

THE EUROPEAN BELL CURVE: IQ, EDUCATIONS AND INEQUALITY

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Summary: In famous book “The Bell Curve” from Richard Herrnstein and Charles Murray [1] was showed that in the United States there is a socioeconomic hierarchy of race and intelligence. They showed that whites are at the top of this hierarchy with the highest average IQ (103) and the highest socioeconomic status and earnings. Hispanics come next with an average IQ of 89 and intermediate socioeconomic status and earnings. Blacks come last with the lowest average IQ of 85 and the lowest socioeconomic status and earnings. They argued that the racial socioeconomic hierarchy is largely determined by differences in intelligence. IQ was consequence of education and will to be successful. Inequality is also link between educations and will to be successful. This paper present link between tree parameters: will, education and GDP.

Keywords: Albania, Austria, Balkans, Bulgaria, Croatia, Education, Flynn effect, GDP per capita, Greece, IQ, IQ of nations, Montenegro, Serbia, Slovenia, Turkey

1. INTRODUCTION

The first attempt to measure the intelligence of man dating back to the late 19th century. Alfred Binet and Theodore Simon had several attempts of making an intelligence test - a success arrived in 1905. From this time, lots of methods are changed - lot of different tests for the assessment of intelligence and emotion were produced.

In the USA more than fifty years exist hypothesis that all races what living on her territory are not equally intelligent. After few trials, an idea that intelligence depends of social conditions (chrysis, financial instability of countries) was born. In 1994, American psychologist Herrnstein and political scientist Murray published cult edition of the book with the title: “The Bell Curve”. [1] Its central argument is that human intelligence [is] substantially influenced by both inherited and environmental factors and is a better predictor of many personal dynamics, including financial income, job performance, chance of unwanted pregnancy, and involvement in crime than are an individual’s parental socioeconomic status, or education level. The book also argues that those with high intelligence, the “cognitive elite”, are becoming separated from those of average and below-average intelligence,

and that this is a dangerous social trend with the United States moving toward a more divided society similar to that in Latin America.

This book was base for further works. [2] [3] [4]. The book “The Bell Curve” was controversial, especially where the authors wrote about racial differences in intelligence and discussed the implications of those differences. The authors were reported throughout the popular press as arguing that these IQ differences are genetic. They wrote in chapter 13: “*It seems highly likely to us that both genes and the environment have something to do with racial differences.*” The introduction to the chapter more cautiously states. “The debate about whether and how much genes and environment have to do with ethnic differences remains unresolved.”

The book's title comes from the bell-shaped normal distribution of intelligence quotient (IQ) scores in a population. Shortly after publication, many people rallied both in criticism and defense of the book. A number of critical texts were written in response to the book. Book argues that: (i) Intelligence exists and is accurately measurable across racial, language, and national boundaries. Intelligence is one of, if not the most, important factors correlated to economic, social, and overall success in the United States, and its importance is increasing. (ii) Intelligence is largely (40% to 80%) heritable, (iii) No one has so far been able to manipulate IQ to a significant degree through changes in environmental factors—except for child adoption and that they conclude is not large in the long term—and in light of these failures, such approaches are becoming less promising (iv) The United States has been in denial of these facts. A better public understanding of the nature of intelligence and its social correlates is necessary to guide future policy decisions.

2. CLASSES OF IQ SCORES

Their evidence comes from an analysis of data compiled in the National Longitudinal Study of Youth (NLSY), a study conducted by the United States Department of Labor's Bureau of Labor Statistics tracking thousands of Americans starting in the 1980s. All participants in the NLSY took the Armed Services Vocational Aptitude Battery (ASVAB), a battery of ten tests taken by all who apply for entry into the armed services. (Some had taken an IQ test in high school, and the median correlation of the Armed Forces Qualification Test (AFQT) scores and those IQ test scores was .81.) Participants were later evaluated for social and economic outcomes. In general, IQ/AFQT scores were a better predictor of life outcomes than social class background. Similarly, after statistically controlling for differences in IQ, many outcome differences between racial-ethnic groups disappeared. So, basic categories are:

- Those who did not finished any school have IQ 40 and less
- Three years of finished school – IQ 50
- Four-seven years of finished school - IQ 60
- Eight years of finished school – IQ 75
- Twelve years of finished school – IQ 90
- Fifteen years of finished school – IQ 110
- Sixteen and more years of finished school - IQ 125

We know that all of us foes not have financial support to finish high schools, but they have high IQ. But opposite is also truth: many graduated students do not have IQ mentioned in previous paragraph.

