

## Findings of the European Catch-Up Index 2021



May 2022

## About EuPI

The European Policy Initiative (EuPI) of Open Society Institute – Sofia Foundation aims to contribute to improving the ability of new member states to effectively impact common European policies through good quality research, policy recommendations, networking and advocacy. The initiative operates in the eleven new member states from CEE through a network of experts and policy institutes.

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## About the report

The report “Where are They Now? Findings of the European Catch-Up Index 2021” presents the findings of the European Catch-Up Index project of the European Policies Initiative (EuPI) of Open Society Institute - Sofia Foundation (OSI-Sofia) supported by a grant from Open Society Foundations (OSFs). This product is for non-commercial use only. The views expressed in the report are those of the author and do not necessarily reflect the views of OSI-Sofia or OSFs.

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## About Index 2021<sup>1</sup>

The Catch Up Index measures the performance of 35 countries – the EU member states, the candidate and potential candidate countries across four categories - Economy, Quality of Life, Democracy and Governance, using 47 basic indicators. There are scores for each category and an Overall Score, composed of the scores for the four categories, based on a scale from 100 to 0, highest to lowest. The standardized scores allow for rankings the countries from 1 to 35, highest to lowest position.

The primary goal of the Catch-Up Index is to measure how the newer EU member states (dubbed EU11) from Central and Eastern Europe are catching-up with their counterparts to the West, i.e. the older member states (dubbed EU14+2 as Malta and Cyprus are included). The candidate countries – CC – and the Potential Candidate Countries – PCC – are also included in the Index. It is easier to track catching-up in the economy, but the Index methodology allows for comparing the convergence in additional, important areas of development. In short, the Index attempts to measure the “average European levels” that the countries and citizens in the newer member states aspire to reach. The Index results can serve the broader purpose of assessing the processes of convergence and divergence in Europe across the four categories and the multiple indicators, compare countries and groups of countries and look for relationships between different factors.

This is the tenth edition of the Catch-Up Index, with the first report released in 2011 and published every year. This allows for multi-year comparisons and registering longer term trends. As the current Index is based mostly on data released in 2021 with the latest available, but not later than 30 November 2021, it is referred to as “Index 2021”.

The data used in the Index 2021 encompass the period coinciding with the Covid-19 pandemic, which started in early 2020. Therefore, the Index 2021 data and findings in this report describe the situation on the European continent at the time of the Covid-19 health, economic and social crisis but this is more of a snapshot as the extent of these changes will be felt and examined long after this. Furthermore, the index has been released after the start of Russia’s war against Ukraine on February 24, 2022 but the data and analysis precede and have been finalized before it and therefore do not cover the dramatic implications of the conflict. In practice, the index reflects the situation in Europe immediately before the start of the war.

There are several changes in Index 2021 compared to previous editions. As the UK left the EU at the end of 2020, it is no longer included among the EU member states. The Index uses the term “new member states” to designate the countries of CEE that joined the EU with the fifth wave of enlargement in 2004 and 2007 and Croatia, which joined in 2013. Despite that there is considerable amount of time passed and many countries object being called “new”, there are still common characteristics and trends of

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<sup>1</sup> Disclaimer: The latest used data in the Catch-Up Index 2021 is as of 30 November 2021. Missing data was replaced using imputation procedures as explained in the supplements of this report.

these countries as a group that make studying their experience valuable. After all, the Pont Neuf in Paris still retains its name - “new bridge” - despite being completed in 1606.

It should also be noted that the Catch-Up Index registers performance on per capita basis, thus eliminating the size of a country (or the overall country GDP) as a factor. In case the countries have substantial intra-regional differences, they are not taken into account as it is the country average and per capita that matter in this case. The Index does not register internal country regional differences due to methodological and technical complexity, although that was considered when initially designing the Index.

In addition to the regular Catch-Up Index, this year the Global Catch-Up Index came into existence expanding the comparison to 57 countries. The Global Index includes several groups of countries – the EU member states – “old” and “new”, the candidate and potential candidate countries, those closely associated with the EU – such as the European Economic Area and Switzerland, EU’s neighbors that are former socialist countries too and in different ways engaged with the EU, including those in Central Asia. The rest are a number of countries around the world – Canada, the US, China, Russia, Australia, Japan, South Korea and Israel. The methodology followed largely the model of the Catch-Up Index with the indicators divided into Economy, Quality of Life, Democracy and Governance categories.

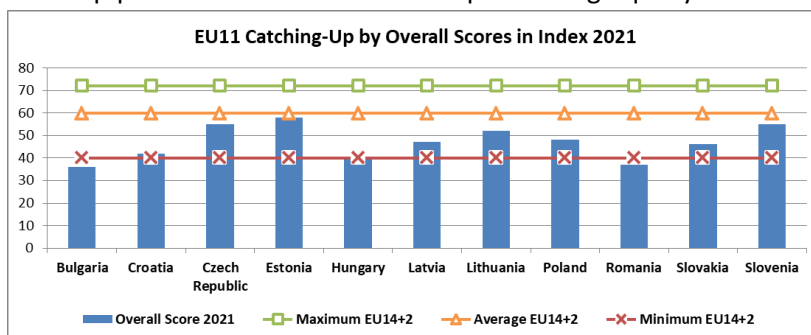
| Catch-Up Index 2021   |  |                       |                               |                         |                          |                       |                        |
|---|--|-----------------------|-------------------------------|-------------------------|--------------------------|-----------------------|------------------------|
| Group   | Country  | Economy Score (100-0) | Quality of Life Score (100-0) | Democracy Score (100-0) | Governance Score (100-0) | Overall Score (100-0) | Overall Ranking (1-35) |
| EU14+2  | Denmark  | 71                    | 68                            | 76                      | 72                       | 72                    | 1                      |
| EU14+2  | Netherlands  | 69                    | 69                            | 74                      | 71                       | 71                    | 2                      |
| EU14+2  | Sweden   | 68                    | 68                            | 74                      | 72                       | 70                    | 3                      |
| EU14+2  | Finland  | 61                    | 71                            | 75                      | 72                       | 70                    | 4                      |
| EU14+2  | Luxembourg   | 73                    | 67                            | 66                      | 71                       | 69                    | 5                      |
| EU14+2  | Ireland  | 73                    | 66                            | 69                      | 63                       | 68                    | 6                      |
| Iceland   | Iceland  | 59                    | 70                            | 69                      | 70                       | 67                    | 7                      |
| EU14+2  | Germany  | 65                    | 62                            | 64                      | 67                       | 64                    | 8                      |
| EU14+2  | Austria  | 61                    | 63                            | 60                      | 68                       | 63                    | 9                      |
| UK  | UK   | 60                    | 61                            | 57                      | 65                       | 61                    | 10                     |
| EU14+2  | Belgium  | 54                    | 67                            | 61                      | 58                       | 60                    | 11                     |
| EU11  | Estonia  | 57                    | 55                            | 62                      | 59                       | 58                    | 12                     |
| EU14+2  | France   | 55                    | 61                            | 57                      | 60                       | 58                    | 13                     |
| EU11  | Slovenia   | 51                    | 60                            | 53                      | 57                       | 55                    | 14                     |
| EU11  | Czech Republic   | 55                    | 57                            | 53                      | 56                       | 55                    | 15                     |
| EU14+2  | Portugal   | 43                    | 51                            | 58                      | 60                       | 53                    | 16                     |
| EU11  | Lithuania  | 54                    | 49                            | 54                      | 50                       | 52                    | 17                     |
| EU14+2  | Spain  | 47                    | 52                            | 53                      | 54                       | 51                    | 18                     |
| EU14+2  | Cyprus   | 48                    | 56                            | 52                      | 49                       | 51                    | 19                     |
| EU14+2  | Malta  | 54                    | 50                            | 51                      | 50                       | 51                    | 20                     |
| EU11  | Poland   | 47                    | 52                            | 44                      | 48                       | 48                    | 21                     |
| EU11  | Latvia   | 51                    | 42                            | 51                      | 46                       | 47                    | 22                     |
| EU14+2  | Italy  | 40                    | 50                            | 52                      | 44                       | 46                    | 23                     |
| EU11  | Slovakia   | 46                    | 46                            | 45                      | 48                       | 46                    | 24                     |
| EU11  | Croatia  | 41                    | 43                            | 40                      | 44                       | 42                    | 25                     |
| EU11  | Hungary  | 45                    | 39                            | 34                      | 41                       | 40                    | 26                     |
| EU14+2  | Greece   | 32                    | 46                            | 41                      | 39                       | 40                    | 27                     |
| EU11  | Romania  | 43                    | 30                            | 42                      | 34                       | 37                    | 28                     |
| EU11  | Bulgaria   | 41                    | 27                            | 37                      | 38                       | 36                    | 29                     |
| CC  | Serbia   | 34                    | 30                            | 28                      | 26                       | 30                    | 30                     |
| CC  | Montenegro   | 29                    | 31                            | 26                      | 28                       | 29                    | 31                     |
| CC  | North Macedonia  | 34                    | 21                            | 26                      | 26                       | 27                    | 32                     |
| CC  | Albania  | 26                    | 21                            | 27                      | 22                       | 24                    | 33                     |
| CC  | Turkey   | 36                    | 30                            | 10                      | 15                       | 23                    | 34                     |
| PCC   | BiH  | 24                    | 21                            | 18                      | 12                       | 19                    | 35                     |
| *Legend   |  |                       |                               |                         |                          |                       |                        |
| EU14+2  | The fourteen old EU member states, after the UK left in 2020, and Cyprus and Malta, which joined in 2004 |                       |                               |                         |                          |                       |                        |
| EU11  | The new EU member states from CEE, which joined in 2004, 2007 and 2013                                   |                       |                               |                         |                          |                       |                        |
| CC  | EU Candidate Countries   |                       |                               |                         |                          |                       |                        |
| PCC   | EU Potential Candidate Countries   |                       |                               |                         |                          |                       |                        |
| **The ranking is based on the Index 2021 Overall Scores. The scores are from 100 to 0, highest to lowest. The ranking is from 1 to 35, highest to lowest position. The groups of countries are: the EU14+2 are the fifteen old EU member states and Cyprus and Malta; the EU11 are the EU member states from CEE, which joined in 2004, 2007 and 2013. The candidate countries are designated as CC and the PCC are the potential candidate countries. Iceland was a candidate country and the UK was EU member state until 2020. |  |                       |                               |                         |                          |                       |                        |



## Index 2021 Highlights

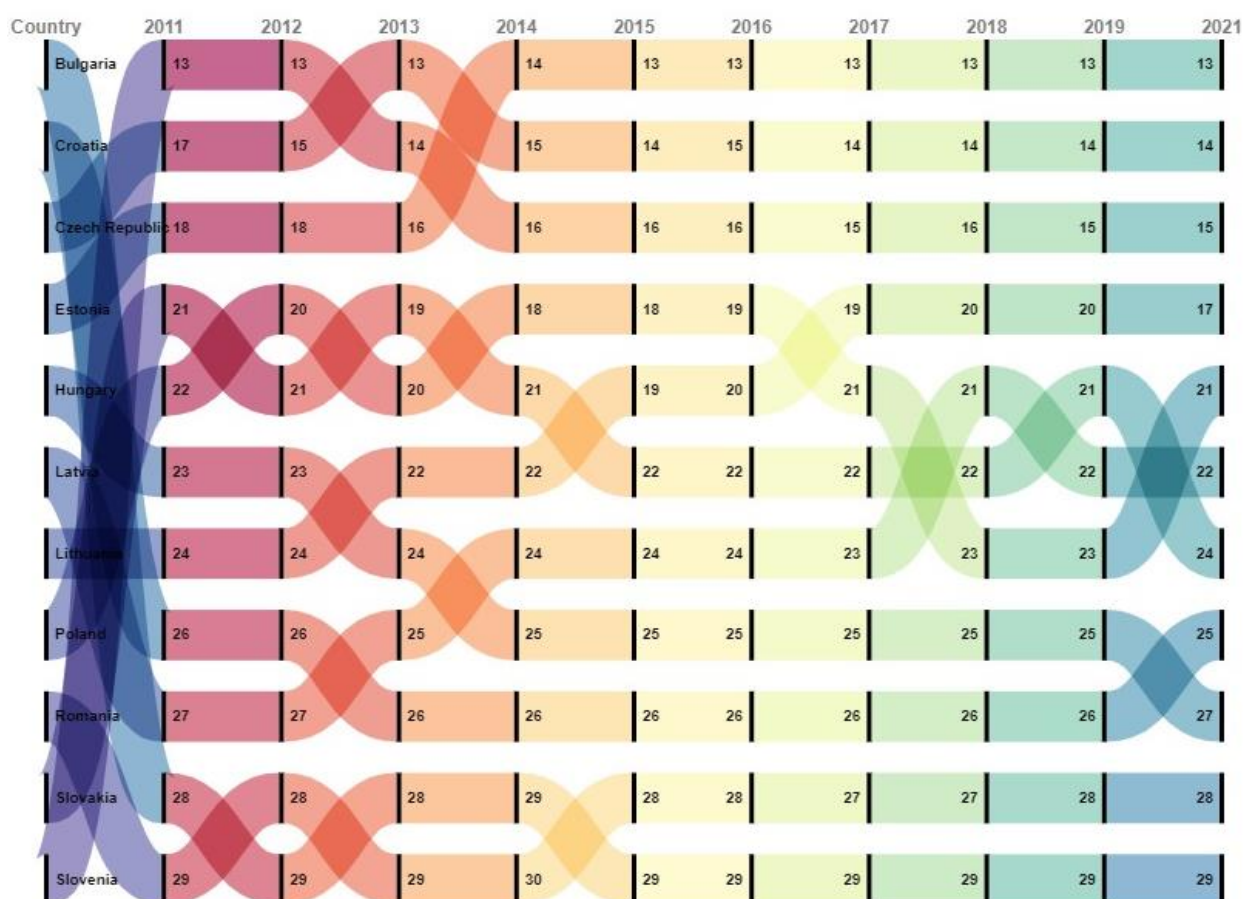
Have you ever wondered what happened to your favorite stars? There are TV programs or magazine articles devoted to updating the public on the professional and personal lives of beloved celebrities under the heading “Where Are They Now?”. In a similar way, the Catch-Up Index, in addition to the most current ranking of 35 European countries on selected indicator, offers a look back at the performance of the countries in the index in comparative perspective. As the index has been published since 2011, the performance is registered in a decade old period. These are the most important findings in Index 2021:

