

Competition, Collaboration, and Life Satisfaction Part 1. The Seven of European Leaders



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Abstract. The first part of this paper demonstrates that a group of seven European countries is significantly ahead of other Western states, including the United States, in the development of economic and political institutions. The Seven are Denmark, Norway, Sweden, Finland, Iceland, Switzerland, and the Netherlands. They rank first in the life satisfaction index (happiness index) and are leaders in the integral index of quality of life, civic culture, and institutional effectiveness which is formed by aggregating ten most important indicators. These include healthy life expectancy at birth, the corruption perception index, the democracy index, the human development index, the Gini index and a number of others. When this index is used to cluster the set of developed countries, the Seven appears to be the leading cluster. This result suggests that the achievement of high values of the proposed index contributes to the country's advancement to the leading positions in life satisfaction. An analysis of the dynamics of institutional indicators showed that the U.S. lagging behind the Seven has been increasing over time. In recent years, the U.S. has been among the flawed democracies, the levels of generalized trust of U.S. citizens as well as trust in political institutions and in the government are decreasing, the U.S. advantages in terms of global competitiveness and per capita GDP are diminishing. The second part of the paper will consider what qualitative features of socio-economic and political mechanisms provide leadership, and how our findings can be used to develop catch-up strategies.

Key words: happiness index, Nordic exceptionalism, U.S. lagging behind, collaboration, clustering, nearest neighbor method.

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Introduction

Western political systems and the welfare state mechanisms are in a deep crisis. Many experts confirm this. For instance, in a book published in 2019, Nobel laureates Abhijit Banerjee and Esther Duflo note that in many countries "... the public conversation between the left and the right has turned more and more into a high-decibel slanging match. ... In the United States ... split-ticket voting is at its lowest on record. Sixty-one percent of Democrats say they view Republicans as racists, sexists, or bigots. ... A third of all Americans would be disappointed if a close family member married someone from the other side." "There is a clear feeling that civilization..., based on democracy and debate, is under threat", "...We seem to be back to the Dickensian world of *Hard Times*, with haves facing off against the increasingly alienated have-nots, with no resolution in sight" (Banerjee, Duflo, 2019, pp. 1, 2, 3).

The works (Polterovich, 2015; Polterovich, 2018b; Polterovich, 2021a) demonstrate that the root of the problem lies in the exhaustion of opportunities and, moreover, degradation of institutions of political and economic competition. Having replaced the estate political systems and the guild economy of the late Middle Ages, competition between political parties and between manufacturers allowed a wider stratum of citizens to participate in the governance process and create an economy of technological progress. There emerged an opportunity to increase economic potential by creating new technology and administration methods; thus, the role of war as a radical type of competition between states has dramatically declined. However, in the course of development, the inherent flaws in economic and political competitive mechanisms are becoming more and more pronounced; first of all, these include high transaction costs of competitive interactions and the built-in mechanism providing for a negative selection of political leaders, as a result of which

the victory in political competition turns out to be poorly related to managerial abilities of the winner. In this regard, the mechanisms of competition and power are being gradually replaced with mechanisms of collaboration in the economic and political spheres. However, this transformation is going on very slowly and it proves unable to prevent crisis phenomena. The paper (Polterovich, 2021a) demonstrates that some Western states are trying to deal with the crisis by implementing reforms to mitigate competition and enhance the role of collaboration. In this article, the thesis will be developed in more detail. Namely, we will show that seven European countries are leaders in this process and that the results of the strategy they have chosen allow to count on overcoming the crisis.

The Seven of European leaders include Denmark, Norway, Sweden, Finland, Iceland, Switzerland and the Netherlands. They rank first in the happiness index, an integral yardstick of the social, economic and political state of society, indicating citizens' life satisfaction. Their leadership in this and many other cultural and institutional indicators is primarily due to the fact that they are significantly ahead of other Western states in the above-mentioned process of establishing collaboration mechanisms. In this regard, the situation for the United States is the opposite. The country, which until recently demonstrated the seemingly unshakable advantages of competition institutions, is now experiencing a crisis in its most obvious and severe form, gradually losing economic and institutional leadership.

The Scandinavian countries (Denmark, Norway and Sweden) have high-quality institutions, a high level of social security and low inequality; all this was noted long ago and has provided the grounds for the emergence of the concept of Scandinavian exceptionalism. Elaborating on this concept, many authors have also considered Finland (see, for example, (Pratt, 2008), which contains references to earlier works). In modern studies, the term "Nordic

exceptionalism” or “Nordic model” is used more often, and along with the Scandinavian countries, not only Finland, but also Iceland is considered (see, in particular, (Iqbal, Todi, 2015; Martela et al., 2020)). The article (Martela et al., 2020) provides an overview of relevant studies. It emphasizes the connection between life satisfaction¹ and a high quality of institutions and civic culture.

