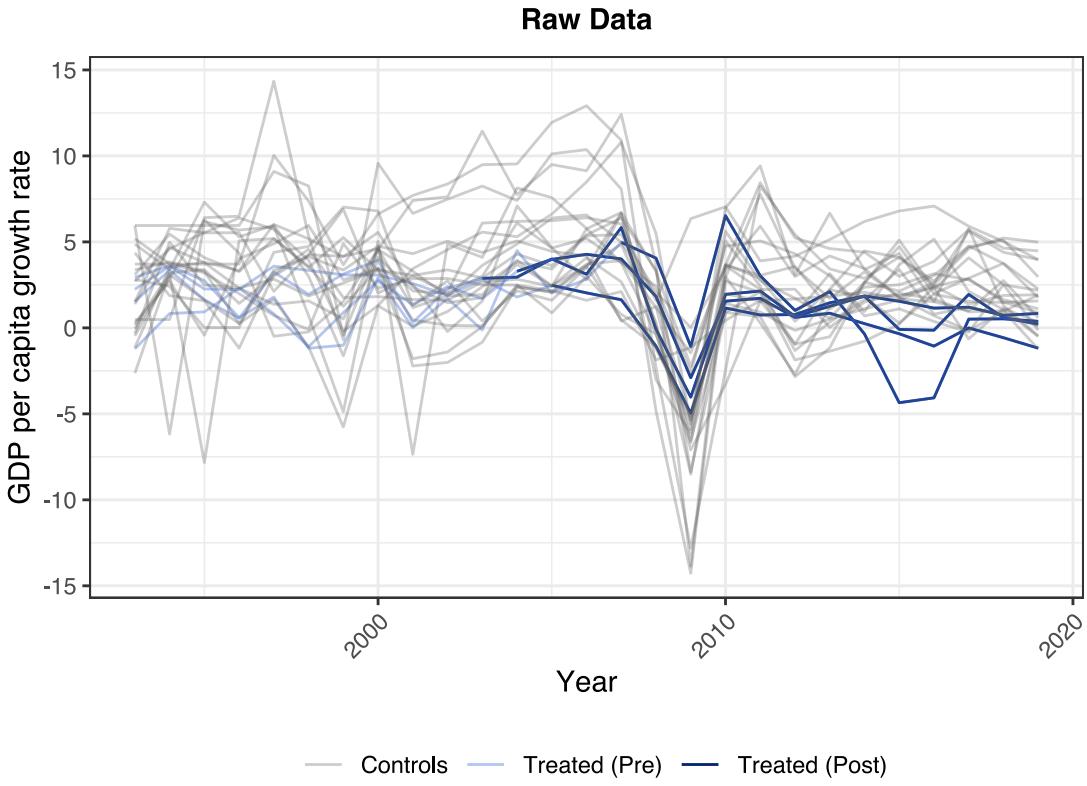
(Online) **Appendix**

A0. Raw data

Figure A0.1. Plot of raw data trends



A1. Main results – detailed R output

Table A1.1. BRA main model output

Response variable	***GDP per capita growth rate***
Model	***BRA***
ATT effect of mega-events	1.17 (1.75) [p-value: 0.50]
MSPE	1.79
sigma2	2.67
Model fitness by period (R output)	ATT S.E. CI.lower CI.upper p.value n.Treated -14 -0.240011 1.0143 -2.2280 1.7480 0.8129486 0 -13 0.400710 0.8655 -1.2956 2.0970 0.6433741 0 -12 -0.078709 1.2294 -2.4883 2.3309 0.9489536 0 -11 -0.721077 1.6074 -3.8715 2.4293 0.6537168 0 -10 0.561216 1.2442 -1.8774 2.9998 0.6519392 0 -9 -1.574704 1.0390 -3.6112 0.4618 0.1296343 0 -8 -0.183671 0.9177 -1.9823 1.6150 0.8413660 0 -7 1.144629 1.2538 -1.3128 3.6021 0.3612943 0 -6 0.281036 1.0427 -1.7626 2.3247 0.7875252 0 -5 0.986581 1.0532 -1.0776 3.0508 0.3488747 0 -4 -1.698873 0.9613 -3.5829 0.1852 0.0771764 0 -3 1.080191 0.9231 -0.7291 2.8895 0.2419537 0 -2 -0.833482 0.9339 -2.6639 0.9969 0.3721332 0 -1 -0.561562 1.0797 -2.6777 1.5546 0.6029789 0 0 1.466321 1.6528 -1.7731 4.7058 0.3749858 0 1 3.513458 3.1495 -2.6595 9.6864 0.2646120 1 2 3.021323 4.4198 -5.6413 11.6840 0.4942359 1 3 3.832530 2.8790 -1.8102 9.4753 0.1831240 1 4 0.812922 1.2861 -1.7078 3.3336 0.5273320 1 5 0.906398 2.2170 -3.4388 5.2516 0.6826576 1 6 1.279961 1.8657 -2.3768 4.9367 0.4926837 1 7 -1.329873 1.6147 -4.4947 1.8349 0.4101731 1 8 -5.460845 1.5472 -8.4933 -2.4284 0.0004163 1 9 -4.384422 1.3751 -7.0795 -1.6894 0.0014299 1 10 -0.002213 1.3799 -2.7068 2.7024 0.9987204 1 11 0.173363 1.0923 -1.9676 2.3143 0.8738999 1 12 0.781863 1.5011 -2.1602 3.7239 0.6024591 1
Implied weights of IFE models (R output)	CHL 0.950614 COL 2.095777 CRI 0.680353 CZE 1.139604 DNK 0.007425 EST -2.469831 FIN -0.750436 HUN -0.508880 IND 0.846083 ISL -1.041400 ISR 1.142934 LTU -0.425935 LUX -1.405056 LVA -2.065733 MEX -1.613567 NZL 0.683238 SVK 1.251498 SVN 0.109105 SWE -0.364650 TUR 0.738858
Covariates (R output)	Coefficients for the Covariates: beta S.E. CI.lower CI.upper p.value inflation -0.0008026 0.001076 -0.002912 0.001307 0.45585148 industry 0.2736576 0.064528 0.147184 0.400131 0.00002226 export -0.0060375 0.009506 -0.024668 0.012593 0.52533280 lifeexp -0.0067176 0.087846 -0.178893 0.165458 0.93904510

Unobserved factors	3
Fixed effects	Two-way
Observations	567
Treated countries	
Control countries	"CHL", "COL", "CRI", "CZE", "DNK", "EST", "FIN", "HUN", "IND", "ISL", "ISR", "LTU", "LUX", "LVA", "MEX", "NZL", "SVK", "SVN", "SWE", "TUR"

Note: main entries are ATT effects; the numbers in parentheses are standard errors and *p-values* for ATT are in brackets.