As conclusion for this part:

- For calculation of IQ of nations we watching educational structure of citizens
- All countries does not have the same system of educations and census – so we have to recalculate system and to normalize to the mentioned parameterization UNESCO in his publication identify fifty educational systems around the globe, but they recalculated all fifty to eight - on upper list they add tree year school and post-high school education which exists in many countries.

3. BASIC CRITERIA OF STUDY

In this study author take criteria what Herrnstein and Murray describe in their study, as well as other researchers. Data from European countries are shown. Basic characteristics of this research are:

- All European countries do not have results for year 2014. So results for 2013 and 2012 are used, and in some cases for 2011 and 2010.
- All education systems has to be modeled to equal schema proposed by UNESCO [5]
- It was noted that 31% of the population has completed eight grades of elementary school.
- With high school we have up to 50% of the population.

In Table 1 are shown data for every mentioned category of population and calculated IQ coefficient and IQ coefficient with Flynn effect (to be discussed later).

4. RESULT OF IQ ANALYSIS OF NATIONS

In Lynn and Vatanen study from 2006 [4] there are few criteria for measuring and calculation of IQ of the nations. Only 119 countries are shown as one where IQ of nation is measured, and the rest are estimated using calculation on the base of three neighbor countries. Also results from PISA test and all other relevant tests are included.

We will compare our results with results in Table 4.1, chapter 4. Only 38 countries have better scores than fifteen measured in Table 1 in European countries, what represents 32.2%. Our 44 countries represent 37.25%. Practically, European countries are in first half of the world countries (this does not mean population because of 2.7 billion of citizens of China and India).

Second, countries with smaller number of citizens (10 million and less) can change their IQ of nation in 5-10 years, what is not possible in countries with larger number of citizens. Implication of this is that variation of +/- of 2 IQ points can be changed rapidly. This will be shown in example of Serbia.

5. IQ AND GDP OF NATIONS

Europe is full of contrasts. We have countries rich with natural resources (such are petrol and gas), with and without touristic resources, industrial resources. Table 2 showing this link between GDP (PPP) and IQ of the nations.

Table 3. European Countries with IQ and GDP per capita (PPP)

Country	IQ Nation	GDP per capita (1,000 USD)
Albania	84	4.61
Andorra	85	39.44
Austria	92	47.42
Belarus	95	6.66
Belgium	93	43.32
Bosnia and Herzegovina	82	4.48
Bulgaria	91	6.93
Czech Republic	91	18.64
Montenegro	87	6.45
Denmark	88	56.43
Estonia	94	16.77
Finland	89	45.86
France	87	41.28
Greece	84	23.02
The Netherlands	87	45.87
Croatia	88	13.28
Ireland	87	32.93
Island	93	42.90
Italy	90	33.55
Cyprus	96	20.37
Latvia	91	13.98
Liechtenstein	88	163.68
Lithuania	92	11.67
Luxembourg	102	103.69
Hungary	88	12.86
Macedonia	88	4.85
Malta	91	21.79
Moldova	78	1.97
Germany	100	42.14
Norway	85	97.77
Poland	86	12.53
Portugal	86	20.33
Romania	87	8.40
Russia	76	13.75
San Marino	94	59.63
Slovakia	87	16.99
Slovenia	90	22.32
Spain	71	29.01
Serbia	87	5.15
Switzerland	88	79.02
Sweden	91	54.41
Turkey	88	10.29
United Kingdom	86	38.32
Ukraine	82	3.88