The paper (Helliwell et al., 2019, p. 23) highlights factors closely related to the level of happiness. Along with per capita GDP, the authors point out indicators such as social support, healthy life expectancy at birth, freedom to make life choices, generosity, and perceptions of corruption. The results of the panel regression of the happiness index on these six variables demonstrate their significance and the ability to “explain” a significant part of the variance. At the same time, however, the question remains as to whether the Nordic countries are “first among equals” or indeed “exceptions”.

Comparing the 15 richest countries by a number of indicators, the authors of the work (Martela et al., 2020, p. 134) find that the idea of Nordic exceptionalism is not entirely accurate: the Netherlands and Switzerland are very close to the Nordic states. However, the article does not pay attention to the two countries.

In the present paper, we use this observation and investigate the idea of exceptionalism of the Seven of European leaders. To this end, in the next section, an integral LCI-10 index will be formed, reflecting the quality of life, civic culture, and institutional effectiveness. This index will be used to cluster developed countries. It will be demonstrated that the Seven states not only occupy leading positions in this index, but also form a separate cluster. A slightly weaker result is obtained when the number of aggregated indicators is expanded, although in this case the Seven remains in the leading positions.

¹ An overview of alternative approaches to measuring the level of happiness and the works of Russian authors on this topic is contained in (Shmatova, Morev, 2015).

Life satisfaction: The Seven of European leaders

Since 2012, the annual World Happiness Report has been published under the auspices of the UN (see, in particular, (Helliwell et al., 2019, 2020, 2021a)). In these reports, a group of researchers analyze the results of Gallup polls, in which respondents from different countries (about 150 in recent surveys) are asked the following question: “Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?”².

Countries are usually ranked by the average results of answers over the previous three years (the average level of happiness varies from 8.9 to 2.6). With such a ranking the Seven occupied leading positions in recent years.

The work of Helliwell, Huang, Wang, Norton (Helliwell et al., 2021b) presents the results of regressions of the happiness index on six significant factors, which together explain the variation of the dependent variable for 149 countries quite well. We are talking about the following indicators: GDP per capita in terms of Purchasing Power Parity, healthy life expectancy at birth, social support, freedom to make life choices, perceptions of corruption, and generosity. Social support is measured as the proportion of respondents who answered in the affirmative to the Gallup World Poll question “If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?” This indicator characterizes social relations of small radius, which may play less significant role in well-organized systems. Thus, an individual may need less help from relatives and friends if official organizations providing such assistance are available. Perhaps this is the reason

² See: <https://news.gallup.com/poll/122453/understanding-gallup-uses-cantril-scale.aspx>

why, according to the data used by the authors, Sweden ranked 25th in terms of social support. A similar disadvantage is typical of the generosity indicator, which is measured by the results of responses to the question “Have you donated money to a charity in the past month?” In addition, we should note that generosity in these countries is realized in the form of state aid to poor countries. It is no coincidence that the Seven does not rank high according to this indicator: Iceland – 6th, the Netherlands – 11th, Norway – 23rd, Sweden – 26th, Switzerland – 27th, Denmark – 34th, Finland – 91st. Meanwhile, according to the level of official development assistance as a percentage of gross national income, five countries of the Seven are in the top ten, Finland ranks 11th, and Iceland – 14th³.

The indicator of the freedom to make life choices, also measured by the Gallup World Poll, depends on citizens’ ideas about freedom. Otherwise it is difficult to explain the fact that the United Arab Emirates turned out ahead of the Seven with the exception of Norway, and the United States ranked 64th (Martela et al., 2020, p. 135).

In order to demonstrate the “exceptionalism” of the Seven, we choose a different set of indicators to reflect more comprehensively the quality of institutions and the level of countries’ development. The indicators are as follows: healthy life expectancy at birth, the corruption perception index, the democracy index, the human development index, the Gini index, the generalized trust index, trust in government, government effectiveness, GDP (PPP) per capita, the rule of law.