Table A1.2. CAN main model output

Response variable	***GDP per capita growth rate***
Model	***CAN***
ATT effect of mega-events	-0.35 (0.97) [p-value: 0.71]
MSPE	1.24
sigma2	3.61
Model fitness by period (R output)	ATT S.E. CI.lower CI.upper p.value n.Treated -10 -0.09922 2.001 -4.021 3.8225 0.9605 0 -9 0.17594 1.686 -3.129 3.4804 0.9169 0 -8 -0.72762 2.329 -5.293 3.8381 0.7548 0 -7 -1.69980 1.797 -5.222 1.8219 0.3442 0 -6 0.52525 1.626 -2.661 3.7113 0.7466 0 -5 -0.29210 1.474 -3.180 2.5963 0.8429 0 -4 1.10253 1.987 -2.793 4.9977 0.5791 0 -3 0.29888 1.759 -3.149 3.7467 0.8651 0 -2 -0.86706 1.923 -4.637 2.9028 0.6521 0 -1 0.92532 1.168 -1.365 3.2152 0.4283 0 0 0.73093 1.373 -1.960 3.4217 0.5944 0 1 -0.86683 1.489 -3.785 2.0511 0.5604 1 2 0.50267 1.768 -2.963 3.9678 0.7762 1 3 -1.13756 1.992 -5.041 2.7660 0.5679 1 4 1.59681 2.761 -3.815 7.0084 0.5630 1 5 -0.97128 2.240 -5.362 3.4191 0.6646 1 6 0.09360 4.537 -8.799 8.9860 0.9835 1 7 -0.55253 2.738 -5.918 4.8134 0.8401 1 8 -0.11881 1.516 -3.090 2.8526 0.9375 1 9 0.24098 1.988 -3.655 4.1373 0.9035 1 10 -0.22676 1.967 -4.083 3.6294 0.9082 1 11 -0.51092 1.244 -2.950 1.9277 0.6813 1 12 -2.13317 1.493 -5.060 0.7933 0.1531 1 13 -1.64674 1.444 -4.478 1.1841 0.2542 1 14 0.80689 1.358 -1.854 3.4682 0.5523 1 15 -0.61578 1.042 -2.659 1.4270 0.5547 1 16 -0.18330 1.482 -3.088 2.7212 0.9016 1
Implied weights of IFE models (R output)	CHL 0.41451 COL 0.84763 CRI 1.10063 CZE 0.37633 DNK 1.26596 EST -4.56949 FIN 0.08187 HUN 0.17622 IND 2.90512 ISL -0.06117 ISR 2.08076 LTU -3.67474 LUX 1.11497 LVA -4.56482 MEX 0.63813

	NZL 1.90548 SVK -0.55684 SVN 0.13976 SWE 1.04027 TUR -1.66060
Covariates (R output)	Coefficients for the Covariates: beta S.E. CI.lower CI.upper p.value inflation -0.064745 0.013052 -0.09033 -0.03916 0.0000007035 industry 0.361375 0.066149 0.23173 0.49102 0.0000000468 export -0.002069 0.009535 -0.02076 0.01662 0.8281807589 lifeexp -0.243579 0.110509 -0.46017 -0.02698 0.0275136909
Unobserved factors	1
Fixed effects	Two-way
Observations	567
Treated countries	
Control countries	"CHL", "COL", "CRI", "CZE", "DNK", "EST", "FIN", "HUN", "IND", "ISL", "ISR", "LTU", "LUX", "LVA", "MEX", "NZL", "SVK", "SVN", "SWE", "TUR"
Note: main entries are ATT effects; the numbers in parentheses are standard errors and *p-values* for ATT are in brackets.	

Table A1.3. GBR main model output

Response variable	***GDP per capita growth rate***
Model	***GBR***
ATT effect of mega-events	0.3013 (0.9381) [p-value: 0.7481]
MSPE	0.60
sigma2	2.88
Model fitness by period (R output)	ATT S.E. CI.lower CI.upper p.value n.Treated -10 -0.09922 2.001 -4.021 3.8225 0.9605 0 -9 0.17594 1.686 -3.129 3.4804 0.9169 0 -8 -0.72762 2.329 -5.293 3.8381 0.7548 0 -7 -1.69980 1.797 -5.222 1.8219 0.3442 0 -6 0.52525 1.626 -2.661 3.7113 0.7466 0 -5 -0.29210 1.474 -3.180 2.5963 0.8429 0 -4 1.10253 1.987 -2.793 4.9977 0.5791 0 -3 0.29888 1.759 -3.149 3.7467 0.8651 0 -2 -0.86706 1.923 -4.637 2.9028 0.6521 0 -1 0.92532 1.168 -1.365 3.2152 0.4283 0 0 0.73093 1.373 -1.960 3.4217 0.5944 0 1 -0.86683 1.489 -3.785 2.0511 0.5604 1 2 0.50267 1.768 -2.963 3.9678 0.7762 1 3 -1.13756 1.992 -5.041 2.7660 0.5679 1 4 1.59681 2.761 -3.815 7.0084 0.5630 1 5 -0.97128 2.240 -5.362 3.4191 0.6646 1 6 0.09360 4.537 -8.799 8.9860 0.9835 1 7 -0.55253 2.738 -5.918 4.8134 0.8401 1 8 -0.11881 1.516 -3.090 2.8526 0.9375 1 9 0.24098 1.988 -3.655 4.1373 0.9035 1 10 -0.22676 1.967 -4.083 3.6294 0.9082 1 11 -0.51092 1.244 -2.950 1.9277 0.6813 1 12 -2.13317 1.493 -5.060 0.7933 0.1531 1 13 -1.64674 1.444 -4.478 1.1841 0.2542 1 14 0.80689 1.358 -1.854 3.4682 0.5523 1 15 -0.61578 1.042 -2.659 1.4270 0.5547 1 16 -0.18330 1.482 -3.088 2.7212 0.9016 1
Implied weights of	CHL 0.41451 COL 0.84763 CRI 1.10063