- The top performers in index 2021 in the ranking of 35 countries by overall score are Denmark (1st with 72 points out of 100), the Netherlands (2nd with 71 points) with Sweden (3rd) and Finland (4th) with 70 points each with just minimal difference in the score, Luxembourg (5<sup>th</sup> with 69 points), Ireland (6<sup>th</sup> with 68) points and Iceland (7<sup>th</sup> with 67 points) on a scale from 100 to 0, highest to lowest score.
- The last three countries in the 2021 ranking are Bosnia and Herzegovina (35th with 19 points), Turkey (34th with 23 points) and Albania (33rd with 24 points).
- Index 2021 shows a gap between the best performers in the Northern and Western Europe and those lagging behind in the Southeast of the continent and this difference has remained since the first edition of the index in 2011.
- The East-West and North-South divides still persist, but the index shows that there is a catching-up process with EU11 countries performing equally or sometimes outperforming older member states.



- The comparison of data shows the catching-up of the EU11 was most dynamic in the 2011-2014 period after which the process slowed down or was reversed for some countries.
- The results of the index 2021 show that three EU11 countries - Estonia, the Czech Republic and Slovenia – are close to but do not outperform the average benchmark of 60 points of the EU14+2 group with respectively 58, 55 and 55 points.
- In the overall ranking, Estonia is 13th, the Czech Republic 14th and Slovenia 15th in the overall ranking out of 35 countries, while none of the EU11 countries is near the best performers of the EU14+2 group with the maximum score of 72 points.
- But along with the top three performers in the EU11 group, there is the dynamic trio of Estonia, Lithuania and Latvia, which have improved continuously both their scores and rankings between 2011 and 2021 with a regional pattern in the improvement as these are all Baltic counties.

### Changes in the Ranking of the EU11 countries between 2011 and 2021



- Estonia excels among the other EU11 states as it climbed from 18<sup>th</sup> in the overall ranking in 2011 to 13<sup>th</sup> position in 2021 and is now 9<sup>th</sup> out of 35 countries in Democracy, 11<sup>th</sup> in Economy and 13<sup>th</sup> in Governance, while Slovenia performs better in Quality of Life on 13<sup>th</sup> position.
- The year on year country developments in the index are as a rule incremental, but the long-term comparisons between the first edition and the latest 2021 edition show the levels of change, with Estonia's climbing up the ranking from 18<sup>th</sup> to 13<sup>th</sup> place and retaining it over the years.
- Index 2021 shows the trajectory of the new EU member states convergence with the rest, but there are cases of divergence of some countries indicated in the categories of Democracy and Governance.
- In Democracy, Hungary witnessed a significant drop of 7 positions and 17 score points and 4 positions and 6 points drop in Governance too from 2011 to 2021, while Poland dropped by 3 positions and 7 points in Governance in the same period from 2011 to 2021.

- The divergence trends may indicate changing views of the catching-up paradigm by some political leaders in CEE, who are rejecting the emulation of the “Western” counterparts, at least in democracy and governance and cherry-picking their participation in the European project.

There are several findings in index 2021, which confirm also the results of previous editions of the index, as follows:

- The EU11 as a group are still far from the top performers of the EU14+2 and their average scores are closest to the average benchmarks in the Economy and further away, but equally distant to the average scores in Quality of Life, Democracy and Governance, where the catching-up is slower.
- The new EU member states still differ in many respects from their counterparts in EU14+2, but at the same time make up a diverse group themselves.
- There are some findings that defy common preconceptions, e.g. several of the CEE countries have the lowest inequality levels in the EU - Slovakia (1<sup>st</sup> among 35 countries), Slovenia (2<sup>nd</sup>) and the Czech Republic (3<sup>rd</sup>) are the least unequal countries among the 35 countries according to the Gini indicator. But Bulgaria (34<sup>th</sup>), Lithuania (33<sup>rd</sup>) and Latvia (32<sup>nd</sup>) are the countries with the highest inequality and among the last in the ranking.

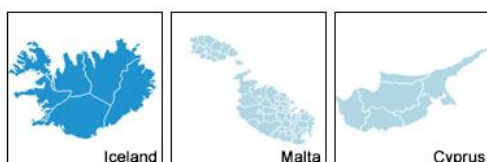
Similar to previous editions of the index, the cluster analysis divides the countries into groups with similar characteristics and provides another perspective of the Index 2021. Estonia is the only country from the EU11 group, which entered the second cluster by overall score. However, there is no EU11 country in the first cluster of best performers. The EU11 countries are not represented in the best performing clusters in the Economy category, there is only one new EU member state represented in best scoring Democracy clusters and fare slightly better in Quality of Life and Governance top clusters with three CEE countries in each of them.

- There are clear geographic patterns as shown in the cluster map by overall scores: all countries in the clusters four to six are exclusively concentrated on the Balkans or around it, while no country from this region is in the better performing clusters one to three. This creates a picture of the dividing lines in Europe between the Balkans and the rest.

- The comparison between clusters in the Index 2011 and Index 2021 by overall score shows that the new member states as a whole have moved up to the better performing clusters, catching-up with a number of EU14+2 countries and leaving the last two clusters to the EU candidate countries in Southeastern Europe.

### OVERALL SCORE: RANKING AND CLUSTERS CATCH-UP INDEX 2021 EDITION

|         |   |
|---------|---|
| Cluster | 1 |
| Cluster | 2 |
| Cluster | 3 |
| Cluster | 4 |
| Cluster | 5 |
| Cluster | 6 |



- The analyses show that there seems to be geographic and time patterns in the Catch-Up Index dynamics. For example, the top clusters consist of best performing countries in Western core and Northern Europe while the last two clusters consist of the candidate countries located in Southeastern Europe, which are falling behind.
- Furthermore, the trends in the ranking and scores shows that the catching-up and the changes were most dynamic from 2011 to the 2014-2016 period, after which there is a slowdown of the process. The changes in the period 2011-2021 happen mostly within the EU11 group, compared to the EU14+2 of old member states and the EU candidate countries.

## The Global Catch-Up Index 2021 Findings

| Global Catch-Up Index 2021          |               |      |         |
|-------------------------------------|---------------|------|---------|
| Overall Score: Ranking and Clusters |               |      |         |
| Country                             | Overall Score | Rank | Cluster |
| Norway                              | 74            | 1    | 1       |
| Ireland                             | 74            | 2    |         |
| Luxembourg                          | 72            | 3    |         |
| Switzerland                         | 72            | 4    |         |
| Netherlands                         | 70            | 5    |         |
| Denmark                             | 70            | 6    |         |
| Sweden                              | 70            | 7    |         |
| Iceland                             | 70            | 8    |         |
| Finland                             | 69            | 9    |         |
| Australia                           | 67            | 10   | 2       |
| Canada                              | 67            | 11   |         |
| Austria                             | 66            | 12   |         |
| Belgium                             | 65            | 13   |         |
| Germany                             | 65            | 14   |         |
| Japan                               | 63            | 15   |         |
| UK                                  | 63            | 16   |         |
| France                              | 63            | 17   |         |
| South Korea                         | 62            | 18   |         |
| USA                                 | 61            | 19   | 3       |
| Estonia                             | 60            | 20   |         |
| Slovenia                            | 59            | 21   |         |
| Spain                               | 59            | 22   |         |
| Malta                               | 58            | 23   |         |
| Portugal                            | 58            | 24   |         |
| Czech Republic                      | 58            | 25   |         |
| Italy                               | 57            | 26   |         |
| Cyprus                              | 56            | 27   |         |
| Israel                              | 55            | 28   | 4       |
| Lithuania                           | 53            | 29   |         |
| Greece                              | 52            | 30   |         |
| Poland                              | 52            | 31   |         |
| Latvia                              | 51            | 32   |         |
| Slovakia                            | 51            | 33   |         |
| Croatia                             | 49            | 34   |         |
| Hungary                             | 47            | 35   |         |
| Romania                             | 44            | 36   |         |
| Bulgaria                            | 41            | 37   | 5       |
| Montenegro                          | 39            | 38   |         |
| Albania                             | 38            | 39   |         |
| Serbia                              | 37            | 40   |         |
| Georgia                             | 37            | 41   |         |
| North Macedonia                     | 36            | 42   |         |
| Turkey                              | 35            | 43   |         |
| Armenia                             | 35            | 44   |         |
| Ukraine                             | 34            | 45   |         |
| Moldova                             | 33            | 46   | 6       |
| BiH                                 | 33            | 47   |         |
| China                               | 33            | 48   |         |
| Kazakhstan                          | 32            | 49   |         |
| Belarus                             | 31            | 50   |         |
| Kosovo                              | 30            | 51   |         |
| Russia                              | 30            | 52   |         |
| Kyrgyzstan                          | 23            | 53   |         |
| Azerbaijan                          | 23            | 54   |         |
| Uzbekistan                          | 16            | 55   |         |
| Tajikistan                          | 14            | 56   |         |
| Turkmenistan                        | 11            | 57   |         |

In addition to the regular Catch-Up Index, this year the Global Catch-Up Index came into existence expanding the comparison to 57 countries. The Global Index includes several groups of countries – the EU member states – “old” and “new”, the candidate and potential candidate countries, those closely associated with the EU – such as the European Economic Area and Switzerland, EU’s neighbors that are former socialist countries too and in different ways engaged with the EU, including those in Central Asia. The rest are a number of countries around the world – Canada, the US, China, Russia, Australia, Japan, South Korea and Israel. The methodology followed largely the model of the Catch-Up Index with the indicators divided into Economy, Quality of Life, Democracy and Governance categories.

There is an important disclaimer: though the Catch-Up Index and the Global Index are very similar, the Global Index uses a smaller number of indicators, which has impact on the results, including differences in the ranking of countries.

- In the global ranking, the winner is Norway (1<sup>st</sup> out of 74 countries with 74 points), followed by Ireland with an identical score (2<sup>nd</sup> with 74 points) with a minimal difference after the decimal separator.

- The best performing EU11 country in the global ranking is Estonia (20<sup>th</sup> out of 57 countries with 60 points), followed closely by Slovenia (21<sup>st</sup> with 59 points), which are part of the third cluster of good performers.

- The EU countries dominate the best performing clusters, along with those most closely associated with them such as the EEA and Switzerland or recent member UK.

- The other developed Western-style

democracies around the world perform generally remarkably well in each of the four categories and in the overall global ranking.