Let us compare the Seven with other developed countries. According to the IMF, there are 40 countries⁴ among them, but only 36 were ranked by the happiness index. The corresponding list in ascending order of rank is given in column 2 of *Table 1*. Further, we consider that the country’s rank on the happiness index coincides with its number on this list. Similarly, countries are rearranged according to the ten indicators listed above: in each case, the countries are arranged, according to the corresponding index, from the top one ranked 1st, to the bottom one ranked 36th. A special situation arises if two or more countries were assigned the same rank during the initial ranking, so that when

Table 1. The Seven of European leaders among developed countries

1	2	3	4	5	6	7	8	9	10	11	12	13
Happiness index ¹⁾	Country	Healthy life expectancy at birth ²⁾	Corruption perception index ³⁾	Democracy index ⁴⁾	Human development index ⁵⁾	Gini index ⁶⁾	Generalized trust ⁷⁾	Trust in government ⁸⁾	Government effectiveness ⁹⁾	GDP (PPP) per capita ¹⁰⁾	Rule of law ¹¹⁾	Integral index LCI-10 ¹²⁾ (average of ranks 3–12)
1	Finland	19	4.5	6	11.5	8	4	4	3	16	1	7.7
2	Denmark	19	1.5	7	10	7	3	7	5	8	5	7.25
3	Switzerland	4	4.5	12	2.5	14	7	1	2	4	6	5.7
4	Iceland	9	17.5	2	4.5	4	10	14	16	10	9	9.6
5	The Netherlands	14.5	8	9.5	8.5	11	5	5	6	9	11	8.75
6	Norway	14.5	7	1	1	6	1	2	4	5	2	4.35
7	Sweden	10.5	4.5	3	7	10	2	8	8	13	8	7.4
8	Luxembourg	12	9.5	13	22.5	20	22	6	7	1	10	12.3
9	New Zealand	27	1.5	4	14.5	21.5	6	10	14	18	3	11.95

³ See: <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/ODA-2020-detailed-summary.pdf>

⁴ See: <https://www.imf.org/en/Publications/WEO/weo-database/2021/October/select-countries?grp=110&sg=All-countries/Advanced-economies>

End of Table 1

1	2	3	4	5	6	7	8	9	10	11	12	13
Happiness index ¹⁾	Country	Healthy life expectancy at birth ²⁾	Corruption perception index ³⁾	Democracy index ⁴⁾	Human development index ⁵⁾	Gini index ⁶⁾	Generalized trust ⁷⁾	Trust in government ⁸⁾	Government effectiveness ⁹⁾	GDP (PPP) per capita ¹⁰⁾	Rule of law ¹¹⁾	Integral index LCI-10 ¹²⁾ (average of ranks 3–12)
10	Austria	22.5	15.5	16	17	9	16	11	9	11	7	13.50
11	Australia	22.5	12.5	9.5	8.5	21.5	9	21	12	14	13	14.35
12	Israel	5.5	28	23.5	19.5	28	27	25	26	25	28	23.55
13	Germany	22.5	9.5	14	6	12	15	9	20	12	15	13.50
14	Canada	16	12.5	5	16	15	8	13	11	17	12	12.55
15	Irish	17	20	8	2.5	13	13	15	17	3	17	12.55
16	UK	28	12.5	15	13	31	14	28	19	21	18	19.95
17	Czech Republic	30	32	27	26	2	23	29	30	26	27	25.2
18	USA	34	22	21	17	32	12	17	22	6	21	20.4
19	Belgium	26	15.5	30	14.5	5	17	32	25	15	20	20.0
20	France	7.5	21	20	25	16	26	23	23	20	22	20.35
21	Malta	13	34	26	27	-	30	-	28	23	31	26.5
22	Taiwan	-	23	11	-	-	20	-	15	-	23	18.4
23	Spain	7.5	24	18	24	24	19	26	31	30	32	23.55
24	Italy	10.5	33	25	28.5	23	21	27	36	24	36	26.40
25	Slovenia	25	28	29	21	3	32	19	24	29	26	23.6
26	Singapore	2	4.5	35	11.5	29	33	3	1	2	4	12.50
27	Slovakia	31	36	34	35	1	31	30	34	33	33	29.8
28	Lithuania	32	28	33	32	30	24	16	27	28	29	27.9
29	Cyprus	5.5	30	28	31	-	35	-	32	27	34	27.81
30	Estonia	29	17.5	23.5	28.5	17	25	18	21	31	19	22.95
31	Latvia	33	31	32	33	26	29	31	33	34	30	31.2
32	Japan	1	19	17	19.5	25	11	22	13	22	16	16.55
33	Portugal	19	25.5	22	34	19	34	12	29	32	24	25.05
34	South Korea	3	25.5	19	22.5	27	18	20	18	19	25	19.7
35	Greece	22.5	35	31	30	18	28	24	35	35	35	28.0
36	Hong Kong	-	12.5	36	4.5	-	-	-	10	7	14	14.0

Sources:

¹⁾ Data for 2018–2020. Helliwel et al., 2021a, p. 20.