IFE models (R output)	CZE 0.37633 DNK 1.26596 EST -4.56949 FIN 0.08187 HUN 0.17622 IND 2.90512 ISL -0.06117 ISR 2.08076 LTU -3.67474 LUX 1.11497 LVA -4.56482 MEX 0.63813 NZL 1.90548 SVK -0.55684 SVN 0.13976 SWE 1.04027 TUR -1.66060
Covariates (R output)	Coefficients for the Covariates: beta S.E. CI.lower CI.upper p.value inflation -0.064745 0.013052 -0.09033 -0.03916 0.0000007035 industry 0.361375 0.066149 0.23173 0.49102 0.0000000468 export -0.002069 0.009535 -0.02076 0.01662 0.8281807589 lifeexp -0.243579 0.110509 -0.46017 -0.02698 0.0275136909
Unobserved factors	2
Fixed effects	Two-way
Observations	567
Treated countries	the UK [T: 2006-2019]
Control countries	"CHL", "COL", "CRI", "CZE", "DNK", "EST", "FIN", "HUN", "IND", "ISL", "ISR", "LTU", "LUX", "LVA", "MEX", "NZL", "SVK", "SVN", "SWE", "TUR"
Note: main entries are ATT effects; the numbers in parentheses are standard errors and *p-values* for ATT are in brackets.	

Table A1.4. ZAF main model output

Response variable	***GDP per capita growth rate***
Model	***ZAF***
ATT effect of mega-events	0.62 (0.93) [p-value: 0.50]
MSPE	1.30
sigma2	3.60
Model fitness by period (R output)	ATT S.E. CI.lower CI.upper p.value n.Treated -11 -0.81416 1.933 -4.602 2.974 0.6735 0 -10 -0.30449 1.610 -3.460 2.851 0.8500 0 -9 0.09490 2.354 -4.519 4.709 0.9678 0 -8 1.40363 1.739 -2.005 4.812 0.4196 0 -7 -0.62243 1.617 -3.792 2.547 0.7003 0 -6 -2.19648 1.438 -5.014 0.621 0.1265 0 -5 0.50283 1.818 -3.060 4.066 0.7821 0 -4 0.40987 1.677 -2.878 3.697 0.8070 0 -3 0.59385 1.903 -3.135 4.323 0.7549 0 -2 1.19085 1.130 -1.025 3.406 0.2921 0 -1 -0.14371 1.260 -2.614 2.327 0.9092 0 0 0.12094 1.184 -2.200 2.442 0.9186 0 1 1.27607 1.573 -1.807 4.359 0.4172 1 2 1.21329 1.896 -2.502 4.929 0.5222 1 3 1.24989 2.794 -4.226 6.726 0.6546 1 4 2.25930 2.511 -2.661 7.180 0.3682 1 5 2.33466 4.757 -6.988 11.657 0.6235 1 6 -0.02545 3.072 -6.047 5.996 0.9934 1

	7 0.68916 1.496 -2.243 3.621 0.6450 1 8 1.62959 1.947 -2.186 5.445 0.4026 1 9 1.18314 1.966 -2.671 5.037 0.5474 1 10 0.12408 1.205 -2.238 2.486 0.9180 1 11 -0.63435 1.415 -3.408 2.139 0.6539 1 12 -1.13138 1.405 -3.885 1.622 0.4206 1 13 -0.06354 1.352 -2.713 2.586 0.9625 1 14 -0.45322 1.068 -2.546 1.640 0.6713 1 15 -0.29476 1.498 -3.230 2.641 0.8440 1
Implied weights of IFE models (R output)	CHL 0.62843 COL 1.23137 CRI 1.56726 CZE 0.58181 DNK 1.83211 EST -6.48615 FIN 0.14136 HUN 0.26624 IND 4.16944 ISL -0.07068 ISR 2.99679 LTU -5.22185 LUX 1.59314 LVA -6.51468 MEX 0.91576 NZL 2.74198 SVK -0.75647 SVN 0.22861 SWE 1.50002 TUR -2.34449
Covariates (R output)	Coefficients for the Covariates: beta S.E. CI.lower CI.upper p.value inflation -0.064935 0.012982 -0.09038 -0.03949 0.00000056770 industry 0.365399 0.064732 0.23853 0.49227 0.00000001654 export -0.001963 0.009662 -0.02090 0.01697 0.83897155738 lifeexp -0.253755 0.094303 -0.43859 -0.06892 0.00712739339
Unobserved factors	1
Fixed effects	Two-way
Observations	567
Treated countries	
Control countries	"CHL", "COL", "CRI", "CZE", "DNK", "EST", "FIN", "HUN", "IND", "ISL", "ISR", "LTU", "LUX", "LVA", "MEX", "NZL", "SVK", "SVN", "SWE", "TUR"
Note: main entries are ATT effects; the numbers in parentheses are standard errors and *p-values* for ATT are in brackets.	

