

# STATISTICAL ANALYSIS OF THE GLOBAL COMPETITIVENESS INDEX (GCI) OF GEORGIA

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Republic of Georgia is a Eurasia country in the Caucasus region, which consists of 7 regional territories, which unify 60 district and city centers. It borders with Russia in the north and northeast, Turkey and Armenia in the south and Azerbaijan in the southeast. In the west, it reaches the Black Sea shores of about 310 km. Georgia occupies an area of 69.700 km<sup>2</sup> with slightly less than 5 million people (according to estimates for 2018). The country's main and largest city is Tbilisi, with over a million people. Major cities in Georgia are: Kutaisi, Batumi, Rusztavi, with over a 100 thousand people and etc.

Gross national income (GNI) of Georgia is 7.1 billion US\$ and 37.64 billion PPP US\$ and revenue per capita is 1350 US\$. Georgia's exports are over 350 billion US\$, and imports are more than 650 billion US\$ for 2018.

Georgia is a member of the following international organizations: Council of Europe, Organization for Security and Co-operation in Europe (OSCE), EUROCONTROL, World Trade Organization (WTO), GUAM (Georgia, Ukraine, Azerbaijan and Moldova) Organization for Democracy and Economic Development, and is also a signatory to the NATO Partnership for Peace program and etc.

In the paper is given statistical and trend analysis of Georgia's global competitiveness index (GCI) for period 2004-2018.

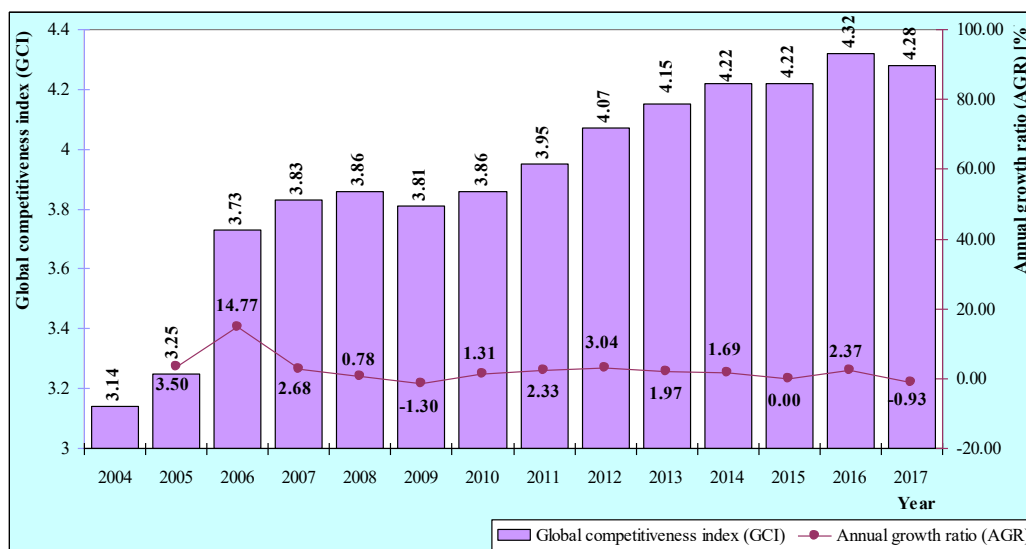
Data on values of GCI of Georgia has been retrieved from Global Competitiveness Report (GCR) for period 2004-2018 [1], with a certain calculations from the part of the authors. The GCR with the data for each year for the countries of the world is issued by the World Economic Forum (WEF). The WEF coordinator for Georgia is BIRG (Business Initiative for Reforms in Georgia).

For the trend analysis, we used the following parameters: annual growth rate (AGR) and cumulative growth index (CGI). On Table 1 are given GCI data of Georgia for the period 2004-2018 and trend analysis for GCI with AGR is shown on Figure 1.

**Table 1.** Data of Global Competitiveness Index (GCI) for Georgia for the period 2004-2018

Year	Score	Rank	Position [%]	Q	AG	CI	AGR	CGI
2004	3.14	94/104	90.38	Q4	-	-	-	100.00
2005	3.25	86/117	73.50	Q3	0.11	103.50	3.50	103.50
2006	3.73	85/125	68.00	Q3	0.48	114.77	14.77	118.79
2007	3.83	90/131	68.70	Q3	0.10	102.68	2.68	121.97
2008	3.86	90/134	67.16	Q3	0.03	100.78	0.78	122.93
2009	3.81	90/133	67.67	Q3	-0.05	98.70	-1.30	121.34
2010	3.86	93/139	66.91	Q3	0.05	101.31	1.31	122.93
2011	3.95	88/142	61.97	Q3	0.09	102.33	2.33	125.80
2012	4.07	77/144	53.47	Q3	0.12	103.04	3.04	129.62
2013	4.15	72/148	48.65	Q2	0.08	101.97	1.97	132.17
2014	4.22	69/144	47.92	Q2	0.07	101.69	1.69	134.39
2015	4.22	66/140	47.14	Q2	0.00	100.00	0.00	134.39
2016	4.32	59/138	42.75	Q2	0.10	102.37	2.37	137.58
2017	4.28	67/137	48.91	Q2	-0.04	99.07	-0.93	136.31
2018	60.90	66/140	47.14	Q2				

Note: Quartile (Q), Annual Growth (AG), Chain Index (CI), Annual Growth Rate (AGR), Cumulative Growth Index (CGI).



**Fig. 1.** Trend analysis for Global Competitiveness Index (GCI) with Annual Growth Rate (AGR)

Global Competitiveness Index (GCI) data for Georgia for the period 2004-2017 changed in intervals from 3.14 to 4.32. Maximum value was in 2016 and minimum in 2004 year. Highest growth of Annual Growth Rate (AGR) was by 14.77 in 2006 year, while the highest fall was by -1.30 in 2009.

Statistical descriptions parameters of Global Competitiveness Index (GCI) of Georgia for period 2004-2017 is given in Table 2.

**Table 2.** Descriptive statistics of the Global Competitiveness Index (GCI) of Georgia for period 2004-2017

Measures	Sign	CGI
Sample size	N	14
Minimum	Min	3.14
Maximum	Max	4.32
Range	Rx	1.18
Total	Sum	54.69
Mean	Aver	3.9064
Geometric mean	GM	3.8902
Harmonic mean	HM	3.8729
Median	Med	3.9050
Std. deviation	SD	0.3578
Variance	Var	0.1280
Coef. of variation	CV	9.1588
Skewness	Sk	-1.0516
Kurtosis	Ku	0.6709

## References

- [1] Schwab K., Sala-i-Martin X., Samans R., Blanke J., and etc. (editors): *The Global Competitiveness Report 2016-2017*. Geneva (Switzerland): World Economic Forum (WEF), 2016. – 382 pp. ISBN 978-1-944835-04-0.
- [2] Dašić P. Statistical analysis and modeling of global competitiveness index (GCI) of Serbia. *Journal of Research and Development in Mechanical Industry*, Vol. 9, Issue 3 (2017). ISSN 1821-3103.