²⁾ Data for 2019. Available at: <https://apps.who.int/gho/data/view.main.SDG2016LEXv?lang=en>

³⁾ Data for 2020. Available at: https://images.transparencycdn.org/images/CPI2020_Report_EN_0802-WEB-1_2021-02-08-103053.pdf

⁴⁾ Data for 2020. Democracy Index 2020. In sickness and in health? (2021). The Economist Intelligence Unit Limited.

⁵⁾ Data for 2019. Available at: <http://hdr.undp.org/sites/default/files/hdr2020.pdf>, p. 343.

⁶⁾ Data for 2020. Available at: <https://data.oecd.org/inequality/income-inequality.htm>

New Zealand – for 2018. Available at: <https://knoema.com/atlas/New-Zealand/topics/Poverty/Income-Inequality/GINI-index>

Singapore – for 2020. Available at: <https://www.statista.com/statistics/951976/singapore-gini-coefficient-after-tax/>

New Zealand and Singapore were added to the OECD data on 39 countries. 41 countries were ranked.

⁷⁾ Ranked by averaged WVS survey data from the early 1980s to 2009 (Svendsen, Svendsen, 2015, p. 95).

Data on Costa Rica. Available at: <https://socialcapitalgateway.org/sites/socialcapitalgateway.org/files/data/paper/2012/09/07/pc.pdf>, p.18.

⁸⁾ OECD data, 2017–2020. Available at: <https://data.oecd.org/gga/trust-in-government.htm>

On Singapore. Available at: <https://www.straitstimes.com/singapore/politics/singaporeans-have-high-level-of-confidence-in-government-but-politically>

Singapore was added to the OECD data on 42 countries. 43 countries were ranked.

⁹⁾ World Bank data for 2020. Available at: https://www.theglobaleconomy.com/rankings/wb_government_effectiveness/

¹⁰⁾ World Bank data for 2020. Available at: https://www.theglobaleconomy.com/rankings/gdp_per_capita_ppp/

The data on Japan were taken as of 2019.

¹¹⁾ Available at: https://www.theglobaleconomy.com/rankings/wb_ruleoflaw/

¹²⁾ The integral index of quality of life, civic culture and institutional effectiveness; calculated as an average of ten indicators (3–12).

Table 2. Clustering the set of developed countries, 10 and 12 factors*

1	2	3	4	5	6	7	8	9
Rank according to the LCI-10	Happiness index, rank	Country	Integral index LCI-10	Distance to the "nearest" country with a smaller LCI-10	Social support index ¹⁾ , rank	Human freedom index ²⁾ , rank	Integral index LCI-12 ³⁾ (average of the ranks: 4 with a weight of 10; 6 and 7)	Distance to the "nearest" country with a smaller LCI-12
		Cluster 1.10					Cluster 1.12	
1	6	Norway	4.35		9	5.5	4.83	-
2	3	Switzerland	5.70	1.35	8	9.5	6.21	1.38
3	2	Denmark	7.25	1.55	4	9.5	7.17	0.96
4	7	Sweden	7.40	0.15	18	1	7.75	0.12
5	1	Finland	7.70	0.30	11	3.5	7.63	0.46
6	5	The Netherlands	8.75	1.05	19	2	9.04	1.29
7	4	Iceland	9.60	0.85	1	13	9.17	0.13
		Cluster 2.10						
8	9	New Zealand	11.95	2.35	3	3.5	10.50	1.33
9	8	Luxembourg	12.30	0.35	12	5.5	11.71	1.21
10	26	Singapore	12.50	0.20	-	36	-	-
11-12	14	Canada	12.55	0.05	7	11	11.96	0.25
11-12	15	Ireland	12.55	0.00	2	19	12.21	0.25
13-14	10	Austria	13.50	0.95	15	7.5	13.13	0.92
13-14	13	Germany	13.50	0.00	16	7.5	13.21	0.08
15	36	Hong Kong	14.00	0.50	-	27.5	-	-
16	11	Australia	14.35	0.35	6	12	13.46	0.25
		Cluster 3.10					Cluster 2.12	
17	32	Japan	16.55	2.20	20	27.5	17.75	4.29
18	22	Taiwan	18.40	1.85	-	17	-	-
19	34	South Korea	19.70	1.30	31	22	20.83	0.5
20	16	UK	19.95	0.25	5	20	18.71	0.96
21	19	Belgium	20.00	0.05	13	14	18.92	0.21
22	20	France	20.35	0.35	17	29.5	20.83	0.00
23	18	USA	20.40	0.05	14	26	20.33	1.41
		Cluster 4.10						
24	30	Estonia	22.95	2.55	25	15.5	22.5	1.67
25-26	23	Spain	23.55	0.60	10	29.5	22.92	0.42
25-26	12	Israel	23.55	0.00	24	35	24.54	0.12
27	25	Slovenia	23.60	0.05	22	23	23.42	0.50
28	33	Portugal	25.05	1.45	27	15.5	24.42	1.00
29	17	Czech	25.20	0.15	26	18	24.67	0.13
30	24	Italy	26.40	1.20	23	31	26.50	1.83
31	21	Malta	26.50	0.10	-	24	-	-
32	29	Cyprus	27.80	1.30	-	33	-	-
33	28	Lithuania	27.90	0.10	28	25	27.67	1.17
34	35	Greece	28.00	0.10	30	34	28.67	1.00
35	27	Slovakia	29.80	1.80	21	32	29.25	0.58
36	31	Latvia	31.20	1.4	29	21	30.17	0.92