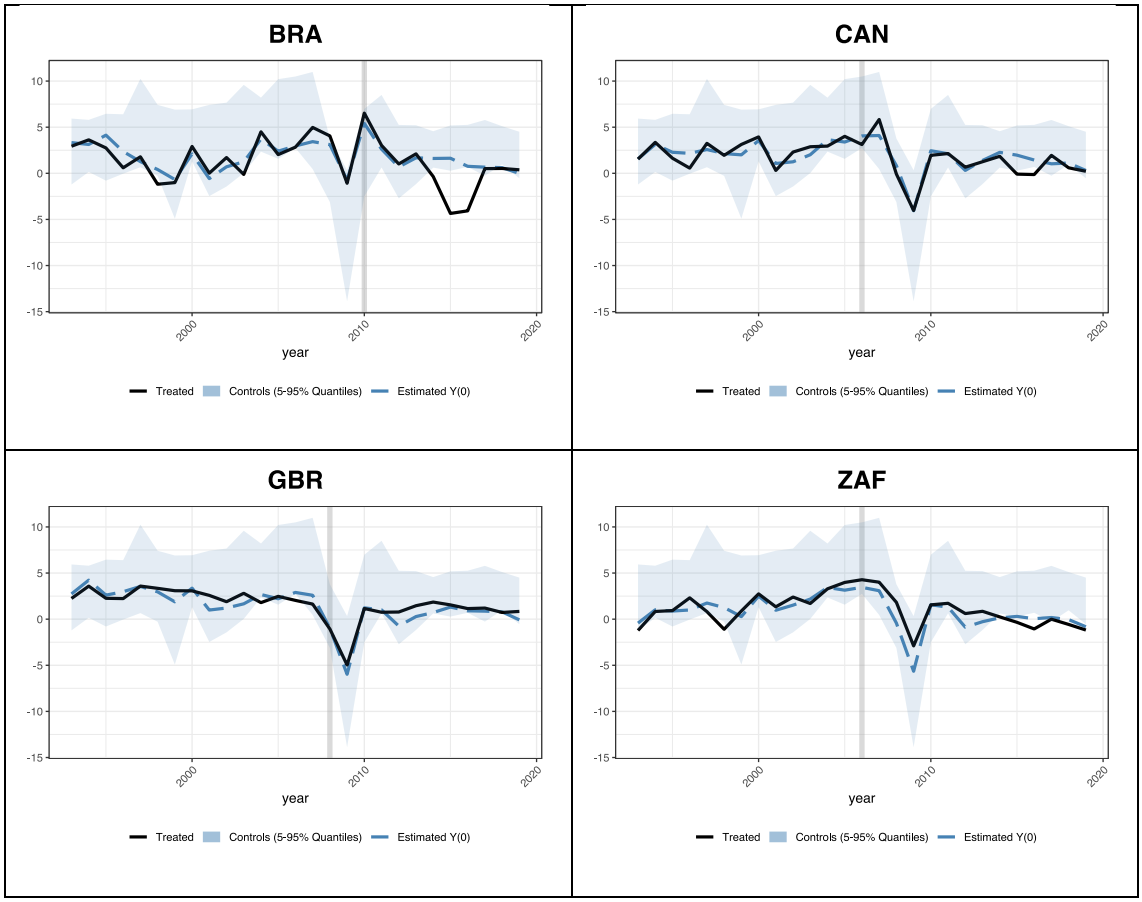
A2. Sensitivity analyses – shifted treatment moment (3 years before the event)

Table A2.1. Overview of GSC models [*total effect* of mega-events] – with the shifted treatment year.

Response variable	*GDP PER CAPITA GROWTH RATE*			
Model	***BRA***	***CAN***	***GBR***	***ZAF***
ATT effect of mega-events	-1.27 (0.57) [p-value: 0.03]	-0.24 (1.00) [0.81]	0.56 (1.19) [p-value: 0.64]	0.48 (1.00) [0.63]
MSPE	3.30	1.14	0.94	1.25
sigma2	2.37	3.60	3.58	3.60
Covariates	lifeexp; inflation; industry; export			
Unobserved factors	4	1	1	1
Fixed effects	Two-way	Two-way	Two-way	Two-way
Observations	567	567	567	567
Treated countries	BRA [T: 2011-2019]	CAN [T: 2007-2019]	the UK [T: 2009-2019]	South Africa [T: 2007-2019]
Control countries	"CHL", "COL", "CRI", "CZE", "DNK", "EST", "FIN", "HUN", "IND", "ISL", "ISR", "LTU", "LUX", "LVA", "MEX", "NZL", "SVK", "SVN", "SWE", "TUR"			

Note: main entries are ATT effects; the numbers in parentheses are standard errors and *p-values* for ATT are in brackets.

Figure A2.1. Band plots



A3. Alternative main model for BRA (no factors, FE model)

Table A3.1. FE model for Brazil (summary)

Response variable	***GDP per capita growth rate***
Model	***BRA***
ATT effect of mega-events	1.17 (1.75) [p-value: 0.50]
MSPE	1.68
sigma2	5.60
Covariates (R output)	Coefficients for the Covariates: beta S.E. CI.lower CI.upper p.value inflation -0.0008453 0.001275 -0.003344 0.001653 0.50727259 industry 0.3558175 0.083315 0.192523 0.519112 0.00001948 export -0.0105698 0.010229 -0.030619 0.009479 0.30146739 lifeexp -0.0320391 0.141246 -0.308877 0.244798 0.82055456
Unobserved factors	0
Fixed effects	Two-way
Observations	567
Treated countries	BRA [T: 2006-2019]
Control countries	"CHL", "COL", "CRI", "CZE", "DNK", "EST", "FIN", "HUN", "IND", "ISL", "ISR", "LTU", "LUX", "LVA", "MEX", "NZL", "SVK", "SVN", "SWE", "TUR"
Note: main entries are ATT effects; the numbers in parentheses are standard errors and *p-values* for ATT are in brackets.	

