

# The Economy of Greece and the FIFA Ranking of its National Football Team

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*The purpose of this study is to compare the performance of the Greek economy with the FIFA ranking of the Greek National Football Team in order to find out whether there exists some sort of statistical association. The period under consideration starts with the establishment of the European and Monetary Union in 1992 and ends with the current year of 2021. In 1992, FIFA started to rank national football teams which restricts the extent of time to be used in this study. The descriptive evidence presented in this paper shows that there exists strong positive association between the level of real Gross Domestic Product (GDP) of Greece and the ranking of its national football team.*

# The Greek Economy in the EMU Period

In 1992 the European Union (EU) launched its biggest project ever called Economic and Monetary Union (EMU) with an objective to:

1. Coordinate economic policy-making between member states.
2. Coordinate fiscal policies by limiting government debt and deficit.
3. Follow an independent monetary policy run by the European Central Bank (ECB)
4. Supervise financial institutions within the Euro area by applying single rules.
5. Introduce a common currency to be used by all member states.

The rationale behind this deepening of economic integration was

- (a) higher economic growth (more jobs) and
- (b) monetary stability (lower inflation)

# What a year 2004 was!

Most Greeks would agree that 2004 was a year to be remembered by Greece's current and future generations.

- Greece organized the Olympic Games of 2004.
- The Greek National Football Team, against all odds, won the European Trophy, beating the national team in the final game of the hosting country, Portugal.
- Greece won the Eurovision Song Contest.



# The Hubris

Many Greeks committed hubris by believing that they were Gods' chosen people. It was a classic example of an ancient Greek tragedy. Metaphysically, nemesis and punishment followed. The economy disarrayed when the Great Recession hit Greece in 2009, and as a coincidence along came the failures of the Greek National Football Team. The former is measured by the Gross Domestic Product (GDP) and the latter with the Federation Internationale de Football Association (FIFA) rankings of national football teams.