* The dash indicates the absence of relevant data on the country.

Sources:

¹⁾ Social Support Index. Available at: <https://data.oecd.org/healthrisk/lack-of-social-support.htm>

OECD (2021), Lack of social support (indicator). DOI: 10.1787/0cfbe26f-en (Accessed 07 October 2021).

²⁾ Human Freedom Index 2021. Available at: <https://worldpopulationreview.com/country-rankings/freedom-index-by-country>

³⁾ The integral index of quality of life, civic culture and institutional effectiveness; calculated as an average of twelve indicators: 3–12 (Tab. 1) and 5, 6 (Tab. 2). Obviously, LCI-12 = [10 LCI-10 + (rank 5) + (rank 6)]/12

compiling the list each of them can be located in one of two or more places following each other. In this case, each country is assigned a rank equal to the sum of the numbers of the corresponding places divided by their number. For example, according to the initial data, Finland, Switzerland, Sweden and Singapore had the same corruption perception index and ranked from 3rd to 6th on our list. After the rearrangement, each of these countries scores 4.5 (see column 4 of Table 1). Columns 3–12 of Table 1 contain the scores obtained in this way from the initial data.

We note that the initial ranks depend on the number of countries that were ranked according to one or another index. Rearrangement allows us to get rid of this dependence.

Column 13 of Table 1 shows the average rank of each country for all ten indicators. We call this indicator, designated as the LCI-10, the integral index of quality of life, civic culture and institutional effectiveness. This index is used to cluster the group of countries under consideration (*Table 2*).

The calculation uses the simplest clustering method – the nearest neighbor method (also called the single linkage method)⁵.

We take the modulus of the difference between the corresponding values of the LCI-10 as a measure of the distance between countries. We say that a subset of countries *S* (which does not coincide with their entire set and contains at least two countries) forms a cluster in a weak sense if two conditions are met: a) *S* contains all such and only such countries whose nearest neighbors belong to *S*; b). the distance between any two countries from *S* is less than at least one of the distances from these countries to any country not belonging to *S*. A subset of *S* is called a cluster in a strong sense, or simply a cluster if it is a cluster in a weak sense and the following condition is met: the distance from each country within *S* to its nearest neighbor is less

than the distance from any country within *S* to any country outside *S*.

It can be easily verified that the nearest neighbor method generates clusters in a strong sense.

In the situation under consideration, the graph of connections between vertices (countries) can be represented as a weighted chain where the weights of the edges are equal to the corresponding distances.

The vertices of this chain are arranged in ascending order of LCI-10 values (see columns 1, 3 and 4 of Table 2), and the weights of the edges connecting them are equal to the differences between the corresponding values (see column 5 of Table 2). For example, the weight of the first Norway – Switzerland edge in the chain is $5.70 - 4.35 = 1.35$; the weight of the Iceland – New Zealand edge is defined similarly: $11.95 - 9.60 = 2.35$, etc. The distance between any two countries is equal to the sum of the weights of the edges connecting them. For example, the distance between Australia and the UK is calculated using the data from column 5 as follows: $2.20 + 1.85 + 1.30 + 0.25 = 5.60$.

If an LCI-10 value is the same for several countries, as is the case, for example, for Austria and Germany, then they are located at the same vertex, and their order in column 3 is chosen at random.

Obviously, under the accepted assumptions, the Seven forms a cluster. In the situation under consideration, clustering can be conducted by sequentially removing the edges with the maximum weight. According to the data in column 5, the USA – Estonia edge has the maximum weight. When the edge is removed, our set of countries splits into two clusters: cluster 4.10 and all other countries. Then, removing the Iceland – New Zealand and Australia–Japan edges, we split the set of developed countries into four clusters. If we assess the level of development by the values of the LCI-10, then the Seven turns out to be the leading

⁵ See: <http://www.aiportal.ru/articles/autoclassification/single-link.html>

cluster in this regard⁶. While each country from the first cluster shows higher life satisfaction than any country from the other clusters. It is also easy to check that the average life satisfaction in the second cluster is higher than in the third, and in the third it is higher than in the fourth.