A4. Main models w/o controlling for the life expectancy at birth

Table A4.1. Main models reestimated excluding the life expectancy at birth

Response variable	*GDP PER CAPITA GROWTH RATE*			
Model	***BRA***	***CAN***	***GBR***	***ZAF***
ATT effect of mega-events	0.53 (1.47) [p-value: 0.72]	-0.21 (1.0) [0.83]	0.37 (1.01) [p-value: 0.71]	1.16 (1.06) [0.27]
MSPE	1.75	1.27	0.64	3.03
sigma2	2.68	3.62	2.87	2.91
Covariates	inflation; industry; export			
Unobserved factors	3	1	2	2
Fixed effects	Two-way	Two-way	Two-way	Two-way
Observations	567	567	567	567
Treated countries	BRA [T: 2008-2019]	CAN [T: 2004-2019]	the UK [T: 2006-2019]	South Africa [T: 2005-2019]
Control countries	"CHL", "COL", "CRI", "CZE", "DNK", "EST", "FIN", "HUN", "IND", "ISL", "ISR", "LTU", "LUX", "LVA", "MEX", "NZL", "SVK", "SVN", "SWE", "TUR"			

Note: main entries are ATT effects; the numbers in parentheses are standard errors and *p-values* for ATT are in brackets.

A5. Donor pool

Table A5.1. Donor pool

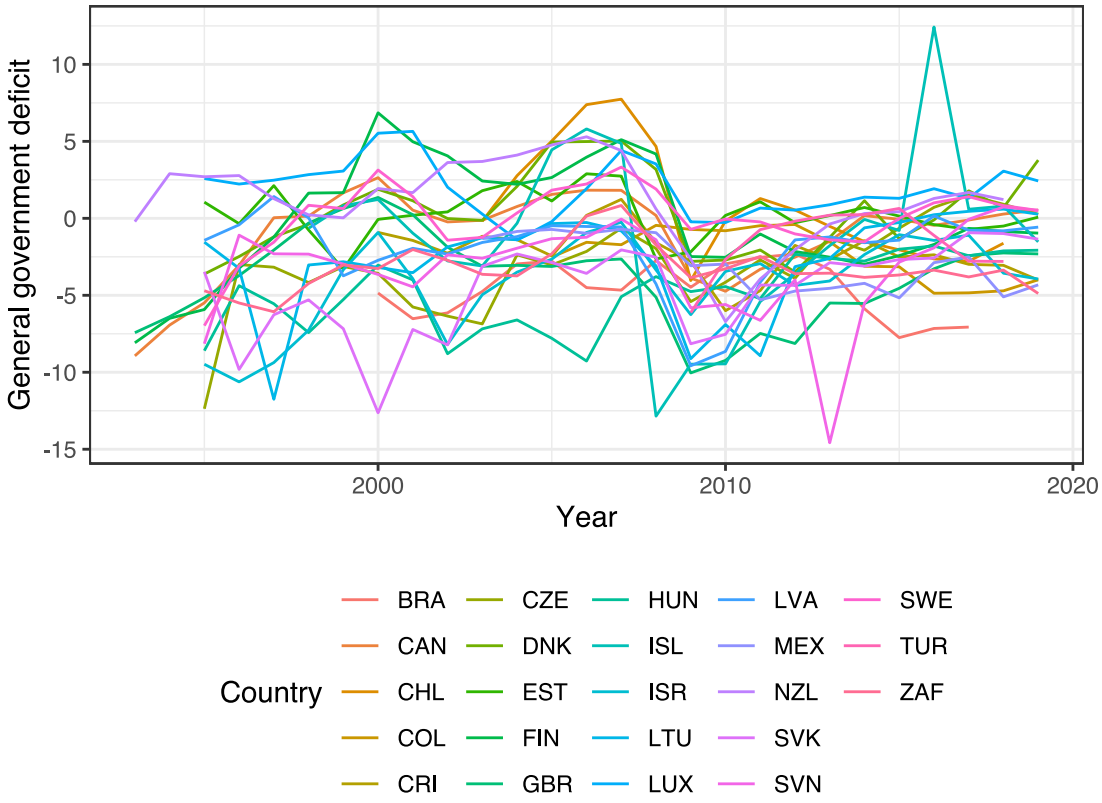
OECD 2020	Australia Austria Belgium Canada Chile Colombia Costa Rica Czech Republic Denmark Estonia Finland France Germany Greece Hungary Iceland Ireland Israel Italy Japan Latvia Lithuania Luxembourg Mexico Netherlands New Zealand Norway Poland Portugal Slovak Republic Slovenia South Korea Spain Sweden Switzerland Turkey United Kingdom United States
Key partners	Brazil, China, India, Indonesia, South Africa

Table A5.2. Mega events since 2000 (summary)

	Recent hosts				
Olympic Games	2016 Rio da Janeiro - Brazil	2012 – London – Great Britain	2008 – Beijing - China	2004 – Athens - Greece	2000 – Sydney - Australia
European football championships	2016 - France	2012 – Poland / Ukraine	2008 – Austria / Switzerland	2004 - Portugal	2000 – Belgium / Netherlands
FIFA World Cup	2018 - Russia	2014 - Brazil	2010 – South Africa	2006 - Germany	2002 – South Korea / Japan
Expo	2015 – Milan - Italy	2010 – Shanghai - China	2005 – Aichi - Japan	2000 – Hannover - Germany	
Asian Games	2018 – Jakarta – Palembang - Indonesia	2014 – Incheon – South Korea	2010 – Guangzhou - China	2006 – Doha - Qatar	2002 – Busan – South Korea
Olympic Winter Games	2018 – PyeongChang – South Korea	2014 – Sochi - Russia	2010 – Vancouver - Canada	2006 – Torino - Italy	2002 – Salt Lake City - USA

A6. General government deficit

Figure A6.1. General government deficit plot



A7. GDP per capita growth vs the life expectancy at birth – scatterplots

Figure A7.1.