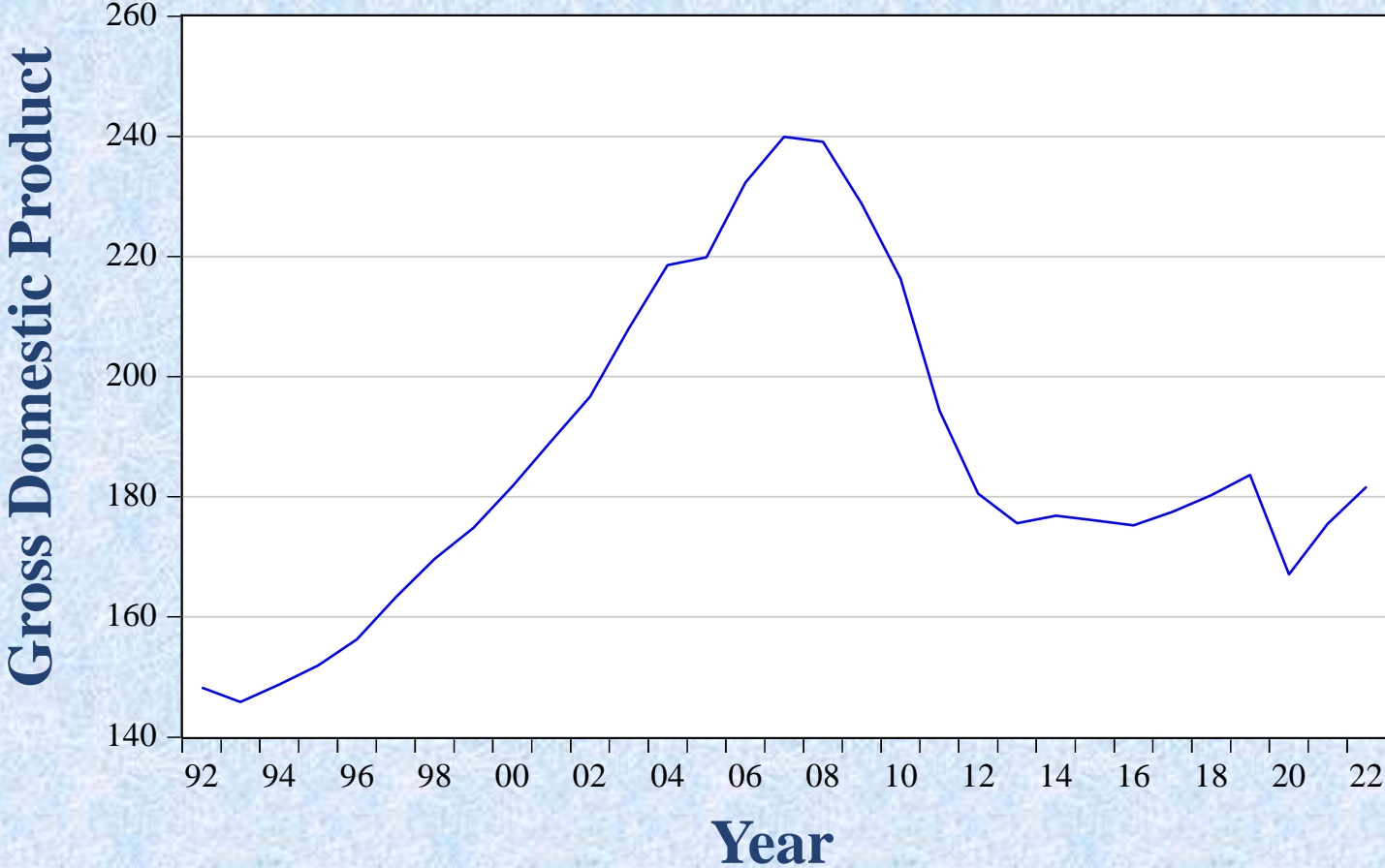


# Greek Economic Growth, 1992-2021

*(GDP is measured in billions of constant 2015 of euro)*

YEAR	GDP (bn)	GDP (%)	YEAR	GDP (bn)	GDP (%)	YEAR	GDP (bn)	GDP (%)
1992	148.25	0.70	2002	196.64	3.92	2012	180.56	-7.08
1993	145.88	-1.60	2003	208.03	5.79	2013	175.61	-2.74
1994	148.80	2.00	2004	218.56	5.06	2014	176.84	0.70
1995	151.92	2.10	2005	219.87	0.60	2015	176.11	-0.41
1996	156.27	2.86	2006	232.30	5.65	2016	175.25	-0.49
1997	163.28	4.48	2007	239.90	3.27	2017	177.49	1.28
1998	169.64	3.89	2008	239.10	-0.34	2018	180.26	1.56
1999	174.85	3.07	2009	228.81	-4.30	2019	183.61	1.86
2000	181.71	3.92	2010	216.28	-5.48	2020	167.09	-9.00
2001	189.21	4.13	2011	194.33	-10.15	2021	175.48	5.02

# Greek Gross Domestic Product (GDP), 1992-2022 in bn of 2015 euro



# The Rate of Growth of Greek Domestic Product (GDP), 1992-2022



## Summary Statistics of Greek GDP, 1992-2021

Statistic	1992-2021	1992-2001	2002-2011	2012-2021
Average	186	162.98	219.38	176.83
Minimum	146	145.88	194.33	167.09
Maximum	239	189.21	239.90	183.61
Range	93	43.33	45.57	16.52
Standard Deviation	27	15.28	16.16	4.39
Skewness	0.54	0.45	-0.27	-0.73
Kurtosis	2.37	1.83	1.89	3.82



## FIFA Rank of the Greek National Football Team

<b>YEAR</b>	<b>FIFA RANK</b>	<b>YEAR</b>	<b>FIFA RANK</b>	<b>YEAR</b>	<b>FIFA RANK</b>
<b>1992</b>	31	<b>2002</b>	48	<b>2012</b>	11
<b>1993</b>	34	<b>2003</b>	30	<b>2013</b>	12
<b>1994</b>	28	<b>2004</b>	18	<b>2014</b>	24
<b>1995</b>	34	<b>2005</b>	16	<b>2015</b>	41
<b>1996</b>	35	<b>2006</b>	16	<b>2016</b>	42
<b>1997</b>	42	<b>2007</b>	11	<b>2017</b>	47
<b>1998</b>	53	<b>2008</b>	20	<b>2018</b>	43
<b>1999</b>	34	<b>2009</b>	13	<b>2019</b>	54
<b>2000</b>	42	<b>2010</b>	11	<b>2020</b>	53
<b>2001</b>	57	<b>2011</b>	14	<b>2021</b>	51