The fact that the Seven forms a separate cluster, where each of the countries surpasses representatives of other clusters not only in life satisfaction, but also in the integral index, can be considered a serious argument in favor of its “exceptionalism”: The Seven is significantly ahead of all other states, including the United States, in terms of development. We emphasize that neither the three Scandinavian countries nor the five Nordic states form a cluster.

The results we have obtained suggest that the feeling of life satisfaction is associated with the level of the LCI-10. It would be interesting to check for a causal relationship between indicators included in LCI-10 and the level of happiness by interviewing respondents.

Certainly, the conclusions may depend on the clustering method and, in particular, on the selected set of parameters that form an integral index. If, for example, the indicators of social support and personal freedom, rejected earlier for substantive reasons, are added to the ten parameters used, then the picture changes: the Seven ceases to be a cluster. When dividing the set of countries by means of a new integrated index LCI-12 into two clusters, the Seven is part of the first cluster along with seven more countries (see columns 6–9 of Table 2). Nevertheless, it remains at the top of the list and forms a cluster in a weak sense, which can be easily checked. While the United States turns out in the second cluster.

On the dynamics of the main indicators: the Seven and the USA

According to the LCI-10 the United States ranks 23rd, even lower than according to the

⁶ The algorithm used does not contain a stopping rule. It is important for us that the Seven forms a cluster at some step.

happiness index. We should note that over the recent decades a typical trend has developed: the U.S. has been lagging increasingly behind a number of countries, and many other countries are now catching up with the U.S.

According to the report “Corruption Perceptions Index 2020”⁷, in 2020 the United States reached its lowest position on the CPI since 2012. The authors relate this to the challenges of allocating and distributing the COVID-19 relief package. The high scores of Denmark, Finland, Sweden and Switzerland are emphasized. Of the seven European leaders, only Iceland has gone beyond the top ten on the CPI; still it is also significantly ahead of the United States.

The Democracy Index is calculated by the Economist Intelligence Unit, the research and analysis division of the Economist Group (UK), on the basis of expert assessments and opinion polls in 167 countries. The 60 indicators obtained in this way are aggregated to identify five indicators, each of which characterizes one of the fundamental categories of the democratic mechanism: electoral process and pluralism, the functioning of government, political participation, political culture, and civil liberties. These indicators are evaluated on a ten-point scale, and the Democracy Index is their arithmetic mean. Based on its scores each country is classified as one of four types of regime: “full democracy”, “flawed democracy”, “hybrid regime” or “authoritarian regime”⁸. Data for 2006–2020 have been published⁹. During this

⁷ Corruption Perceptions Index 2020 (2021). Transparency International. Berlin. 30 p. Available at: https://images.transparencycdn.org/images/CPI2020_Report_EN_0802-WEB-1_2021-02-08-103053.pdf

⁸ See: <https://countryeconomy.com/hdi?year=2006/>

⁹ Democracy Index 2012. Democracy at a standstill (2013). The Economist Intelligence Unit Limited 2013. Pp. 1–40. Available at: <https://civitanaorg.files.wordpress.com/2014/05/democracy-index-2012.pdf>; Democracy Index 2020. In sickness and in health? (2021). The Economist Intelligence Unit Limited. Pp. 1–70. An updated version of the index has been published recently (Democracy Index (2021). Gumanitarnyi portal: Issledovaniya. Tsentr gumanitarnykh tekhnologii, 2006–2021 (revised March 10, 2021). Available at: <https://gtmarket.ru/ratings/democracy-index>).

period, the index values decreased for almost all countries initially classified as full democracies. Norway is one of the few exceptions. In addition, four other countries within the Seven retained the index values above nine; the indices of the remaining two states – the Netherlands and Switzerland – are very close to nine. While the U.S. score on the Democracy Index was falling monotonously from 8.22 and turned out below 8 in 2016. Thus, the United States has moved to the flawed democracy category. It lags behind the majority of full democracies in terms of the quality of governance and the level of political culture¹⁰.

The Human Development Index (HDI) is an aggregate of four indicators: life expectancy at birth, mean of years of schooling for adults aged 25 years and more, expected years of schooling for children of school entering age, and gross national income per capita¹¹.

In 1990, the United States ranked 7th on the HDI and were ahead of the Netherlands, Denmark and Finland¹². In 2005, they ranked 12th, surpassing only Denmark within the Seven¹³. In 2019, the United States moved to the 17th place, while the Seven countries took places no lower than 12th (see Table 1). In terms of HDI growth rate for 1990–2017, the United States is behind the vast majority of countries. Among the countries included in the top 100 in 2017, the HDI was growing at a lower rate only in Ukraine¹⁴.