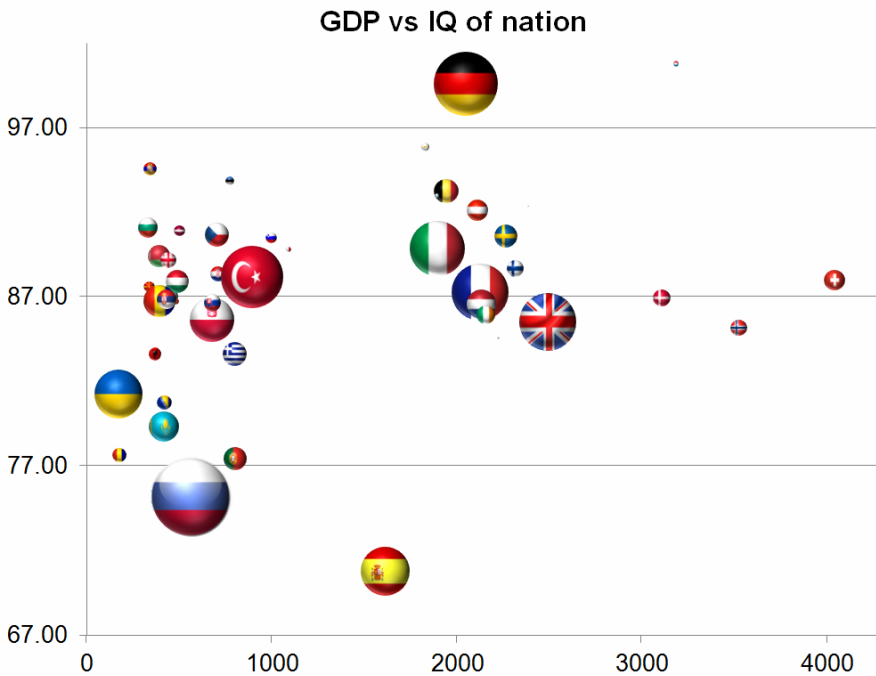


Figure 2. Relations between GDP per capita(PPP) and IQ in 2013
GDP figures are taken from Wikipedia [6]

6. CONCLUSION

Based on the research in this paper conclusion is:

- Education is important element of wealth of nations, as well as natural resources
- Battle for illiterate people in each country is concept of prosperity
- Concept of secondary and higher education is extremely important for European countries. Third industrial revolution and IT society will be just a dream in the mind of some European peoples on they will travel to other developed countries to work in ICT sector for example
- School system in all level of education has to be changed
- Lynn and Vatennen showing that developed countries increasing the level of IQ over the years, partly because of evolution in education system [4] [3] [2]

Country	No classes	1-3 education	4-7 education	8 yrs of education	12 yrs of education	15 yrs of education	16 yrs of education	Unknown	Total	Total number of citizens	IQ of nation
Albania [7]	96,365	220,000	320,000	420,000	1,147,739	125,578	289,795		2,619,477	2,821,977	84
Andorra [8]	2,614	2,100	4,523	10,516	25,546	8,057	2,227	1,020	56,603	76,058	85
Austria [9]	5,000	204,429	486,736	820,498	3,380,988	1,152,933	827,451	54,736	6,932,772	8,414,638	92
Belarus [10]				493,000	5,790,000		1,530,000	1,302,000	9,115,000	9,464,000	95
Belgium [11]				3,536,079	3,105,042		2,335,956		8,977,077	11,194,824	93
Bosnia and Herzegovina [12]	163,323	81,230	391,975	818,361	1,412,392	122,501	182,967	93,903	3,266,652	3,791,622	82
Bulgaria [13]	75,499	75,996	346,618	1,552,111	2,990,424		1,348,650		6,389,298	7,364,570	91
Czech Republic [14]	121,356	55,641	98,600	1,450,412	4,235,698		850,423	126,658	7,595,577	10,512,400	91
Montenegro [15]	8,181	58,090	38,375	77,748	262,783	35,694	71,388		552,259	620,029	87
Denmark [16]	94,366	114,558	224,656	1,140,481	1,606,564	368,444	546,876	167,244	4,263,189	5,564,219	88
Estonia [17]	62,124	28,456	33,214	88,450	452,123	98,000	245,000	3,200	1,010,567	1,311,870	94
Finland [18]	441,552	289,616	206,867	413,736	1,779,062	703,350	744,723	8,722	4,587,628	5,451,270	89
France [19]	3,300,473	1,124,554	2,114,554	15,443,667	25,114,869	4,333,217	7,455,149	151,448	59,037,931	63,200,000	87
Greece [20]	371,453	644,699	654,322	3,139,307	3,460,850	723,829	940,407		9,934,867	10,816,286	84
The Netherlands [21]	890,000	448,900	856,900	2,487,000	6,863,000	2,035,000	1,074,000	108,000	14,762,800	16,850,652	87
Croatia [22]	62,092	34,786	249,081	773,849	1,911,815	212,059	383,130	5,965	3,632,777	4,290,612	88
Ireland [23]	125,231	75,024	390,455	1,578,009	2,100,655	135,122	739,922	139,871	5,284,289	6,378,000	87
Island [24]				85,800	80,600		56,100	500	223,000	326,340	93
Italy [25]	1,193,165	596,582	5,369,240	15,511,139	17,300,886	14,914,557	4,772,658		59,658,227	60,021,955	90
Cyprus [26]	51,418			137,114	394,202		274,226		856,960	1,129,000	96
Latvia [27]	55,510	61,000	39,000	358,632	845,632	112,469	350,014	29,630	1,851,887	2,003,000	91
Liechtenstein [28]	317	499	3,301	7,339	12,301	2,612	3,675	611	30,655	36,656	88
Lithuania [29]	45,790	411,892	-	404,418	843,225	466,686	585,851	217	2,758,079	2,986,000	92
Luxembourg [30]	1,120			66,500	125,781	95,005	116,332	11,523	416,261	549,700	102
Hungary [31]	46,529	254,561	580,658	1,863,990	2,608,461	479,872	959,744		6,793,814	9,879,000	88