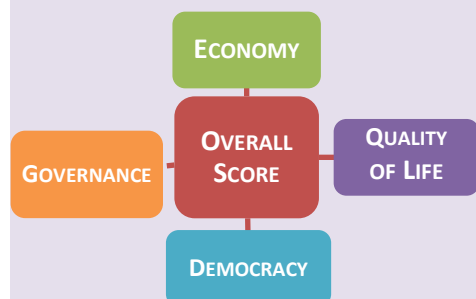
- In Quality of Life, which is measured by education, life expectancy and inequality indicators, the European countries give up the first two spots to two Asian democracies – South Korea and Japan – but continue to perform excellently.
- As a whole, the EU11 countries outperform their counterparts outside of the EU (i.e. the former socialist block members) across the board.
- Several of the EU11 countries hold their own against a number of developed countries, including in Quality of Life, Democracy and Governance, with Slovenia, the Czech Republic and the three Baltic countries generally outshining the others.
- It is indicative that none of the EU member states is part of the last two clusters of underperforming countries.

### **“You don’t know how lucky you are”: The Economist Sums It Up**

A recent Economist article on the transition of the former Communist bloc countries (12 February 2022 edition) came up with a telling subtitle - “The promise of former eastern-bloc economies is mostly unfulfilled: But those that joined the EU have done much better than the rest”. The article sums up the developments in the region in the last 30 years nicely and it is supported by the findings of the Global Catch-up Index.

Better still, the Economist article addresses the EU member states in Central and Eastern Europe “You don’t know how lucky you are”, summing up that “Among the economies which joined the EU, in contrast, growth remained strong. In 2016, GDP per person in Romania overtook that in Russia. While much of the former Soviet Union remained dependent on exports of grain, gas and gold, central Europe and the Baltics became deeply integrated with European labor and financial markets, and tied into European supply chains.” There is a warning though “Sailing has not been entirely smooth; over the past decade, populist governments in Poland and Hungary have weakened democratic institutions. But such systems remain miles away from the authoritarian regimes common across most of the post-Soviet world.”

## Categories, scores and ranks: About the methodology approach



The Catch-Up Index model is simple and is designed to assess the performance of the selected countries across the four categories. Each country is ascribed a score in each category, and the Overall Score is the average of those in the four categories combined. The countries are then ranked according to that score. Performance in the broad categories is assessed on the basis of indicators and sub-indicators, each having a different weight assigned to it, depending on its importance in the Catch-Up Index model. The raw data from different sources is standardized on a scale of 0 to 100 points, so that comparisons or other processing of scores can be made between countries, categories and indicators. The countries' performance is measured relative to each another and not to external targets,

because the standardization method assigns the highest score to the best performing country and vice versa. As mentioned above, the scores run on a scale from 0 (lowest) to 100 (highest), while the ranks range from 1 (highest) to 35 (lowest) – the number of countries included in the Index.

The EU member states are divided into four main groups – the EU11 and the EU14+2, the CC – candidate countries and PCC – the potential candidate countries. The EU11 group includes the ten post-communist countries from Central and Eastern Europe (CEE), which joined in 2004, 2007 and Croatia in 2013. The other, the control group is the EU14+2 – the older member states plus Cyprus and Malta, which also joined in 2004 but come from a different context and path of development, and thus are closer in characteristics to the older EU members. The UK, which used to be a member state until 2020 and Iceland, which used to be a candidate state are shown separately.

The model uses a set of several yardsticks - or benchmarks – against which to assess the progress or lagging of the EU11 in meeting the standards of the rest of the EU. The benchmarks can be considered to be targets for the EU11.

The Index takes as its main benchmark the “EU14+2 Average”, which is the mean of the scores of these countries in a given category or indicator as a component of the overall score. The average (or mean of the scores) was preferred to the median (the “middle number” in a range of scores in this case) for a number of practical reasons. The “EU14+2 Average” is a group score and does not correspond to a specific country. Sometimes, the median is also used and the corresponding score can be associated with a particular country.

The other two important benchmarks are the “EU14+2 Maximum”, which is the highest score in the group and the “EU14+2 Minimum”, which is the lowest score in the EU14+2 group. Both the maximum and the minimum score can be associated with a respective country.

Once the “maximum”, “average” and “minimum” are established and the countries are ranked according to their score, it can be easily observed if a particular country is above, below or near any of these benchmarks and how near or far it is to the target.

Other group scores – “average” for the EU11, the candidates or potential candidates – can be drawn depending on the task of the comparison.

The “EU14+2 Average” is the main benchmark, because the maximum may be an unrealistically high target, while setting the minimum – the lowest score – as a goal would have no motivational value.



## Clusters and Ranking by Overall Score in Index 2021

| Overall Score: Ranking and Clusters 2021 |                 |                    |                   |         |
|--|-----------------|--------------------|-------------------|---------|
| Group                                    | Country         | Overall Score 2021 | Overall Rank 2021 | Cluster |
| EU14+2                                   | Denmark         | 72                 | 1                 | 1       |
| EU14+2                                   | Netherlands     | 71                 | 2                 |         |
| EU14+2                                   | Sweden          | 70                 | 3                 |         |
| EU14+2                                   | Finland         | 70                 | 4                 |         |
| EU14+2                                   | Luxembourg      | 69                 | 5                 |         |
| EU14+2                                   | Ireland         | 68                 | 6                 |         |
| Iceland                                  | Iceland         | 67                 | 7                 |         |
| EU14+2                                   | Germany         | 64                 | 8                 | 2       |
| EU14+2                                   | Austria         | 63                 | 9                 |         |
| UK                                       | UK              | 61                 | 10                |         |
| EU14+2                                   | Belgium         | 60                 | 11                |         |
| EU11                                     | Estonia         | 58                 | 12                |         |
| EU14+2                                   | France          | 58                 | 13                |         |
| EU11                                     | Slovenia        | 55                 | 14                | 3       |
| EU11                                     | Czech Republic  | 55                 | 15                |         |
| EU14+2                                   | Portugal        | 53                 | 16                |         |
| EU11                                     | Lithuania       | 52                 | 17                |         |
| EU14+2                                   | Spain           | 51                 | 18                |         |
| EU14+2                                   | Cyprus          | 51                 | 19                |         |
| EU14+2                                   | Malta           | 51                 | 20                |         |
| EU11                                     | Poland          | 48                 | 21                |         |
| EU11                                     | Latvia          | 47                 | 22                |         |
| EU14+2                                   | Italy           | 46                 | 23                |         |
| EU11                                     | Slovakia        | 46                 | 24                |         |
| EU11                                     | Croatia         | 42                 | 25                | 4       |
| EU11                                     | Hungary         | 40                 | 26                |         |
| EU14+2                                   | Greece          | 40                 | 27                |         |
| EU11                                     | Romania         | 37                 | 28                |         |
| EU11                                     | Bulgaria        | 36                 | 29                | 5       |
| CC                                       | Serbia          | 30                 | 30                |         |
| CC                                       | Montenegro      | 29                 | 31                |         |
| CC                                       | North Macedonia | 27                 | 32                | 6       |
| CC                                       | Albania         | 24                 | 33                |         |
| CC                                       | Turkey          | 23                 | 34                |         |
| PCC                                      | BiH             | 19                 | 35                |         |

The top performers in index 2021 by overall score are Denmark (1<sup>st</sup> with 72 points out of 100), the Netherlands (2<sup>nd</sup> with 71 points) with Sweden (3<sup>rd</sup>) and Finland (4<sup>th</sup>) with 70 points each with just minimal difference in the score. The last three countries are Bosnia and Herzegovina (35<sup>th</sup> with 19 points), Turkey (34<sup>th</sup> with 23 points) and Albania (33<sup>rd</sup> with 24 points).

The first and second clusters are composed of old member states and two other Western countries (Iceland and UK) with Estonia the only EU11 country in the second cluster. The third cluster is composed mostly of Central and South European countries. The fourth cluster, which sits between the more successful performers and those lagging behind, is composed of EU member states in the Balkans and their neighbor Hungary. The last two clusters at the bottom of the ranking are composed exclusively of the rest of the Balkan countries, which are candidate or potential candidate EU members.



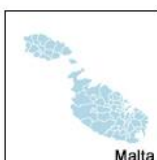
There are clear geographic patterns in the cluster map by overall scores. All countries in the clusters four to six are exclusively concentrated on the Balkans or around it, while no country from this region is in the better performing clusters one to three. This creates a picture of the dividing lines in Europe between the “wider” Balkans region and the rest.

#### OVERALL SCORE: RANKING AND CLUSTERS CATCH-UP INDEX 2021 EDITION

|         |   |
|---------|---|
| Cluster | 1 |
| Cluster | 2 |
| Cluster | 3 |
| Cluster | 4 |
| Cluster | 5 |
| Cluster | 6 |



Iceland



Malta



Cyprus



The comparison of clusters between the first edition of the index in 2011 and the current one, i.e. Index 2021, provides additional perspective with a number of interesting findings. The first two clusters by overall score consisted of only 19 states in Index 2011, in Index 2019 they were 24 and in Index 2021 there were only 13 countries. This shows that over the years more countries moved to the better performing groups, but yet again it is becoming a more exclusive club as fewer countries manage to maintain excellent performance across the four categories.

With regard to the catching-up of the new EU members, in Index 2011 the EU11 champions – Slovenia (13<sup>th</sup> position in 2011), the Czech Republic (17<sup>th</sup> position in 2011) and Estonia (18<sup>th</sup> position in 2011) were part of just the third cluster and were the only new member states there. But in Index 2021 Estonia has moved to the second cluster (it was there in Index 2019 too). Six new member states became part of the third cluster already in Index 2019 and have stayed there in the current Index 2021 too. These are the Czech Republic, Slovenia, Lithuania, Slovakia, Latvia and Poland, moving up the hierarchy of clusters.

In 2011, six of the current new member states were in the “transitional” fourth cluster, situated between the better and worse performing countries, and two others - Romania and Bulgaria - were in



the fifth cluster. In Index 2021, this fourth transitional cluster has shrunk from 8 to 5 countries. Bulgaria and Romania have become part of the fourth cluster already in Index 2017 together with Hungary, Croatia and Greece and the rest of the CEE countries have moved up. Furthermore, in Index 2021 there are no new member states in the fifth and sixth cluster, as they all have moved up to other groups, and there are only EU candidate countries from the Balkans in the last two clusters.

The trends show that between the Index 2011 and Index 2021, the new member states have “graduated” to the better performing clusters, catching-up with a number of EU14+2 countries and leaving the last two clusters to the EU candidate countries in Southeastern Europe.

### About the cluster analysis

The cluster analysis divides countries in the Catch-Up Index into groups based on shared characteristics. In addition, it also shows the proximity of the clusters to one another, i.e. some clusters are closer to each other and more distant from the rest. The clusters are also hierarchical, with better performing countries in clusters of higher order.

The findings of the cluster analysis reveal divisions in Europe along the lines of shared characteristics as identified by the indicators of the Catch-Up Index. This “Europe” is different from the one that is usually perceived to be divided along political lines and by legal arrangements.

The findings of the cluster analysis provide an alternative narrative about the divergence and convergence processes in Europe. It can be argued that countries within one cluster or those clusters in closer proximity are more likely to forge common approaches or policies even if they have disagreements in the short term. Thus the cluster analysis shows a more “organic Europe” - a snapshot of similarity and dissimilarity, based on characteristics of countries, not political agreements or legally bindings. This allows to better track the processes of convergence and divergence on the continent.

## Clusters and Ranking in Economy in Index 2021

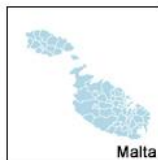
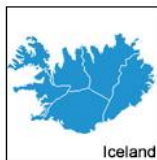
| Economy Scores: Ranking and Clusters 2021 |                 |            |           |         |
|---|-----------------|------------|-----------|---------|
| Group                                     | Country         | Score 2021 | Rank 2021 | Cluster |
| EU14+2                                    | Luxembourg      | 73         | 1         | 1       |
| EU14+2                                    | Ireland         | 73         | 2         |         |
| EU14+2                                    | Denmark         | 71         | 3         |         |
| EU14+2                                    | Netherlands     | 69         | 4         |         |
| EU14+2                                    | Sweden          | 68         | 5         |         |
| EU14+2                                    | Germany         | 65         | 6         |         |
| EU14+2                                    | Austria         | 61         | 7         |         |
| EU14+2                                    | Finland         | 61         | 8         | 2       |
| UK  | UK              | 60         | 9         |         |
| Iceland                                   | Iceland         | 59         | 10        |         |
| EU11                                      | Estonia         | 57         | 11        |         |
| EU11                                      | Czech Republic  | 55         | 12        |         |
| EU14+2                                    | France          | 55         | 13        |         |
| EU14+2                                    | Belgium         | 54         | 14        |         |
| EU14+2                                    | Malta           | 54         | 15        |         |
| EU11                                      | Lithuania       | 54         | 16        | 3       |
| EU11                                      | Slovenia        | 51         | 17        |         |
| EU11                                      | Latvia          | 51         | 18        |         |
| EU14+2                                    | Cyprus          | 48         | 19        |         |
| EU11                                      | Poland          | 47         | 20        |         |
| EU14+2                                    | Spain           | 47         | 21        |         |
| EU11                                      | Slovakia        | 46         | 22        |         |
| EU11                                      | Hungary         | 45         | 23        | 4       |
| EU11                                      | Romania         | 43         | 24        |         |
| EU14+2                                    | Portugal        | 43         | 25        |         |
| EU11                                      | Bulgaria        | 41         | 26        |         |
| EU11                                      | Croatia         | 41         | 27        |         |
| EU14+2                                    | Italy           | 40         | 28        | 5       |
| CC  | Turkey          | 36         | 29        |         |
| CC  | North Macedonia | 34         | 30        |         |
| CC  | Serbia          | 34         | 31        |         |
| EU14+2                                    | Greece          | 32         | 32        |         |
| CC  | Montenegro      | 29         | 33        | 6       |
| CC  | Albania         | 26         | 34        |         |
| PCC                                       | BiH             | 24         | 35        |         |

The top three performers in Economy in Index 2021 are Luxembourg (1<sup>st</sup> with 73 points), followed with a just slight difference in score by Ireland (2<sup>nd</sup> with 73 points) and Denmark (3<sup>rd</sup> with 71 points). The last three countries in the ranking are Montenegro (33<sup>rd</sup> with 29 points), Albania (34<sup>th</sup> with 26 points) and BiH (35<sup>th</sup> with 24 points).