As follows from Table 1, income inequality in the United States is significantly higher than in the

Seven countries. In fact, this is true in relation to all European states, and the same can be said about wealth inequality. Compared with 1980, inequality in the United States has grown much more dramatically than in Western Europe (Alvaredo et al., 2018; Polterovich, 2021a).

Social mobility is among the factors that significantly affect inequality. It is natural to assume that mobility is higher when the levels of income groups to which children and their parents belong are less correlated. The work (Jäntti et al., 2006) shows that in the United States the correlation is significantly higher than in the UK, where it greatly exceeds the correlation observed in Denmark, Finland, Norway and Sweden. Thus, the son of a poor father is more likely to remain poor in the United States than in the Nordic countries. The authors note that their study dispels the myth of American exceptionalism regarding social mobility.

A similar conclusion also follows from the findings (Alesina et al., 2018, p. 532). According to the authors, if a child's parents belong to the lower income quantile, then the probability that the child will remain in the same quantile is 26.7% for Sweden, which is less than for Italy (27.3), France (29.2), the UK (30.3), the U.S. (33.1). The figures confirm that mobility is lower in the U.S., and in Sweden it is higher than in the leading European countries. The article shows that Europeans consider social mobility as being a lot worse than it is in reality, and U.S. citizens tend to believe that social mobility in their country is significantly higher than it actually is.

Institutional features are closely related to cultural ones. A remarkable example of this relationship is the difference between Americans and Norwegians, experimentally discovered in the work (Almäs et al., 2016). Norwegians, unlike Americans, show a much more negative attitude toward high inequality, while there are no differences in their attitude toward effectiveness.

¹⁰ Democracy Index 2020. In sickness and in health? (2021). The Economist Intelligence Unit Limited. Pp. 1–70. Tables 3, 12.

¹¹ See: <http://hdr.undp.org/en/content/human-development-index-hdi>

¹² See: http://hdr.undp.org/sites/default/files/reports/220/hdr_1991_en_complete_nostats.pdf, p. 15.

¹³ See: http://hdr.undp.org/sites/default/files/reports/268/hdr_20072008_en_complete.pdf, p. 229.

¹⁴ Human Development Indices and Indicators. 2018 Statistical Update (2018). The United Nations Development Programme, New York. 112 p. Pp. 26–29. Available at: http://hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf.

We can assume that when performing some kind of work, Norwegian citizens are more likely to feel responsibility that is not associated with financial incentives. It is an essential prerequisite for effective collaboration.

The share of respondents who believe that “most people can be trusted” is taken as an indicator of generalized trust. The data in Table 1 reflect the findings of surveys conducted from the early 1980s to 2009. The work (Min, 2020) contains relatively new data on a slightly different indicator – a synthetic indicator of social trust. It characterizes the respondents’ trust in both their near and far circle, in particular to family members and to people met for the first time. The ranking looks different here, but all the seven European leaders are in the top ten, the UK, New Zealand and Australia rank 7th, 8th and 9th, and the United States ranks 17th.

A sufficiently high level of citizens’ generalized trust is the most important prerequisite for the effectiveness of collaboration mechanisms. A high level of citizens’ trust in the government is of equal importance. Only in this case it becomes possible, while combating the crisis, to transform command hierarchies into advisory or collaborative ones (Polterovich, 2021b).

We should note that over the recent decades the level of generalized trust in the United States has been declining considerably. Thus, the share of respondents who believed that most people can be trusted was about 45% in 1972, and a little more than 30% in 2014. The level of US citizens’ trust in the government decreased from 30% in 1996 to 19% in 2015. In 1958, it was above 70% (Ortiz-Ospina, Roser, 2016).

It is interesting to trace the dynamics of another indicator, the World Competitiveness Ranking (WCR), for the Seven and the United States. The WCR has been calculated since 1989 at the Institute for Management Development (Switzerland) and represents an aggregate of 334 indicators obtained on the basis of statistics and surveys. These indicators, according to the authors, somehow affect the country’s ability to implement long-term economic growth. As we see in *Table 3*, over the past five years, all the Seven countries, with the exception of Iceland, have improved their rating. Five of them were in the top ten in 2021, and Finland ranked 11th. The U.S. ranked no lower than 4th in 2017–2019; and it moved downward to the 10th place in 2020 and 2021.