Macedonia [32]	44,553	256,013	50,040	52,528	957,367	118,394	234,300		1,713,195	2,062,294	88
Malta	10,900	15,100	23,500	60,635	110,421	65,320	50,800	10,200	346,876	412,966	91
Moldova [33]	324,000	236,000	356,740	502,603	1,120,365	98,600	221,000	45,623	2,904,931	3,557,600	78
Germany [34]	2,700,000	864,050	949,081	4,961,000	25,392,000	11,057,250	19,488,000	141,000	65,552,381	80,716,000	100
Norway [35]	135,470	59,089	395,664	1,107,898	1,648,207	255,478	403,665	33,226	4,038,697	5,124,383	85
Poland [36]	1,126,700	2,100,663	3,520,014	8,469,520	13,745,600	2,145,800	5,100,620	226,300	36,435,217	38,946,000	86
Portugal [37]	484,380			3,042,432	1,986,894	248,363	931,356	1,905,930	8,599,355	10,477,800	86
Romania [38]	439,980	643,047	1,962,987	3,452,149	6,768,920	778,426	2,690,646	186,145	16,922,300	20,121,641	87
Russia [39]	29,372,204	13,217,492	16,154,712	22,029,153	36,715,255	19,091,932	8,811,661	1,468,613	146,861,022	147,009,000	76
San Marino [40]				3,797	11,845	6,684	852	1,262	24,440	33,540	94
Slovakia [41]	230,084	154,600	225,400	850,046	1,750,482	336,457	559,642	84,563	4,191,274	5,415,949	87
Slovenia [42]	5,580	6,950	61,395	420,529	935,495	142,143	189,265		1,761,357	2,060,802	90
Spain [43]	16,500,423	844,233	2,214,876	5,665,945	11,247,896	2,214,587	4,115,486	115,478	42,918,924	46,609,700	71
Serbia [44]	164,844	68,898	608,601	1,279,116	3,015,092	348,335	652,234	24,424	6,161,544	7,181,505	87
Switzerland [45]	129,883	196,887	342,555	1,755,642	2,896,112	458,888	845,221	36,454	6,661,642	7,998,454	88
Sweden [46]	150,422	36,004	500,457	1,800,478	3,569,784	856,000	1,200,478	94,633	8,208,256	9,666,781	91
Turkey [47]	3,319,737	1,254,828	5,142,452	7,803,242	28,234,102	4,193,429	8,386,859		58,334,649	76,684,887	88
United Kingdom [48]	2,569,455	3,100,452	5,122,045	9,956,881	19,452,300	3,111,005	8,600,459	1,224,785	53,137,382	63,705,000	86
Ukraine [49]	1,741,663	520,222	14,500,698	5,047,896	12,444,572	2,366,543	5,986,344	422,699	43,030,637	45,377,581	82

Table 1. Table of IQ of nations for European countries. (For Russia and Turkey) are shown data for whole country

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