The first cluster is composed of only Western EU member states. But the second cluster of also strong performers, includes the EU11 countries of Estonia (11<sup>th</sup> with 57 points) and the Czech Republic (12<sup>th</sup> with 55 points), in the same group as the UK and France. The third cluster is composed of CEE and South European states, and the fourth cluster has a similar composition. The last fifth and six clusters are composed of countries in the Balkans, including the EU member state Greece and the candidate and potential candidate countries.

### ECONOMY SCORES: RANKING AND CLUSTERS CATCH-UP INDEX 2021 EDITION

|         |   |
|---------|---|
| Cluster | 1 |
| Cluster | 2 |
| Cluster | 3 |
| Cluster | 4 |
| Cluster | 5 |
| Cluster | 6 |



The comparison between the distribution and composition of clusters between the 2011 and 2021 editions of the index in the Economy category shows several changes, having in mind that in 2011 there were five clusters altogether and six in 2021.

The number of countries in the first and second clusters remained unchanged when 2011 and 2021 are compared.

With regard to catching-up, Slovenia used to be in the second cluster in 2011, but moved down to the third cluster in 2021. Estonia, the Czech Republic and Lithuania joined the second cluster in Economy in 2021 – and improvement over 2019, when there were no new EU member states in the first two clusters in the current index. This third cluster in both 2011 and 2021 contains a number of new EU member states – four in 2011 and five in 2021.

The fourth cluster in 2011 contained six current EU new member states (having in mind Croatia was still an EU candidate in 2011), but only 3 in 2021. In 2021, the fourth “transitional” cluster have enlarged and contains more old EU member states - Portugal and Italy compared to 2011, when there was only Greece which downgraded to the fifth cluster in 2021. A year on year comparison shows that Cyprus and Spain moved from the fourth cluster in 2019 to the third one in 2021.

In regard to the last clusters, there is no substantial change in their composition. In 2011 the last cluster (fifth at the time) consisted of only candidate and potential candidate countries and in 2021 it was split into fifth and sixth cluster and BiH and Albania moving to the sixth. It was only Greece that was downgraded from the forth cluster in 2011 to the fifth one in 2021.

## Clusters and Ranking in Quality of Life in Index 2021

| Quality of Life Scores: Ranking and Clusters 2021 |                 |            |           |         |
|---|-----------------|------------|-----------|---------|
| Group   | Country         | Score 2021 | Rank 2021 | Cluster |
| EU14+2  | Finland         | 71         | 1         | 1       |
| Iceland   | Iceland         | 70         | 2         |         |
| EU14+2  | Netherlands     | 69         | 3         |         |
| EU14+2  | Sweden          | 68         | 4         |         |
| EU14+2  | Denmark         | 68         | 5         |         |
| EU14+2  | Belgium         | 67         | 6         |         |
| EU14+2  | Luxembourg      | 67         | 7         |         |
| EU14+2  | Ireland         | 66         | 8         |         |
| EU14+2  | Austria         | 63         | 9         | 2       |
| EU14+2  | Germany         | 62         | 10        |         |
| UK  | UK              | 61         | 11        |         |
| EU14+2  | France          | 61         | 12        |         |
| EU11  | Slovenia        | 60         | 13        |         |
| EU11  | Czech Republic  | 57         | 14        |         |
| EU14+2  | Cyprus          | 56         | 15        |         |
| EU11  | Estonia         | 55         | 16        | 3       |
| EU14+2  | Spain           | 52         | 17        |         |
| EU11  | Poland          | 52         | 18        |         |
| EU14+2  | Portugal        | 51         | 19        |         |
| EU14+2  | Italy           | 50         | 20        |         |
| EU14+2  | Malta           | 50         | 21        |         |
| EU11  | Lithuania       | 49         | 22        |         |
| EU11  | Slovakia        | 46         | 23        |         |
| EU14+2  | Greece          | 46         | 24        | 4       |
| EU11  | Croatia         | 43         | 25        |         |
| EU11  | Latvia          | 42         | 26        |         |
| EU11  | Hungary         | 39         | 27        | 5       |
| CC  | Montenegro      | 31         | 28        |         |
| EU11  | Romania         | 30         | 29        |         |
| CC  | Turkey          | 30         | 30        |         |
| CC  | Serbia          | 30         | 31        |         |
| EU11  | Bulgaria        | 27         | 32        | 6       |
| CC  | Albania         | 21         | 33        |         |
| PCC   | BiH             | 21         | 34        |         |
| CC  | North Macedonia | 21         | 35        |         |

The top three performers in the Quality of Life category are Finland (1<sup>st</sup> with 71 points), Iceland (2<sup>nd</sup> with 70 points) and the Netherlands (3<sup>rd</sup> with 69 points). The last three countries in the ranking are with identical results with just a slight difference in scores - Albania (33<sup>rd</sup> with 21 points), BiH (34<sup>th</sup> with 21 points) and North Macedonia (35<sup>th</sup> with 21 points).

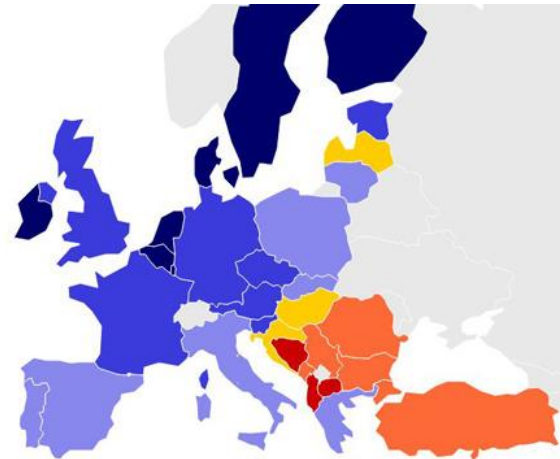
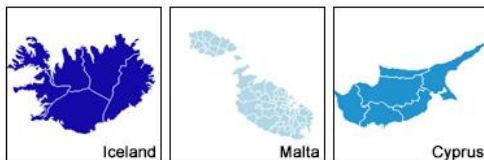
The first two clusters contain a relatively small number of countries – mostly from the EU14+2, but the three EU11 countries – Slovenia (13<sup>th</sup>), the Czech Republic (14<sup>th</sup>) and Estonia (16<sup>th</sup>) are also included in the second cluster.

The fourth cluster is composed of just three EU11 countries. The countries last two clusters are all Balkan countries – a mix of EU members and candidate states.

There are a number of differences and similarities in the Quality of Life clusters when the Index 2011 and Index 2021 are compared. In 2011, the first and second cluster consisted of a large number of countries - 12 in the first cluster and 5 in the second one. This was the situation in Index 2019 too. But in 2021 only 8 countries remained in the first cluster of the best performers.

### QUALITY OF LIFE SCORES: RANKING AND CLUSTERS CATCH-UP INDEX 2021 EDITION

|         |   |
|---------|---|
| Cluster | 1 |
| Cluster | 2 |
| Cluster | 3 |
| Cluster | 4 |
| Cluster | 5 |
| Cluster | 6 |



In 2011 only one new EU member state – Slovenia - made it to the second cluster and there is no EU11 country in the first cluster. But in 2021, there were already three EU11 countries – Slovenia, the Czech Republic and Estonia – in the second cluster among the best performers.

Within the fourth “transitional” cluster, Slovakia, Lithuania and Poland graduated from the 2011 positions in the fourth cluster to the third one in Index 2021. They were replaced by Hungary, which was downgraded from the third cluster in 2011 respectively to the fourth one in 2019. Greece started in the second cluster in 2011, dropped to the fourth cluster in 2019, but in 2021 it moved up again in the third cluster.

There are changes in the fifth and six clusters too. Four candidate countries and Romania used to be in the last sixth cluster in 2011. But in 2021 the sixth cluster has shrunk leaving Albania, BiH and North Macedonia. Romania and Turkey moved up to the fifth cluster to join Bulgaria, Montenegro and Serbia. Latvia managed to leave the fifth cluster of 2011 to join the fourth cluster in 2021.

## Clusters and Ranking in Democracy in Index 2021

| Democracy Scores: Ranking and Clusters 2021 |                 |            |           |         |
|---|-----------------|------------|-----------|---------|
| Group                                       | Country         | Score 2021 | Rank 2021 | Cluster |
| EU14+2                                      | Denmark         | 76         | 1         | 1       |
| EU14+2                                      | Finland         | 75         | 2         |         |
| EU14+2                                      | Sweden          | 74         | 3         |         |
| EU14+2                                      | Netherlands     | 74         | 4         |         |
| Iceland                                     | Iceland         | 69         | 5         | 2       |
| EU14+2                                      | Ireland         | 69         | 6         |         |
| EU14+2                                      | Luxembourg      | 66         | 7         |         |
| EU14+2                                      | Germany         | 64         | 8         |         |
| EU11  | Estonia         | 62         | 9         | 3       |
| EU14+2                                      | Belgium         | 61         | 10        |         |
| EU14+2                                      | Austria         | 60         | 11        |         |
| EU14+2                                      | Portugal        | 58         | 12        |         |
| UK  | UK              | 57         | 13        |         |
| EU14+2                                      | France          | 57         | 14        |         |
| EU11  | Lithuania       | 54         | 15        |         |
| EU11  | Slovenia        | 53         | 16        |         |
| EU14+2                                      | Spain           | 53         | 17        |         |
| EU11  | Czech Republic  | 53         | 18        |         |
| EU14+2                                      | Cyprus          | 52         | 19        |         |
| EU14+2                                      | Italy           | 52         | 20        |         |
| EU11  | Latvia          | 51         | 21        |         |
| EU14+2                                      | Malta           | 51         | 22        |         |
| EU11  | Slovakia        | 45         | 23        | 4       |
| EU11  | Poland          | 44         | 24        |         |
| EU11  | Romania         | 42         | 25        |         |
| EU14+2                                      | Greece          | 41         | 26        |         |
| EU11  | Croatia         | 40         | 27        | 5       |
| EU11  | Bulgaria        | 37         | 28        |         |
| EU11  | Hungary         | 34         | 29        |         |
| CC  | Serbia          | 28         | 30        |         |
| CC  | Albania         | 27         | 31        | 6       |
| CC  | Montenegro      | 26         | 32        |         |
| CC  | North Macedonia | 26         | 33        |         |
| PCC   | BiH             | 18         | 34        |         |
| CC  | Turkey          | 10         | 35        |         |

In Democracy, the top three performers are Denmark (1<sup>st</sup> with 76 points), Finland (2<sup>nd</sup> with 75 points) and Sweden (3<sup>rd</sup> with 74 points). The last three countries in the ranking are North Macedonia (33<sup>rd</sup> with 26 points), BiH (34<sup>th</sup> with 18 points) and Turkey (35<sup>th</sup> with 10 points).

The first two clusters with the best performers are composed of small number of countries – just eight and they are all North and Western European. The third cluster is the biggest one with a mix of countries across the EU from CEE, Central and Southern Europe.