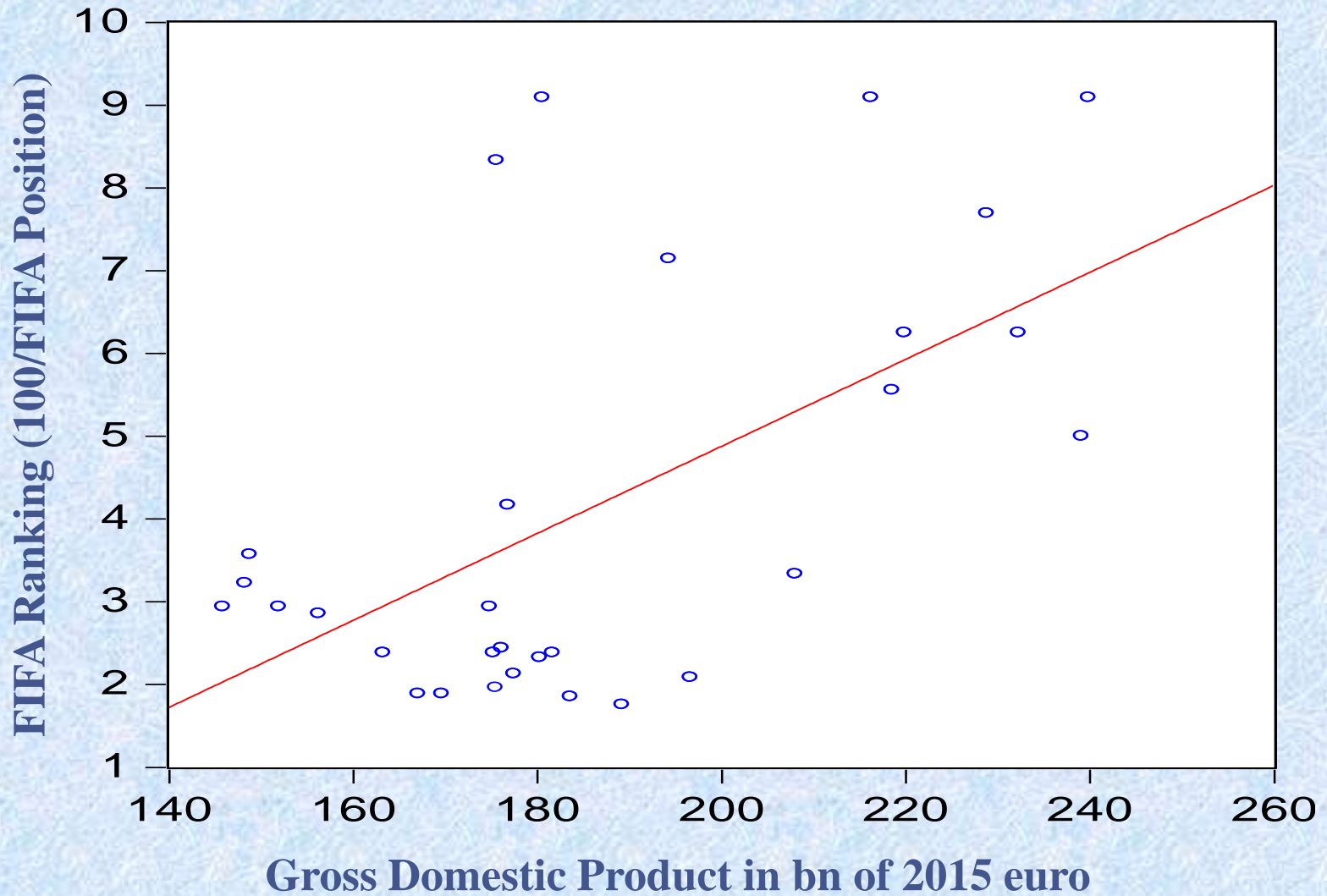
# Summary Statistics of FIFA Ranking

Period	1992-2021	1992-2001	2002-2011	2012-2021
<b>Statistic</b>				
<b>Average</b>	32	39	20	38
<b>Worse Position</b>	57 (2001)	57 (2001)	48 (2002)	54 (2019)
<b>Best Position</b>	11 (2007, 2010, 2012)	31 (1992)	11 (2007, 2010)	11 (2012)
<b>Range</b>	46 (57-11)	26 (57-31)	37 (48-11)	43 (54-11)
<b>Standard Deviation</b>	15.2	9.5	11.4	16.27
<b>Skewness</b>	-0.01	0.86	1.74	-0.76
<b>Kurtosis</b>	1.67	2.48	4.91	2.04

# The FIFA Ranking of the Greek National Football Team, 1992-2021



## The Association of the GDP and the FIFA Ranking, 1992-2022





# Conclusions I

There appears to be a strong association between the performance of the economy and the achievements of the national football team. A 10% increase in Greece's GDP is associated with an increase of 2% in the FIFA ranking of its national football team. The correlation coefficient is  $+0.577$  for the entire period, but if we exclude the outliers in performance then the correlation coefficient increases to  $+0.6503$ .

# Conclusions II

The entire period of 1992 to 2021 was divided into three ten-year periods. It appears that with the exception of the first decade, the football performance was associated with the performance of the economy. A difference is observed in the first decade (1992-2001) during which the performance of the Greek team remained stable when the economy was increasing.



# Conclusions III

The purpose of the study was not to draw conclusions as of the causal relationship between the two variables. Theoretically, the causality may run both ways even though the most probable one is the economy to affect the national football performance. This requires further research, but the descriptive (graphical) depiction of the data show that the national football performance usually follows the previous years' economic growth performance with a lag. Testing for causality is left for a future research.



Thank you very much  
for your attention