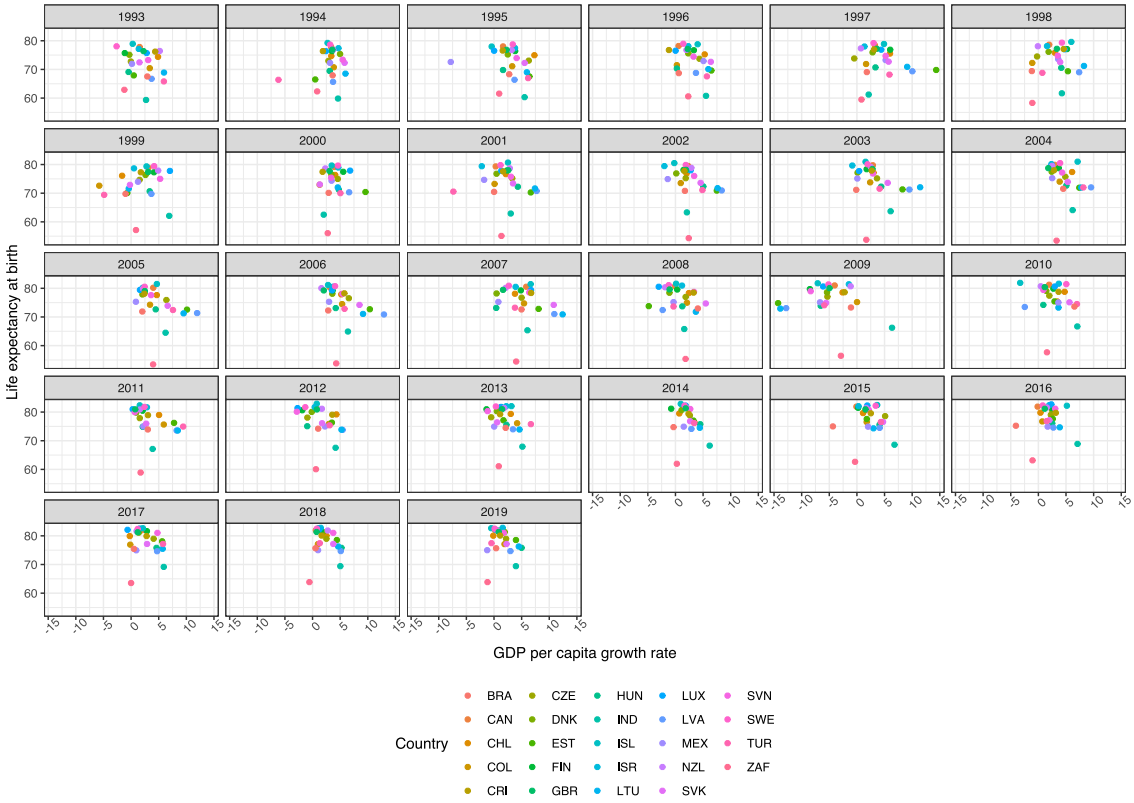
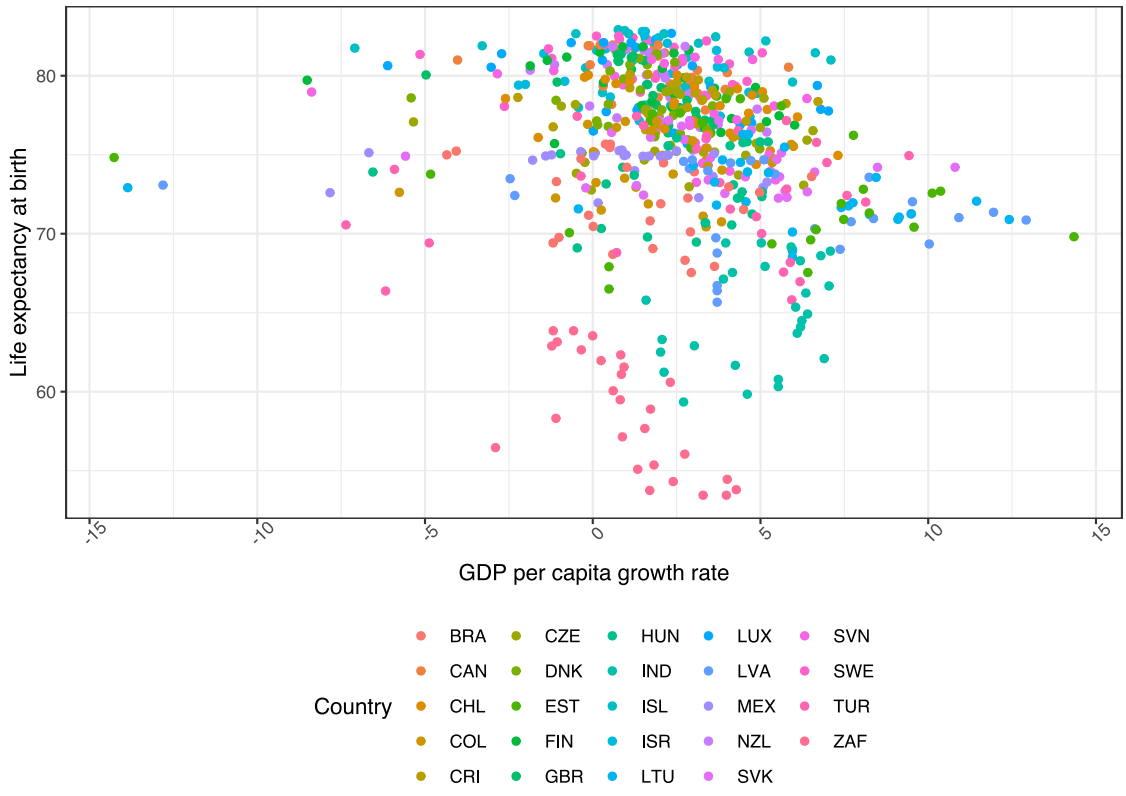


Figure A7.2.