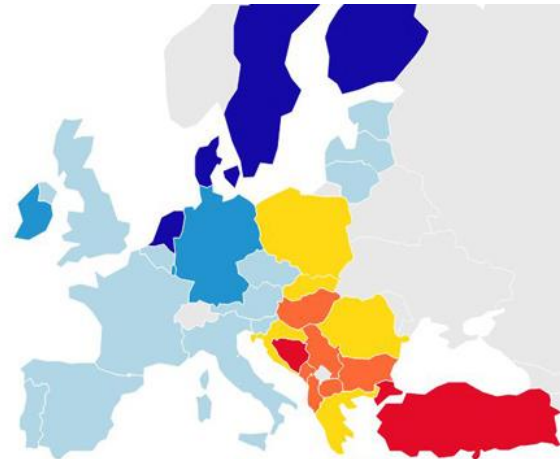
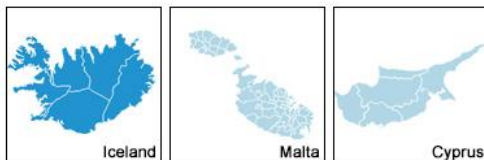
The fourth cluster is the transitional one where countries can go either way. The last two clusters include countries from Southeastern Europe with the exception of Hungary, which is their immediate neighbor anyway.



The changes in the Democracy clusters between 2011 and 2021 show the following. The number of countries in the first and second cluster, which consists of the best performers, has decreased from ten in 2011 and fourteen in 2019 to eight in 2021. Estonia, the best performer of the EU11 group, used to be in the second cluster in the last index 2019 but moved to the third cluster in 2021.

### DEMOCRACY SCORES: RANKING AND CLUSTERS CATCH-UP INDEX 2021 EDITION

|         |   |
|---------|---|
| Cluster | 1 |
| Cluster | 2 |
| Cluster | 3 |
| Cluster | 4 |
| Cluster | 5 |
| Cluster | 6 |



The composition of the third cluster is indicative. In 2011, it consisted of twelve countries out of which seven were new EU member states with Poland and Hungary among them. In the previous Index 2019, the third cluster has shrunk to nine countries with five new EU countries, but both Poland and Hungary are downgraded to the fourth cluster. In Index 2021, Poland remained in the fourth cluster, but Hungary dropped further to the fifth cluster. The fourth “transitional” cluster is quite telling too. It consisted of a mix of old and new member states in 2011, but in 2019 there were mostly EU11 countries and Greece. In 2019, this fourth cluster was joined by the downgraded Hungary and Poland and the upgraded Bulgaria and Romania, which moved up from the fifth cluster.

The fifth and sixth clusters experienced change too. In 2011, there were a number of candidate and potential candidate countries and two new EU member states in the fifth cluster – Bulgaria and Romania. Bulgaria and Romania managed to move up to the fourth cluster in 2019, joining countries such as Hungary, Greece and Croatia. However, in the current Index 2021 the EU member states of Hungary and Bulgaria, backslid to the fifth cluster joining several of the candidate countries from the Balkans. The last, sixth cluster consists of BiH and Turkey.



## Clusters and Ranking in Governance in Index 2021

| Governance Scores: Ranking and Clusters 2021 |                 |            |           |         |
|--|-----------------|------------|-----------|---------|
| Group  | Country         | Score 2021 | Rank 2021 | Cluster |
| EU14+2                                       | Denmark         | 72         | 1         | 1       |
| EU14+2                                       | Finland         | 72         | 2         |         |
| EU14+2                                       | Sweden          | 72         | 3         |         |
| EU14+2                                       | Luxembourg      | 71         | 4         |         |
| EU14+2                                       | Netherlands     | 71         | 5         |         |
| Iceland                                      | Iceland         | 70         | 6         |         |
| EU14+2                                       | Austria         | 68         | 7         |         |
| EU14+2                                       | Germany         | 67         | 8         |         |
| UK   | UK              | 65         | 9         |         |
| EU14+2                                       | Ireland         | 63         | 10        | 2       |
| EU14+2                                       | France          | 60         | 11        |         |
| EU14+2                                       | Portugal        | 60         | 12        |         |
| EU11   | Estonia         | 59         | 13        |         |
| EU14+2                                       | Belgium         | 58         | 14        |         |
| EU11   | Slovenia        | 57         | 15        |         |
| EU11   | Czech Republic  | 56         | 16        | 3       |
| EU14+2                                       | Spain           | 54         | 17        |         |
| EU11   | Lithuania       | 50         | 18        |         |
| EU14+2                                       | Malta           | 50         | 19        |         |
| EU14+2                                       | Cyprus          | 49         | 20        |         |
| EU11   | Poland          | 48         | 21        |         |
| EU11   | Slovakia        | 48         | 22        |         |
| EU11   | Latvia          | 46         | 23        |         |
| EU11   | Croatia         | 44         | 24        |         |
| EU14+2                                       | Italy           | 44         | 25        |         |
| EU11   | Hungary         | 41         | 26        | 4       |
| EU14+2                                       | Greece          | 39         | 27        |         |
| EU11   | Bulgaria        | 38         | 28        |         |
| EU11   | Romania         | 34         | 29        |         |
| CC   | Montenegro      | 28         | 30        | 5       |
| CC   | Serbia          | 26         | 31        |         |
| CC   | North Macedonia | 26         | 32        |         |
| CC   | Albania         | 22         | 33        |         |
| CC   | Turkey          | 15         | 34        | 6       |
| PCC  | BiH             | 12         | 35        |         |

In governance, there are three countries on top with identical results with just a slight difference in the scores - Denmark (1<sup>st</sup> with 72 points), Finland (2<sup>nd</sup> with 72 points). The countries at the bottom of the ranking are Albania (33<sup>rd</sup> with 22 points), Turkey (34<sup>th</sup> with 15 points) and Bosnia and Herzegovina (35<sup>th</sup> with 12 points).

The first and second cluster of the best governed countries include North and West European countries as well as three EU11 ones – Estonia (13<sup>th</sup>), Slovenia (15<sup>th</sup>) and the Czech Republic (16<sup>th</sup>).

The third cluster is composed of countries from CEE and Southern Europe. The fourth cluster includes the EU member states of Hungary, Greece, Bulgaria and Romania.

The last two clusters – fifth and sixth – are composed of the rest of the Southeast European countries, which are EU candidates.

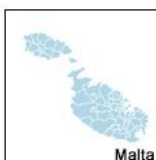
The comparisons between clusters in the Index 2011 and Index 2021 show the following results, having in mind there were five clusters in total in 2011 and six clusters in 2021 in the Governance category.

### GOVERNANCE SCORES: RANKING AND CLUSTERS CATCH-UP INDEX 2021 EDITION

|         |   |
|---------|---|
| Cluster | 1 |
| Cluster | 2 |
| Cluster | 3 |
| Cluster | 4 |
| Cluster | 5 |
| Cluster | 6 |



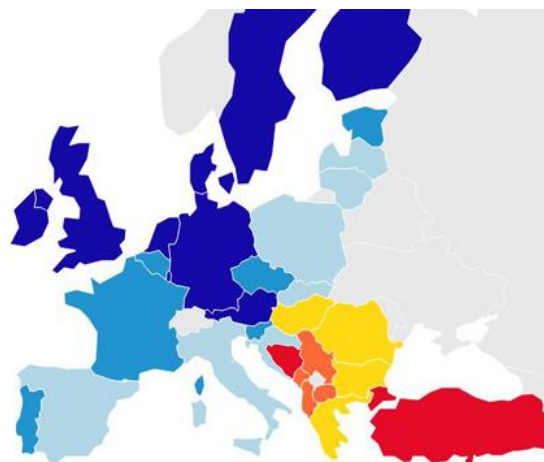
Iceland



Malta



Cyprus



In 2011, two new EU member states were in the second cluster – Slovenia and the Czech Republic. In 2021, Estonia joined them too, thus there are three EU11 countries in the second cluster. The third cluster expanded between 2011 and 2021. In 2011, there were five countries in it, four out of which were new EU member states and one old one. In 2021, there are already nine countries in the third cluster with five EU11 and four EU14+2 countries.

The fourth “transitional” cluster in 2011 had seven countries, but shrunk to just four in 2021. I.e. in 2011, there were Italy and Greece among several new EU member states, while in 2021 there are only Hungary, Greece, Bulgaria and Romania remaining in the fourth cluster as the others have moved up to other clusters. The fifth and last cluster of 2011, which consisted only of EU candidate countries have split into two in 2021. Turkey and BiH are in the last sixth cluster and the other candidate countries remaining in the fifth.

## Trends: Changes in Scores and Ranks between 2011-2021

### Trends by Overall Performance between 2011 and 2021

The table below represents the changes in the Catch-Up Index in the period 2011-2021 by ranking and scores with the countries shown according to their group – EU14+2, EU11, candidates and potential candidate as well as Iceland and the UK.

The trends show that the changes happened mostly in the group of the EU11 countries. The most convergence processes are registered by the three Baltic countries from the EU11 group- Estonia, Latvia and Lithuania – which scores and ranks have been improving over the years. However, the divergence is also associated with EU11 countries – Hungary, Poland and Slovakia – which have been gradually sliding down the rankings and losing points over the years.

In the group of the candidate countries, the changes by overall score show little change over the years, with Albania showing a positive trend and Montenegro, Turkey and BiH losing positions.

Among the EU14+2 countries, a number of countries have worsened their performance in the index 2021 compared to previous years, including Spain, Sweden, Austria, Cyprus, Germany, Malta and Luxemburg. Others, such as Denmark, Finland, Ireland, the Netherlands and Portugal has performed well and improved their results. The UK, which just recently left the EU at the end of 2020, performs inconclusively losing points and positions in the ranking.

