban economics: the role of integrated and iconic buildings
Sydney Opera House – Sydney, Australia



Quelle: Jorn Utzon, http://www.greatbuildings.com/cgi-bin/gbi.cgi/Sydney_Opera.html/cid_sydney_005.gbi

Urban economics: the role of integrated and iconic buildings

International experience with “iconic buildings”

- Mostly centrally located
- Mostly at the waterfront
- Architecture: innovative, unique, and: “unpractical”
- generate feelings of community and national pride
- improve the image of the region
- induce leisure and convention tourism

Urban economics: the role of integrated and iconic buildings

Elbphilharmonie, Hamburg



Quelle: Swaxx Swaxx, 2005, <http://www.fotocommunity.de/pc/pc/cat/5765/display/4415936>



Urban economics: the role of integrated and iconic buildings

Elbphilharmonie, Hamburg



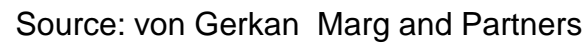
http://www.spiegel.de/fotostrecke/0,5538,PB64-SUQ9MTEzMzUmbnl9MQ_3_3,00.html

Urban economics: the role of integrated and iconic buildings



http://www.spiegel.de/fotostrecke/0,5538,PB64-SUQ9MTEzMzUmbnl9Mw_3_3,00.html

Masterplan P.E.



Urban economics: the role of integrated and iconic buildings

The design of the stadium in P.E.



Source: von Gerkan Marg and Partners

Expectations about Local Benefits of the Moses Mabhida Stadium, Durban

	Yes	No	Yes (Short-Run)	Yes (Long-Run)	Obs
<i>Positive effects</i>	61.3%	38.7%	28%	5.3%	75
<i>Interest to use stadium</i>	52%	48%	-	-	100
<i>Positive business effects</i>	74%	14%	34%	5%	100
<i>General standard of living will increase</i>	64%	13%	29%	6%	100
<i>Positive image for tourist destination</i>	66%	11%	29%	6%	100
<i>Pollution</i>	78%	13%	-	-	100
<i>Increased cost of living</i>	82%	9%	-	-	100

Source: Maennig and Schwarthoff (in press)
Data Source: University of Kwazulu-Natal

Probit Analysis of Expected Regional Economic Business Effects: The case of Durban

<i>Business will strengthen</i>	Model (1)	Model (2)	Covariates=1
<i>YoungAge</i>	0.1593* (1.82)	0.1616* (0.063)	43
<i>Distance</i>	0.3157** (2.04)	0.3240** (2.14)	85
<i>LowIncome</i>	0.1439 (1.46)	0.1539* (1.72)	51
<i>Employed</i>	0.6121*** (2.80)	0.6040*** (2.86)	97
<i>Negative</i>	-0.1853* (-1.91)	-0.1844* (-1.91)	38
<i>White</i>	0.1768* (1.85)	0.1738* (1.80)	32
<i>HighEduc</i>	-0.1925** (-2.06)	-0.1926** (-2.06)	50
<i>SportFan</i>	-0.0309 (-0.26)	-	71
Pseudo R ²	0.1817	0.1811	
Chi- Squared	20.63***	20.54***	
Schwarz	135.23	130.70	
Observations	100	100	

Source: Maennig and Schwarthoff (in press)

Data Source: University of KwaZulu-Natal.

The last column presents the value of the respective explanatory dummy variable. Z- Statistics are in parenthesis, The predicted sample probability at mean is 78,6% compared to the sample frequency of 74. Choosing a cut- off in the amount of 0.5, correctly specified 41 observations corresponds to 76%.. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

Conclusion and outlook

- Short-run economic benefits are not the main aspect/ argument of (large) sport events (exception: feelgood)
- Potentially positive long-run effects: novelty effect and nation's international perception
- Experience from landmark buildings: centrally located, saving infrastructure, at the Waterfront , architectually innovative and „unpractical“
- Stadia for Germany 2006 fail, but for SA 2010 meet these principles
- Good chances for South Africa: less crowding-out; no couch potato-effect; no carnaval effect; more potential for improvement in international perception

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