A8. Empirical distributions for the response variable and for covariates – boxplots

Figure A8.1. Response variable (GDP growth rate)

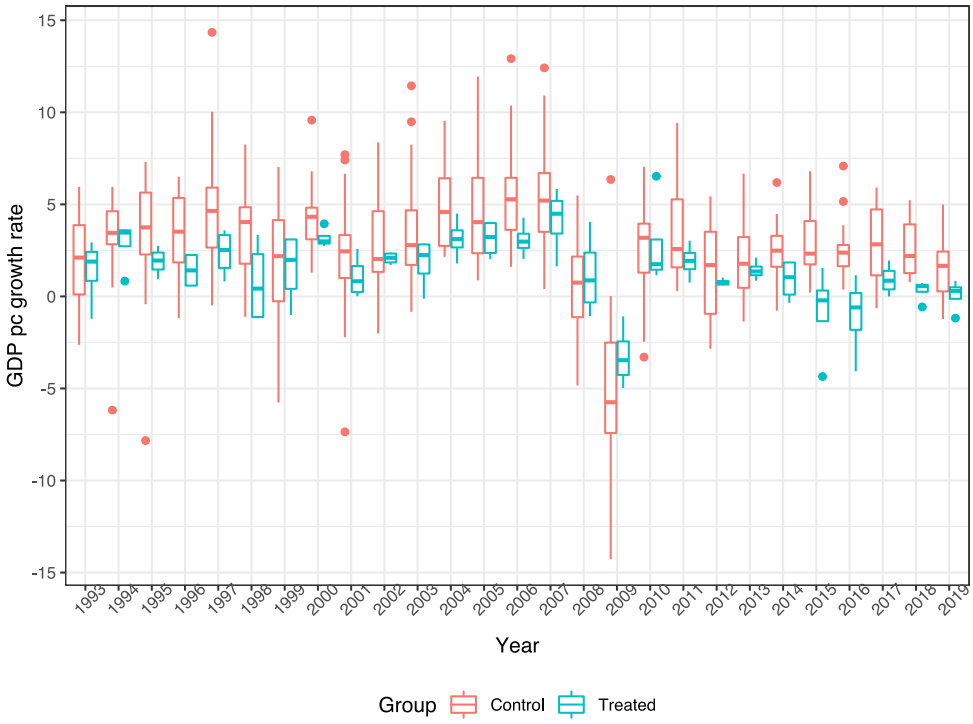


Figure A8.2. Covariates (Inflation)

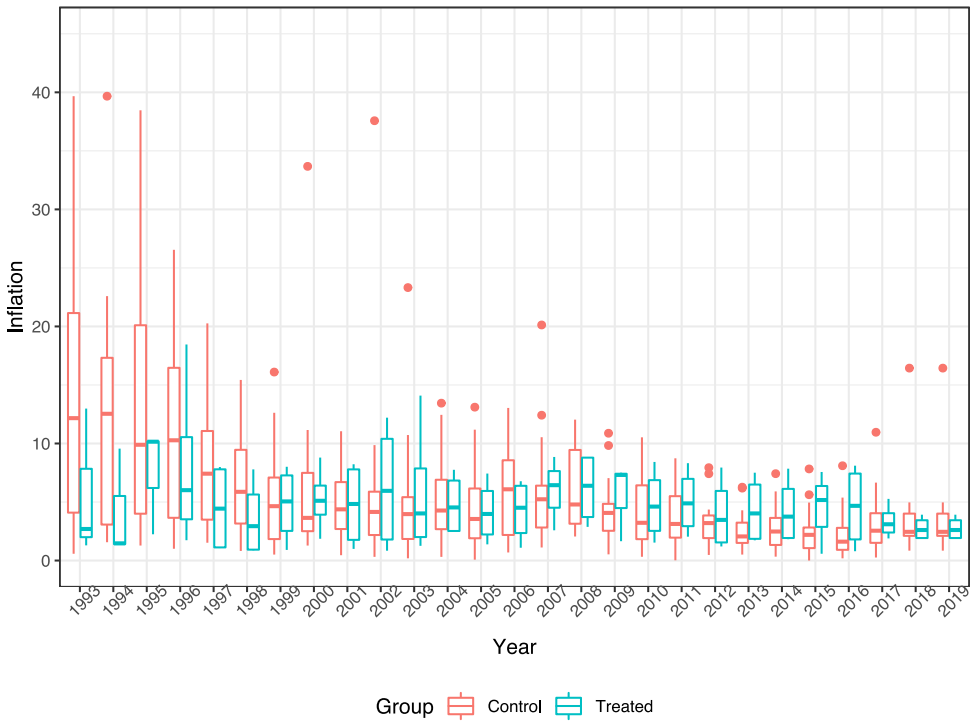


Figure A8.3. Covariates (Industry)

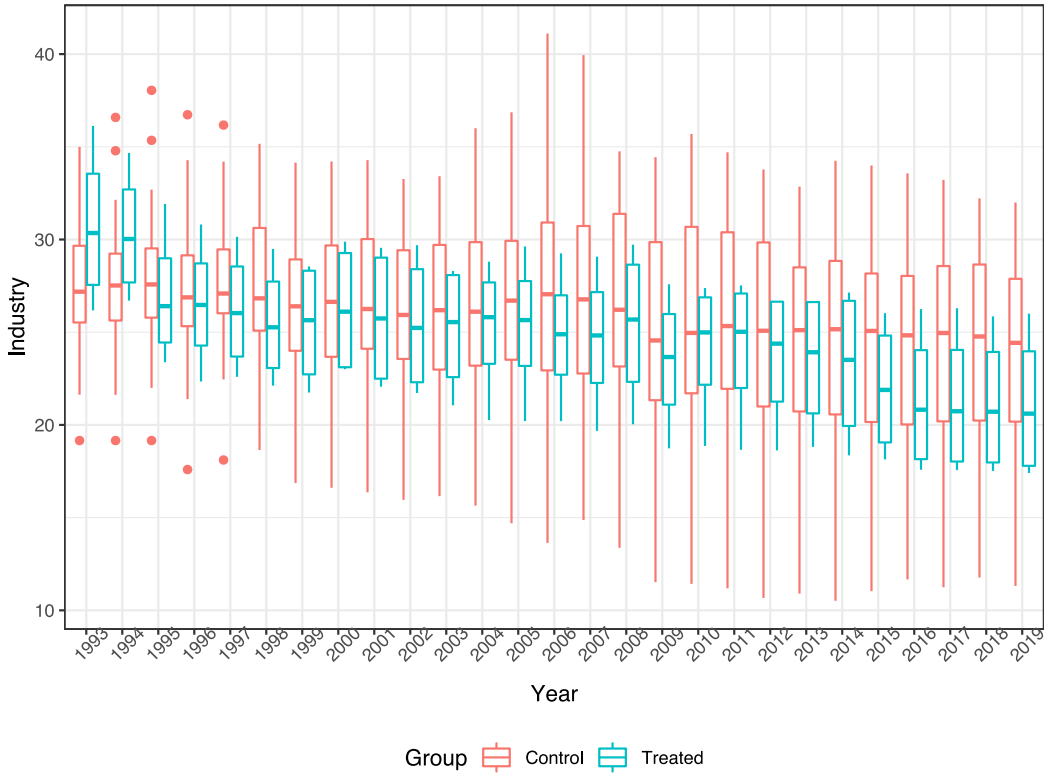


Figure A8.4. Covariates (Export)