## Trends in Economy between 2011 and 2021

| The Catch-Up Index: Changes by Overall Scores 2011 - 2021 |                 |                    |                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|---|-----------------|--------------------|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group   | Country         | Overall Score 2021 | Overall Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank change vs 2019 | Rank change vs 2018 | Rank change vs 2017 | Rank change vs 2016 | Rank change vs 2015 | Rank change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| EU14+2  | Austria         | 63                 | 9                 | -1                   | -2                   | -1                   | -2                   | -3                   | -3                   | -3                   | -2                   | -2                   | 0                   | 0                   | 0                   | -1                  | -2                  | -2                  | -2                  | -2                  | -2                  |
| EU14+2  | Belgium         | 60                 | 11                | 0                    | -1                   | -1                   | -1                   | -2                   | -3                   | -2                   | -2                   | -1                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | -1                  | 0                   |
| EU14+2  | Cyprus          | 51                 | 18                | 0                    | 0                    | 2                    | 2                    | 2                    | 2                    | -1                   | -4                   | -4                   | 1                   | 1                   | 2                   | 3                   | 2                   | 1                   | 0                   | -4                  | -4                  |
| EU14+2  | Denmark         | 72                 | 1                 | 1                    | 1                    | 1                    | 1                    | 1                    | 1                    | 1                    | 0                    | 1                    | 0                   | 0                   | 0                   | 0                   | 2                   | 2                   | 1                   | 2                   | 1                   |
| EU14+2  | Finland         | 70                 | 3                 | 1                    | 1                    | 1                    | 1                    | 0                    | 0                    | 0                    | -1                   | 0                    | 2                   | 2                   | 2                   | 2                   | 2                   | 1                   | 2                   | 1                   | 2                   |
| EU14+2  | France          | 58                 | 12                | 0                    | 0                    | 0                    | 0                    | -2                   | -2                   | -3                   | -2                   | -2                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   |
| EU14+2  | Germany         | 64                 | 8                 | -1                   | -2                   | -2                   | -2                   | -3                   | -2                   | -2                   | -1                   | 0                    | 0                   | 0                   | -1                  | -1                  | -2                  | -2                  | -2                  | -2                  | 1                   |
| EU14+2  | Greece          | 40                 | 26                | 1                    | 3                    | 3                    | 4                    | 2                    | 3                    | 2                    | -1                   | -4                   | 1                   | 2                   | 2                   | 1                   | 1                   | 1                   | 1                   | -1                  | -1                  |
| EU14+2  | Ireland         | 68                 | 6                 | 1                    | 1                    | 2                    | 3                    | 4                    | 5                    | 6                    | 6                    | 4                    | 1                   | 1                   | 2                   | 3                   | 3                   | 5                   | 4                   | 5                   | 2                   |
| EU14+2  | Italy           | 46                 | 23                | 0                    | 0                    | -1                   | -1                   | -1                   | -1                   | 0                    | -2                   | -2                   | 1                   | 1                   | 1                   | 0                   | 0                   | 0                   | 0                   | -1                  | -3                  |
| EU14+2  | Luxembourg      | 69                 | 5                 | -1                   | -1                   | -1                   | -2                   | -2                   | -3                   | -2                   | -3                   | -2                   | -2                  | -2                  | -2                  | -2                  | -4                  | -3                  | -2                  | -4                  | -4                  |
| EU14+2  | Malta           | 51                 | 19                | -3                   | -4                   | -3                   | -4                   | -3                   | -4                   | -3                   | -3                   | -3                   | -3                  | -4                  | -3                  | -5                  | -4                  | -6                  | -4                  | -3                  | -3                  |
| EU14+2  | Netherlands     | 71                 | 2                 | 1                    | 1                    | 1                    | 0                    | 1                    | 1                    | 1                    | 1                    | 1                    | 2                   | 2                   | 2                   | 2                   | 2                   | 3                   | 2                   | 3                   | 2                   |
| EU14+2  | Portugal        | 53                 | 16                | -1                   | 0                    | 0                    | 2                    | 4                    | 5                    | 5                    | 3                    | 2                    | 1                   | 1                   | 2                   | 2                   | 5                   | 4                   | 5                   | 3                   | 3                   |
| EU14+2  | Spain           | 51                 | 20                | -1                   | -1                   | -2                   | -1                   | -1                   | 0                    | -2                   | -3                   | -4                   | -2                  | -2                  | -3                  | -3                  | -3                  | -3                  | -3                  | -3                  | -5                  |
| EU14+2  | Sweden          | 70                 | 4                 | 0                    | 0                    | -1                   | -1                   | -1                   | -2                   | -2                   | -2                   | -1                   | -2                  | -2                  | -2                  | -2                  | -2                  | -3                  | -3                  | -2                  | -1                  |
| EU11  | Bulgaria        | 36                 | 29                | 0                    | 0                    | 1                    | 2                    | 2                    | 2                    | 2                    | 1                    | 2                    | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | -1                  |
| EU11  | Croatia         | 42                 | 25                | 2                    | 1                    | 1                    | 1                    | 1                    | 2                    | 1                    | 1                    | 1                    | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   |
| EU11  | Czech Republic  | 55                 | 14                | 0                    | 0                    | 0                    | 0                    | 0                    | 1                    | 0                    | 0                    | 2                    | 0                   | 0                   | 0                   | 1                   | 0                   | 1                   | -1                  | 1                   | 3                   |
| EU11  | Estonia         | 58                 | 13                | 1                    | 1                    | 2                    | 2                    | 3                    | 3                    | 5                    | 6                    | 6                    | 0                   | 0                   | 0                   | 0                   | 0                   | 1                   | 3                   | 5                   | 5                   |
| EU11  | Hungary         | 40                 | 27                | -1                   | -1                   | -2                   | -2                   | -2                   | -4                   | -5                   | -6                   | -7                   | -2                  | -2                  | -2                  | -2                  | -2                  | -2                  | -3                  | -4                  | -4                  |
| EU11  | Latvia          | 47                 | 22                | 0                    | -1                   | -1                   | 0                    | 0                    | 3                    | 5                    | 7                    | 6                    | 0                   | -1                  | 1                   | 2                   | 2                   | 2                   | 3                   | 5                   | 5                   |
| EU11  | Lithuania       | 52                 | 17                | 2                    | 3                    | 2                    | 2                    | 3                    | 4                    | 5                    | 8                    | 7                    | 3                   | 3                   | 2                   | 3                   | 2                   | 5                   | 5                   | 7                   | 7                   |
| EU11  | Poland          | 48                 | 21                | 1                    | 2                    | 0                    | -2                   | -3                   | -2                   | -1                   | -1                   | 1                    | 2                   | 2                   | 0                   | -2                  | -3                  | -3                  | -1                  | -1                  | 1                   |
| EU11  | Romania         | 37                 | 28                | 1                    | 0                    | 0                    | 1                    | 1                    | 3                    | 3                    | 2                    | 5                    | 0                   | -1                  | -1                  | 0                   | 0                   | 2                   | 1                   | 0                   | 1                   |
| EU11  | Slovakia        | 46                 | 24                | -2                   | -1                   | -2                   | -3                   | -2                   | -2                   | -3                   | -2                   | -1                   | -3                  | -2                  | -2                  | -2                  | -2                  | -3                  | -5                  | -3                  | -3                  |
| EU11  | Slovenia        | 55                 | 15                | 0                    | 1                    | 0                    | 1                    | 3                    | 2                    | 1                    | 0                    | -1                   | 0                   | 1                   | 0                   | 1                   | 1                   | 1                   | -1                  | -2                  | -2                  |
| CC  | Albania         | 24                 | 33                | -1                   | -1                   | -1                   | 1                    | 3                    | 3                    | 1                    | 4                    | 3                    | -1                  | -1                  | -1                  | 0                   | 1                   | 2                   | 1                   | 2                   | 2                   |
| CC  | Montenegro      | 29                 | 31                | -1                   | -1                   | -1                   | -1                   | -3                   | -5                   | -4                   | -1                   | -1                   | -1                  | -1                  | -1                  | -1                  | -1                  | -3                  | -1                  | -1                  | -1                  |
| CC  | North Macedonia | 27                 | 32                | 2                    | 3                    | 3                    | 1                    | 0                    | 2                    | 1                    | 0                    | 0                    | 1                   | 1                   | 1                   | 0                   | 0                   | 1                   | 0                   | 0                   | 0                   |
| CC  | Serbia          | 30                 | 30                | 1                    | 1                    | 1                    | 0                    | 3                    | 3                    | 2                    | 2                    | 2                    | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   |
| CC  | Turkey          | 23                 | 34                | 1                    | 1                    | 1                    | 0                    | -2                   | -3                   | -2                   | -2                   | -1                   | 0                   | 0                   | 0                   | 0                   | -1                  | -2                  | -1                  | -1                  | -1                  |
| PCC   | BiH             | 19                 | 35                | 1                    | 0                    | 0                    | 2                    | -1                   | -4                   | -3                   | -3                   | -2                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | -1                  | -1                  |
| Iceland   | Iceland         | 67                 | 7                 | -1                   | -1                   | 1                    | 1                    | 2                    | 2                    | 4                    | 3                    | 2                    | -1                  | -1                  | -1                  | -1                  | 1                   | 1                   | 2                   | 1                   | -1                  |
| UK  | UK              | 61                 | 10                | -1                   | -1                   | -2                   | -3                   | -2                   | -2                   | -2                   | -1                   | -1                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  | -2                  | -1                  | 0                   |

The trends in the Economy category in the period 2011-2021 show that the “catching-up” has been generally successful within the EU11 group of countries. Only Croatia, Slovenia and Slovakia show deterioration when the results of the index 2021 to the rest are compared, but on the other hand these three countries have good positions in the ranking in this category.

This is not the case with the other groups in the index, with both EU14+2 countries and the EU candidates countries on the whole are backtracking on their achievements. This includes the former EU member the United Kingdom. The big exception is Ireland, which rebounded from the previous crisis, with Malta and Cyprus also showing some improvement, as well as Iceland. Among the EU candidate countries, Serbia has shown dynamism.

In addition to these group patterns, it seems that there is another pattern as the catching-up is most dynamic roughly until 2014 after which it slows down or reverses.

| Economy: Changes in Ranks and Scores 2011-2021 |                 |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|--|-----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group  | Country         | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank Change vs 2019 | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| EU14+2   | Austria         | 61         | 7         | -1                   | -1                   | 0                    | -1                   | -2                   | -3                   | -2                   | -2                   | -1                   | 1                   | 1                   | 1                   | 1                   | -1                  | -1                  | 0                   | 0                   | 1                   |
| EU14+2   | Belgium         | 54         | 14        | -1                   | -1                   | -1                   | -2                   | -4                   | -4                   | -3                   | -4                   | -2                   | 1                   | 0                   | -1                  | -1                  | -3                  | -4                  | -4                  | -4                  | -2                  |
| EU14+2   | Cyprus          | 48         | 19        | 0                    | 1                    | 5                    | 5                    | 5                    | 4                    | -1                   | -6                   | -8                   | 0                   | 2                   | 4                   | 4                   | 6                   | 4                   | -1                  | -7                  | -6                  |
| EU14+2   | Denmark         | 71         | 3         | 1                    | 0                    | 1                    | 1                    | 1                    | 1                    | 3                    | 2                    | 3                    | -1                  | -1                  | -1                  | -1                  | -1                  | -1                  | 0                   | -1                  | 0                   |
| EU14+2   | Finland         | 61         | 8         | 1                    | 1                    | 0                    | 0                    | -1                   | -3                   | -2                   | -4                   | -4                   | 2                   | 2                   | 2                   | 1                   | -1                  | -3                  | -2                  | -3                  | -3                  |
| EU14+2   | France          | 55         | 12        | 0                    | -1                   | -1                   | -2                   | -3                   | -3                   | -5                   | -3                   | -2                   | 1                   | 0                   | 0                   | -1                  | -2                  | -3                  | -3                  | -3                  | -1                  |
| EU14+2   | Germany         | 65         | 6         | 0                    | -1                   | -1                   | -1                   | -1                   | 1                    | 0                    | 2                    | 3                    | 0                   | 0                   | 0                   | -1                  | -1                  | 1                   | -1                  | 0                   | 1                   |
| EU14+2   | Greece          | 32         | 32        | 0                    | 0                    | 1                    | 1                    | 1                    | 0                    | 0                    | -3                   | -7                   | -1                  | -1                  | 0                   | 0                   | 0                   | 0                   | 2                   | -1                  | -5                  |
| EU14+2   | Ireland         | 73         | 2         | 3                    | 4                    | 5                    | 10                   | 12                   | 16                   | 17                   | 17                   | 12                   | 1                   | 1                   | 2                   | 4                   | 7                   | 9                   | 10                  | 9                   | 7                   |
| EU14+2   | Italy           | 40         | 28        | -1                   | -1                   | -3                   | -3                   | -5                   | -3                   | -4                   | -5                   | -6                   | -2                  | -2                  | -4                  | -4                  | -6                  | -4                  | -5                  | -7                  | -6                  |
| EU14+2   | Luxembourg      | 73         | 1         | 0                    | 0                    | -1                   | -1                   | -1                   | -2                   | -2                   | -3                   | -2                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   |
| EU14+2   | Malta           | 54         | 15        | -4                   | -2                   | 0                    | 0                    | 2                    | 3                    | 7                    | 3                    | 4                    | -4                  | -2                  | 0                   | -1                  | 0                   | 0                   | 6                   | 2                   | 2                   |
| EU14+2   | Netherlands     | 69         | 4         | 1                    | 1                    | 1                    | 0                    | 1                    | 2                    | 3                    | 1                    | 0                    | 0                   | 1                   | 1                   | -1                  | 0                   | 0                   | 0                   | 0                   | -2                  |
| EU14+2   | Portugal        | 43         | 24        | 1                    | 1                    | 2                    | 1                    | -1                   | 2                    | 1                    | -1                   | -5                   | 0                   | 1                   | 2                   | 2                   | 0                   | 2                   | 2                   | -1                  | -5                  |
| EU14+2   | Spain           | 47         | 20        | -1                   | -1                   | -1                   | -1                   | -3                   | -1                   | -2                   | -5                   | -7                   | 0                   | -1                  | 0                   | 0                   | -1                  | 0                   | -3                  | -5                  | -5                  |
| EU14+2   | Sweden          | 68         | 5         | 0                    | 0                    | -1                   | -1                   | -1                   | -2                   | -1                   | -1                   | 1                    | 0                   | -1                  | -2                  | -1                  | -2                  | -2                  | -3                  | -2                  | -1                  |
| EU11   | Bulgaria        | 41         | 26        | 1                    | 1                    | 1                    | 1                    | 2                    | 2                    | 2                    | 2                    | 3                    | 2                   | 2                   | 1                   | 1                   | 2                   | 3                   | 2                   | 2                   | 2                   |
| EU11   | Croatia         | 41         | 27        | 1                    | 1                    | 2                    | 2                    | 1                    | 2                    | -2                   | -3                   | -1                   | 0                   | 0                   | 1                   | 1                   | 0                   | 1                   | -2                  | -2                  | -2                  |
| EU11   | Czech Republic  | 55         | 13        | 0                    | 1                    | 1                    | 1                    | 3                    | 4                    | 5                    | 5                    | 6                    | 1                   | 2                   | 1                   | 2                   | 4                   | 1                   | 3                   | 5                   | 5                   |
| EU11   | Estonia         | 57         | 11        | 0                    | 0                    | 0                    | 0                    | 0                    | 2                    | 3                    | 5                    | 5                    | 1                   | 0                   | 0                   | 1                   | 2                   | 2                   | 2                   | 5                   | 5                   |
| EU11   | Hungary         | 45         | 23        | 1                    | 1                    | 1                    | 1                    | 1                    | 1                    | 1                    | 2                    | 4                    | 0                   | 0                   | -1                  | -1                  | 0                   | -1                  | 1                   | 3                   | 3                   |
| EU11   | Latvia          | 51         | 17        | 0                    | 1                    | 0                    | 0                    | -1                   | 2                    | 4                    | 7                    | 7                    | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | 2                   | 5                   | 6                   |
| EU11   | Lithuania       | 54         | 16        | 1                    | 2                    | 2                    | 2                    | 1                    | 3                    | 3                    | 7                    | 8                    | 0                   | 0                   | 0                   | 0                   | -2                  | 0                   | -1                  | 3                   | 5                   |
| EU11   | Poland          | 47         | 21        | 1                    | 1                    | 1                    | 0                    | 1                    | 1                    | 2                    | 3                    | 5                    | 1                   | 1                   | 0                   | 0                   | 0                   | 0                   | 1                   | 3                   | 3                   |
| EU11   | Romania         | 43         | 25        | 1                    | 1                    | 1                    | 0                    | 1                    | 3                    | 3                    | 4                    | 5                    | 0                   | -1                  | 0                   | 0                   | 1                   | 2                   | 2                   | 2                   | 4                   |
| EU11   | Slovakia        | 46         | 22        | -1                   | -1                   | -2                   | -3                   | -2                   | -1                   | -1                   | -1                   | 0                    | -1                  | -2                  | -3                  | -4                  | -2                  | -2                  | -2                  | -2                  | -2                  |
| EU11   | Slovenia        | 51         | 18        | 0                    | 1                    | 2                    | 3                    | 1                    | 2                    | -1                   | -3                   | -4                   | 0                   | 0                   | 0                   | 1                   | 0                   | -1                  | -4                  | -5                  | -4                  |
| CC   | Albania         | 26         | 34        | -1                   | -1                   | -3                   | -3                   | -3                   | -6                   | -6                   | -5                   | -1                   | 0                   | 0                   | 0                   | -1                  | -1                  | -1                  | -1                  | 0                   | 1                   |
| CC   | Montenegro      | 29         | 33        | -2                   | -3                   | -3                   | -4                   | -3                   | -13                  | -10                  | -5                   | -4                   | -1                  | -1                  | -2                  | -2                  | -2                  | -8                  | -4                  | -1                  | -1                  |
| CC   | North Macedonia | 34         | 30        | 0                    | -1                   | -2                   | -2                   | -2                   | -1                   | -1                   | -1                   | 1                    | 0                   | 0                   | 0                   | 0                   | 0                   | 1                   | 1                   | 0                   | 3                   |
| CC   | Serbia          | 34         | 31        | 3                    | 5                    | 4                    | 5                    | 7                    | 3                    | 2                    | 0                    | 0                    | 2                   | 2                   | 2                   | 3                   | 3                   | 3                   | 1                   | 2                   | 0                   |
| CC   | Turkey          | 36         | 29        | -1                   | -3                   | -3                   | 0                    | -2                   | -2                   | 0                    | -1                   | 0                    | 0                   | 0                   | 0                   | 0                   | 0                   | 1                   | 1                   | 0                   | 1                   |
| PCC  | BiH             | 24         | 35        | 2                    | 2                    | 0                    | 1                    | -2                   | -5                   | -7                   | -1                   | -3                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  |
| Iceland  | Iceland         | 59         | 10        | -4                   | -4                   | -3                   | -1                   | 2                    | 3                    | 2                    | 5                    | 1                    | -3                  | -3                  | -3                  | 0                   | 2                   | 2                   | 1                   | 4                   | 0                   |
| UK   | UK              | 60         | 9         | -1                   | -1                   | -1                   | -2                   | -1                   | -2                   | -3                   | -2                   | -2                   | 0                   | 0                   | 0                   | -2                  | -1                  | -1                  | -1                  | -1                  | -3                  |