Table 3. World competitiveness ranking dynamics

#	Country/year	2017	2018	2019	2020	2021
1	Denmark	7	6	8	2	3
2	Norway	11	8	11	7	6
3	Sweden	9	9	9	6	2
4	Finland	15	16	15	13	11
5	Iceland	20	24	20	21	21
6	Switzerland	2	5	4	3	1
7	The Netherlands	5	4	6	4	4
8	New Zealand	16	23	21	22	20
9	UK	19	20	23	19	18
10	Austria	25	18	19	16	19
11	Canada	12	10	13	8	14
12	Australia	21	19	18	18	22
13	Germany	13	15	17	17	15
14	USA	4	1	3	10	10
15	Singapore	3	3	1	1	5

Source: <https://www.imd.org/centers/world-competitiveness-center/rankings/world-competitiveness/>

The advantages of the Seven in relation to the United States, reflected in the level and dynamics of the above indices, have affected the dynamics of per capita GDP (Tab. 4). Today Norway and Switzerland are ahead of the U.S. in terms of this key economic indicator, and other members of the Seven are confidently catching up with the U.S.

The Rule of Law Index is calculated by the World Bank on the basis of statistical data, population and expert surveys¹⁵. It reflects the scale of violence and organized crime, property rights protection, enforceability of contracts, confidence in the police force and judicial system, etc. According to this index, the United States is significantly behind not only the Seven, but also New Zealand, Canada, Austria, Germany (see column 12 of Table 1).

Conclusion

The fact that the United States is gradually losing its position as the most advanced socio-economic system has been noted by many authors, in particular supporters of the theory of Nordic

exceptionalism. We have shown that this theory is not entirely accurate: at present, Switzerland and the Netherlands are also in the group of leaders along with the Nordic countries. Our results demonstrate that the Seven is far ahead of the United States not only in terms of the happiness index, but also in terms of the set of major indicators of civic culture, economic and political institutions. The question arises as to what qualitative features of socio-economic and political mechanisms ensure this leadership.

The process of the U.S. losing its leadership is not over yet. First, by now only Norway and Switzerland are ahead of the United States in terms of per capita GDP. Second, the United States is still ahead of Europe in terms of creating new technology, as evidenced by the data on the number of patent applications. According to statistics for 2010–2020, Asia's share in the total number of applications is growing, the share of North America and Europe is decreasing, while the decline for North America is slower than for Europe¹⁶. Third,

Table 4. GDP (PPP) per capita, % of the U.S. level

#	Country/year	C1	C2	C2/C1
1	Denmark	78.3	92.9	1.19
2	Norway	92.1	105.1	1.14
3	Sweden	80.1	85.4	1.07
4	Finland	72.5	79.5	1.10
5	Iceland	85.2	90.7	1.06
6	Switzerland	100.9	112.7	1.12
7	The Netherlands	85.7	92.3	1.08
8	New Zealand	59.2	69.1	1.17
9	UK	71.9	73.3	1.02
10	Austria	80.8	89.2	1.10
11	Canada	80.6	77.7	0.96
12	Australia	78.2	82.4	1.05
13	Germany	76.8	85.9	1.12
14	USA	100	100	1.00

C1 – GDP (PPP) per capita, % of the U.S. level, average for 1998–2000.
 C2 – GDP (PPP) per capita, % of the U.S. level, average for 2018–2020.
 C2/C1 – growth of the average ratio of GDP (PPP) per capita to the U.S. level for 20 years.
 Calculated according to: https://stats.oecd.org/index.aspx?DataSetCode=PDB_LV#

¹⁵ See: <http://info.worldbank.org/governance/wgi/pdf/rl.pdf>. A different methodology is used by the World Justice Project, but Iceland and Switzerland are not included in the corresponding list of countries.

¹⁶ See: https://www.wipo.int/edocs/pubdocs/en/wipo_pub_941_2021.pdf, p. 15.

the dollar still remains the world's main reserve currency. Its share in the reserves of central banks is decreasing, but yet again at the expense of Asian countries.

Will the United States continue to lose its positions or will it be able to reclaim them? This issue has become particularly relevant in connection with the recent events in Ukraine that resulted, in particular, in an unprecedented consolidation of European countries around the United States. The solution to this issue is connected with the question regarding the extent of qualitative differences in the socio-economic and political mechanisms that caused the

superiority of the Seven over the United States in terms of institutional indicators. And if the extent is significant, then what are the chances that these mechanisms could be borrowed by other Western, primarily European, countries? The second part of the work will be devoted to finding the answer. In particular, we will show that the Seven countries have become leaders thanks to collaborative advantages – more mature mechanisms of collaboration in the economic, social and political spheres, and that a number of other European states follow their example. We will also consider how our findings can be used to develop catch-up strategies.

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