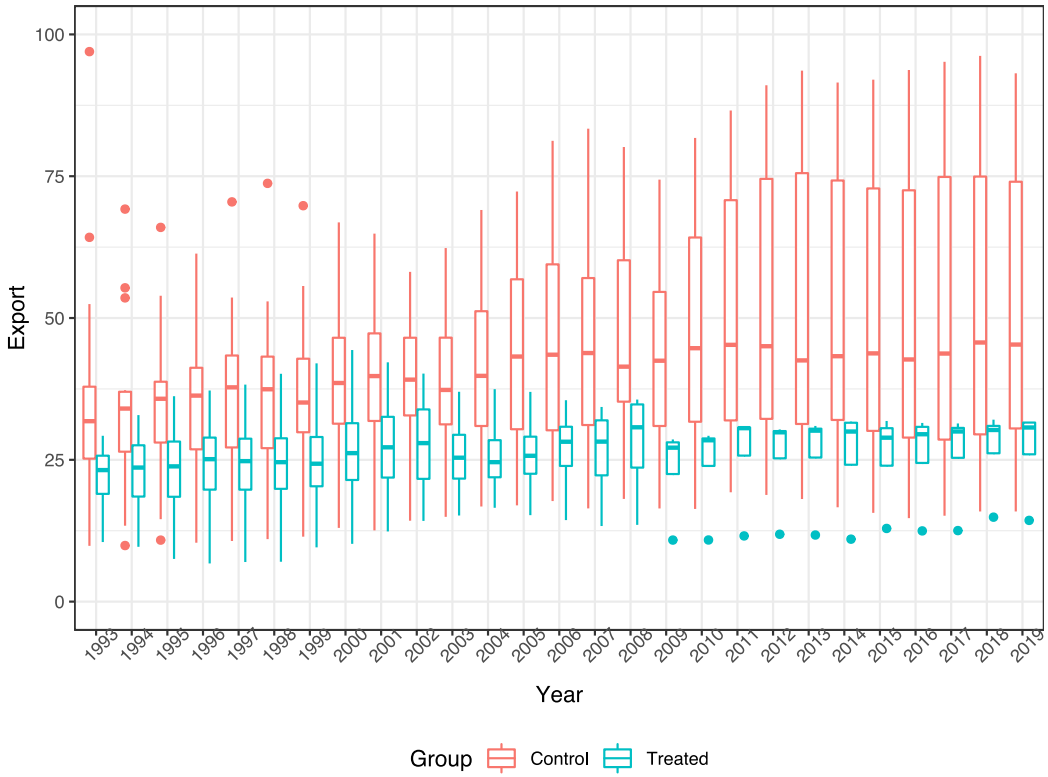
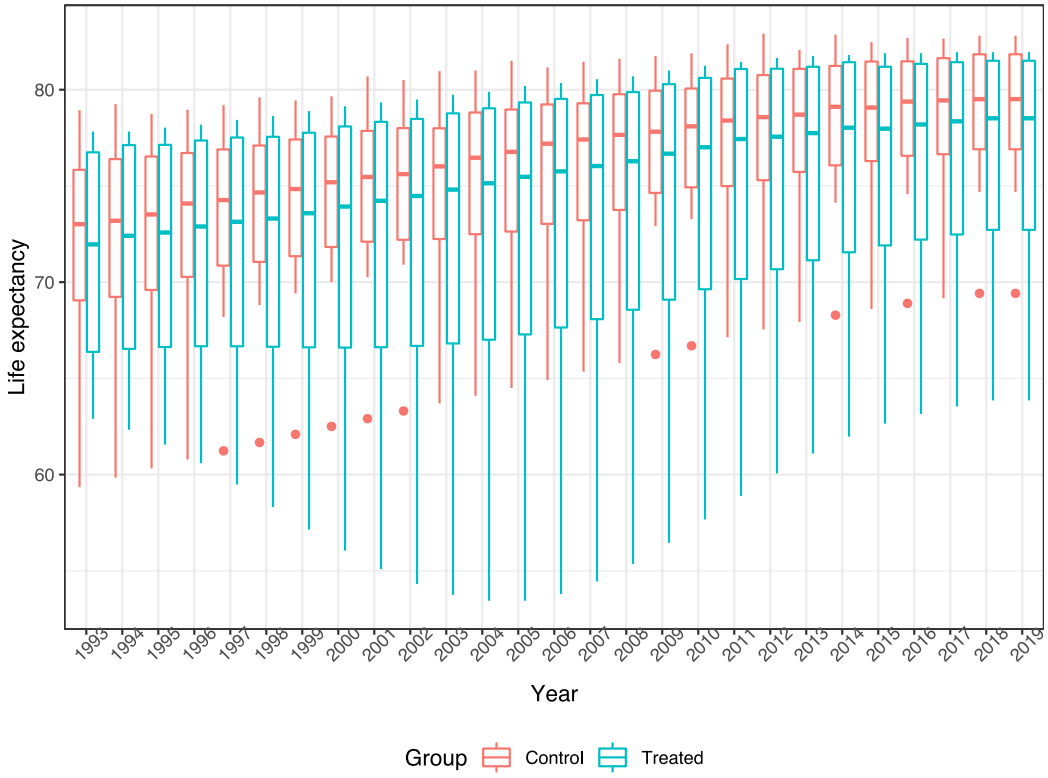


Figure A8.5. Covariates (Life expectancy)



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