## Trends in Quality of Life between 2011 and 2021

The Quality of Life trends in index 2021 show two broad trends. There is visible deteriorations among half the EU14+2 countries (this trend includes the UK too), visible improvement among most of the EU11 countries. The exceptions with a downward trend among the EU11 countries are Bulgaria, Slovakia to some extent with especially Hungary losing both considerable points and positions in the ranking.

Among the EU candidates, the situation is mixed – Serbia and North Macedonia's performance deteriorates, while the performance of Montenegro and Turkey improves.

| Quality of Life: Change in Ranks and Scores 2011-2021 |                 |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|---|-----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group   | Country         | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank Change vs 2019 | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| EU14+2  | Austria         | 63         | 9         | -2                   | -2                   | -3                   | -3                   | -3                   | -2                   | -2                   | -2                   | -2                   | 1                   | 0                   | 0                   | 1                   | -1                  | 2                   | 0                   | 0                   | 0                   |
| EU14+2  | Belgium         | 67         | 6         | 1                    | 0                    | 1                    | 1                    | 1                    | 1                    | 1                    | 1                    | 2                    | 0                   | 1                   | 2                   | 2                   | 1                   | 1                   | 1                   | 1                   | 4                   |
| EU14+2  | Cyprus          | 56         | 15        | 1                    | 0                    | 3                    | 3                    | 1                    | 1                    | 0                    | -2                   | -2                   | 0                   | 0                   | 2                   | 1                   | 0                   | 0                   | 0                   | -2                  | -1                  |
| EU14+2  | Denmark         | 68         | 4         | 1                    | 1                    | 0                    | 0                    | 2                    | 2                    | 2                    | 2                    | 2                    | 1                   | 4                   | 2                   | 1                   | 5                   | 4                   | 4                   | 2                   | 2                   |
| EU14+2  | Finland         | 71         | 1         | 1                    | 1                    | 1                    | 2                    | 1                    | 2                    | 0                    | 1                    | 1                    | 0                   | 0                   | 1                   | 2                   | 2                   | 2                   | 1                   | 1                   | 2                   |
| EU14+2  | France          | 61         | 11        | -2                   | -3                   | -4                   | -4                   | -3                   | -4                   | -4                   | -3                   | -4                   | 1                   | 1                   | 0                   | 0                   | 0                   | -2                  | -1                  | -1                  | -3                  |
| EU14+2  | Germany         | 62         | 10        | -4                   | -5                   | -6                   | -5                   | -6                   | -7                   | -5                   | -4                   | -2                   | -1                  | -5                  | -5                  | -4                  | -6                  | -6                  | -4                  | -2                  | 1                   |
| EU14+2  | Greece          | 46         | 23        | 2                    | 2                    | 0                    | -1                   | 0                    | 0                    | -3                   | -8                   | -10                  | 1                   | 1                   | -1                  | -1                  | -1                  | -2                  | -3                  | -6                  | -6                  |
| EU14+2  | Ireland         | 66         | 8         | 0                    | 1                    | 1                    | 2                    | 3                    | 2                    | 2                    | 2                    | 0                    | 0                   | 2                   | 4                   | 4                   | 4                   | 4                   | 3                   | 3                   | -1                  |
| EU14+2  | Italy           | 50         | 20        | -1                   | -3                   | -5                   | -5                   | -5                   | -4                   | -5                   | -7                   | -8                   | -2                  | -3                  | -5                  | -5                  | -4                  | -4                  | -4                  | -5                  | -7                  |
| EU14+2  | Luxembourg      | 67         | 7         | 1                    | 0                    | -3                   | -4                   | -4                   | -4                   | -3                   | -3                   | -4                   | 0                   | -1                  | -6                  | -6                  | -6                  | -6                  | -3                  | -4                  | -6                  |
| EU14+2  | Malta           | 50         | 21        | -1                   | -1                   | -1                   | -1                   | -1                   | -1                   | -4                   | -1                   | 0                    | -1                  | -2                  | -2                  | -2                  | -2                  | -3                  | -4                  | -2                  | -2                  |
| EU14+2  | Netherlands     | 69         | 3         | 0                    | 0                    | -1                   | -1                   | -2                   | -1                   | -2                   | -2                   | -1                   | 0                   | 0                   | 0                   | -1                  | -1                  | -1                  | -2                  | -2                  | -1                  |
| EU14+2  | Portugal        | 51         | 19        | 1                    | 2                    | 1                    | 2                    | 3                    | 5                    | 5                    | 4                    | 3                    | 2                   | 1                   | 1                   | 1                   | 2                   | 3                   | 4                   | 4                   | 2                   |
| EU14+2  | Spain           | 52         | 17        | -2                   | -1                   | -1                   | -1                   | 0                    | 0                    | 0                    | -2                   | -5                   | 0                   | -1                  | -1                  | 1                   | 0                   | 0                   | 1                   | 1                   | -1                  |
| EU14+2  | Sweden          | 68         | 5         | 0                    | 1                    | 1                    | 0                    | 1                    | 0                    | -2                   | -1                   | 0                    | -1                  | -1                  | 2                   | -1                  | 1                   | 0                   | -2                  | -1                  | 0                   |
| EU11  | Bulgaria        | 27         | 32        | -2                   | -3                   | -1                   | -2                   | -3                   | -3                   | -2                   | -3                   | -3                   | -2                  | -2                  | -2                  | -3                  | -2                  | -2                  | -2                  | -1                  | -2                  |
| EU11  | Croatia         | 43         | 25        | 1                    | 1                    | -1                   | 0                    | -1                   | 0                    | 2                    | 2                    | -1                   | 0                   | 2                   | 1                   | 1                   | 1                   | 1                   | 1                   | 0                   | 0                   |
| EU11  | Czech Republic  | 57         | 14        | 0                    | 1                    | 2                    | 1                    | 1                    | 1                    | -1                   | 2                    | 4                    | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | -1                  | 2                   | 4                   |
| EU11  | Estonia         | 55         | 16        | 1                    | 2                    | 2                    | 2                    | 3                    | 5                    | 7                    | 7                    | 6                    | 0                   | 2                   | 2                   | 1                   | 2                   | 3                   | 5                   | 4                   | 4                   |
| EU11  | Hungary         | 39         | 27        | -2                   | -4                   | -5                   | -5                   | -5                   | -5                   | -5                   | -9                   | -8                   | 0                   | -1                  | -2                  | -2                  | -2                  | -2                  | -2                  | -6                  | -5                  |
| EU11  | Latvia          | 42         | 26        | 0                    | -2                   | 0                    | 1                    | 0                    | 2                    | 4                    | 6                    | 6                    | 0                   | -1                  | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   |
| EU11  | Lithuania       | 49         | 22        | 2                    | 3                    | 3                    | 3                    | 3                    | 3                    | 4                    | 11                   | 8                    | 1                   | 1                   | 2                   | 2                   | 1                   | 2                   | 2                   | 4                   | 4                   |
| EU11  | Poland          | 52         | 18        | 1                    | 4                    | 2                    | 3                    | 4                    | 2                    | 4                    | 5                    | 7                    | 1                   | 3                   | 3                   | 3                   | 2                   | 2                   | 4                   | 6                   | 5                   |
| EU11  | Romania         | 30         | 29        | 0                    | -3                   | 1                    | 2                    | 0                    | 0                    | 2                    | -2                   | 3                    | 0                   | 0                   | 0                   | 1                   | 0                   | 0                   | 2                   | 1                   | 2                   |
| EU11  | Slovakia        | 46         | 24        | -2                   | -1                   | 0                    | 0                    | 2                    | 0                    | -3                   | -1                   | 1                    | -2                  | -2                  | -1                  | -1                  | 0                   | -1                  | -5                  | -2                  | 0                   |
| EU11  | Slovenia        | 60         | 13        | 1                    | 2                    | 0                    | 1                    | 4                    | 2                    | 3                    | 2                    | 3                    | 0                   | 0                   | 0                   | 0                   | 1                   | 0                   | 1                   | 1                   | 2                   |
| CC  | Albania         | 21         | 33        | -2                   | -2                   | -1                   | 0                    | 2                    | 4                    | 1                    | 0                    | -1                   | 0                   | 0                   | 0                   | 1                   | 2                   | 2                   | 2                   | 1                   | 0                   |
| CC  | Montenegro      | 31         | 28        | 0                    | -2                   | -2                   | -2                   | -6                   | -6                   | -2                   | -2                   | 0                    | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 1                   | 1                   |
| CC  | North Macedonia | 21         | 34        | 4                    | 3                    | 2                    | 0                    | -2                   | -2                   | -2                   | -3                   | -4                   | 1                   | 1                   | 0                   | -1                  | -1                  | -1                  | -1                  | -2                  | -2                  |
| CC  | Serbia          | 30         | 30        | 2                    | 4                    | 4                    | 3                    | 7                    | 5                    | 0                    | -3                   | -2                   | 2                   | 1                   | 1                   | 1                   | 2                   | 2                   | -1                  | -2                  | -2                  |
| CC  | Turkey          | 30         | 31        | 1                    | 4                    | 5                    | 5                    | 3                    | 3                    | 6                    | 8                    | 8                    | 0                   | 1                   | 1                   | 1                   | 0                   | 0                   | 1                   | 2                   | 3                   |
| PCC   | BiH             | 21         | 35        | 0                    | -1                   | 3                    | 4                    | 0                    | -1                   | 0                    | 2                    | 3                    | -1                  | -1                  | 0                   | 0                   | -1                  | -1                  | -1                  | 0                   | 0                   |
| Iceland   | Iceland         | 70         | 2         | 1                    | 1                    | 1                    | 3                    | 2                    | 2                    | 3                    | 3                    | 1                    | 0                   | 0                   | 2                   | 5                   | 3                   | 4                   | 3                   | 3                   | 2                   |
| UK  | UK              | 61         | 12        | -2                   | -3                   | -4                   | -5                   | -4                   | -4                   | -1                   | -1                   | -3                   | -1                  | -1                  | -2                  | -3                  | -2                  | -2                  | 0                   | 0                   | 0                   |

## Trends in Democracy between 2011 and 2021

The trends in the Democracy category in the period 2011-2021 show improvement in several countries in both the EU14+2 and EU11 groups. Estonia, Latvia, Lithuania and Romania are those within the EU11 who are converging fast towards the designed goals. Portugal, Italy, Ireland, Cyprus, France are those among EU14+2 who register improvement. Within the candidate countries, Albania achieves better results over the years and to a lesser extent some improvement by Serbia when the 2021 results are compared to previous years.

| Democracy: Change in Ranks and Scores 2011-2021 |                 |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|---|-----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group   | Country         | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank Change vs 2019 | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| EU14+2  | Austria         | 60         | 11        | -2                   | -3                   | -2                   | -4                   | -4                   | -4                   | -6                   | 1                    | -2                   | -2                  | -2                  | -2                  | -3                  | -2                  | -2                  | -5                  | -1                  | -2                  |
| EU14+2  | Belgium         | 61         | 10        | -1                   | -1                   | -1                   | -1                   | -3                   | -3                   | -2                   | 1                    | -1                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   |
| EU14+2  | Cyprus          | 52         | 19        | 3                    | 1                    | 3                    | 5                    | 6                    | 8                    | 4                    | 2                    | 0                    | 3                   | 2                   | 3                   | 5                   | 5                   | 4                   | 3                   | 3                   | 0                   |
| EU14+2  | Denmark         | 76         | 1         | 2                    | 2                    | 1                    | 1                    | 3                    | 2                    | 0                    | 5                    | 2                    | 1                   | 1                   | 0                   | 0                   | 1                   | 1                   | 0                   | 2                   | 1                   |
| EU14+2  | Finland         | 75         | 2         | 0                    | 1                    | 1                    | 3                    | 2                    | 2                    | 1                    | -1                   | 4                    | -1                  | -1                  | 1                   | 1                   | 1                   | 1                   | 1                   | -1                  | 2                   |
| EU14+2  | France          | 57         | 13        | 0                    | 3                    | 5                    | 4                    | -2                   | 0                    | -1                   | 1                    | 0                    | 1                   | 3                   | 6                   | 7                   | -1                  | 1                   | 0                   | 1                   | 0                   |
| EU14+2  | Germany         | 64         | 8         | 0                    | 0                    | 1                    | 1                    | -1                   | 0                    | -1                   | 2                    | 0                    | 0                   | 0                   | 0                   | 1                   | 0                   | 0                   | -1                  | 0                   | 0                   |
| EU14+2  | Greece          | 41         | 26        | -1                   | 3                    | 4                    | 7                    | 1                    | 5                    | 6                    | 3                    | -3                   | -1                  | 1                   | 1                   | 2                   | 0                   | 1                   | 1                   | 1                   | 0                   |
| EU14+2  | Ireland         | 69         | 5         | 1                    | 1                    | 3                    | 3                    | 4                    | 4                    | 5                    | 6                    | 3                    | 2                   | 2                   | 2                   | 2                   | 2                   | 2                   | 4                   | 2                   | 2                   |
| EU14+2  | Italy           | 52         | 20        | 1                    | 3                    | 2                    | 3                    | 4                    | 2                    | 8                    | 5                    | 5                    | 1                   | 2                   | 1                   | 2                   | 2                   | 2                   | 3                   | 3                   | 4                   |
| EU14+2  | Luxembourg      | 66         | 7         | -3                   | -3                   | -1                   | -1                   | -2                   | -4                   | -5                   | -2                   | -3                   | -1                  | -1                  | -1                  | -1                  | -2                  | -2                  | -2                  | -2                  | -2                  |
| EU14+2  | Malta           | 51         | 21        | -3                   | -4                   | -5                   | -9                   | -8                   | -8                   | -5                   | -2                   | -5                   | -5                  | -7                  | -7                  | -9                  | -7                  | -8                  | -6                  | -4                  | -6                  |
| EU14+2  | Netherlands     | 74         | 3         | 2                    | 3                    | 3                    | 3                    | 3                    | 3                    | 2                    | 4                    | 2                    | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 0                   |
| EU14+2  | Portugal        | 58         | 12        | -3                   | -1                   | -2                   | 4                    | 7                    | 6                    | 6                    | 7                    | 5                    | -1                  | 1                   | 0                   | 4                   | 9                   | 8                   | 7                   | 8                   | 6                   |
| EU14+2  | Spain           | 53         | 16        | -1                   | 0                    | -3                   | -1                   | -2                   | 0                    | -1                   | -1                   | -2                   | -1                  | 1                   | -1                  | 1                   | 1                   | 1                   | 0                   | -1                  | 0                   |
| EU14+2  | Sweden          | 74         | 4         | 1                    | 0                    | 0                    | 1                    | 0                    | 0                    | -1                   | 2                    | -1                   | -1                  | -1                  | -2                  | -2                  | -3                  | -3                  | -2                  | -2                  | -3                  |
| EU11  | Bulgaria        | 37         | 28        | 2                    | 1                    | 2                    | 5                    | 3                    | 1                    | 3                    | 1                    | 3                    | 1                   | 1                   | 1                   | 2                   | 1                   | 0                   | 0                   | 1                   | 0                   |
| EU11  | Croatia         | 40         | 27        | 2                    | 0                    | -1                   | -2                   | -2                   | -1                   | -2                   | -2                   | 0                    | 0                   | -2                  | -2                  | -2                  | -2                  | -1                  | -2                  | -2                  | 0                   |
| EU11  | Czech Republic  | 53         | 17        | 0                    | -1                   | -3                   | -4                   | -3                   | -3                   | -4                   | -4                   | -4                   | 1                   | -2                  | -1                  | -3                  | -2                  | -2                  | -3                  | -4                  | -3                  |
| EU11  | Estonia         | 62         | 9         | 1                    | 2                    | 2                    | 3                    | 3                    | 2                    | 3                    | 3                    | 5                    | 3                   | 2                   | 4                   | 4                   | 4                   | 3                   | 3                   | 2                   | 3                   |
| EU11  | Hungary         | 34         | 29        | -2                   | -2                   | -2                   | -4                   | -3                   | -8                   | -9                   | -11                  | -17                  | -1                  | -1                  | -1                  | -2                  | -2                  | -4                  | -5                  | -5                  | -7                  |
| EU11  | Latvia          | 51         | 22        | 0                    | 0                    | 0                    | 2                    | 4                    | 8                    | 11                   | 10                   | 7                    | -2                  | -2                  | -2                  | 1                   | 1                   | 2                   | 4                   | 4                   | 3                   |
| EU11  | Lithuania       | 54         | 15        | 2                    | 3                    | 2                    | 2                    | 2                    | 3                    | 5                    | 4                    | 3                    | 4                   | 4                   | 3                   | 6                   | 3                   | 6                   | 6                   | 6                   | 5                   |
| EU11  | Poland          | 44         | 24        | -1                   | -2                   | -4                   | -11                  | -12                  | -8                   | -8                   | -9                   | -7                   | 0                   | 0                   | -1                  | -9                  | -8                  | -6                  | -6                  | -6                  | -3                  |
| EU11  | Romania         | 42         | 25        | 4                    | 3                    | 2                    | 4                    | 6                    | 7                    | 8                    | 6                    | 10                   | 1                   | 1                   | 1                   | 1                   | 3                   | 4                   | 4                   | 3                   | 4                   |
| EU11  | Slovakia        | 45         | 23        | -4                   | -3                   | -3                   | -9                   | -7                   | -7                   | -6                   | -8                   | -4                   | 0                   | 0                   | 1                   | -5                  | -4                  | -4                  | -3                  | -4                  | 0                   |
| EU11  | Slovenia        | 53         | 18        | 0                    | 1                    | -1                   | -1                   | 1                    | 0                    | -1                   | -1                   | -1                   | -1                  | 0                   | -1                  | 1                   | 2                   | -2                  | -1                  | -2                  | -1                  |
| CC  | Albania         | 27         | 31        | 0                    | 1                    | 1                    | 4                    | 7                    | 4                    | 8                    | 7                    | 12                   | 1                   | 1                   | 1                   | 1                   | 2                   | 1                   | 3                   | 3                   | 3                   |
| CC  | Montenegro      | 26         | 32        | -2                   | -5                   | -1                   | 0                    | -4                   | -4                   | -7                   | -6                   | -3                   | -1                  | -1                  | -1                  | -1                  | -1                  | -2                  | -2                  | -2                  | -2                  |
| CC  | North Macedonia | 26         | 33        | 4                    | 6                    | 7                    | 7                    | 6                    | 7                    | 3                    | -1                   | 0                    | 0                   | 0                   | 1                   | 0                   | -1                  | 1                   | -1                  | -1                  | -1                  |
| CC  | Serbia          | 28         | 30        | -2                   | -6                   | -4                   | -6                   | -6                   | -1                   | 0                    | -2                   | 2                    | 0                   | 0                   | 0                   | -1                  | 0                   | 1                   | 1                   | 1                   | 1                   |
| CC  | Turkey          | 10         | 35        | -1                   | -1                   | 1                    | -1                   | -1                   | -3                   | -4                   | -9                   | -4                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   |
| PCC   | BiH             | 18         | 34        | 0                    | 0                    | -2                   | 3                    | 1                    | -2                   | -3                   | -4                   | -2                   | 0                   | 0                   | -1                  | 0                   | 0                   | -1                  | -1                  | -1                  | -1                  |
| Iceland   | Iceland         | 69         | 6         | -1                   | -2                   | 2                    | -1                   | 4                    | 1                    | 5                    | 4                    | 2                    | -1                  | -1                  | -1                  | -1                  | 0                   | 0                   | 2                   | 0                   | 0                   |
| UK  | UK              | 57         | 14        | -2                   | -2                   | -4                   | -4                   | -5                   | -5                   | -6                   | -1                   | -2                   | -1                  | -2                  | -3                  | -3                  | -3                  | -3                  | -3                  | -2                  | -3                  |

At the same time, there is considerable deterioration in the performance of number of countries. These are first of all Poland and Hungary, which have been steadily diverging in the Democracy category. This is the case, though on smaller scale, with fellow EU11 countries of Slovakia, Slovenia and Croatia.

The UK, which left the EU in the end of 2020, has also witnessed its scores and ranking in the Democracy category declining. Relatively few of EU14+2 experience deterioration with the worst case being Malta, Austria, Luxembourg as well as Sweden, which however remains at the top 4<sup>th</sup> place in the ranking nevertheless.



## Trends in Governance between 2011 and 2021

The trends in the Governance category in the period 2011 – 2021 show that only a handful of countries improve upon their performance. These are mainly EU11 countries, among them Estonia, Latvia and Lithuania have improved their scores and ranking considerably. For example Estonia's ranking increased by six positions and seven to nine points when the 2021 results are compared to those in 2011, 2012 and 2013. In the EU14+2 group, the positive example is Portugal, which increased its positions up to 6 position

| Governance: Change in Ranks and Scores 2011-2021 |                |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|--|----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group  | Country        | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank Change vs 2019 | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| EU14+2   | Austria        | 68         | 7         | 0                    | -1                   | 0                    | -1                   | -2                   | -2                   | -1                   | -2                   | -2                   | 0                   | 0                   | 0                   | -1                  | -1                  | -1                  | -2                  | -2                  | -1                  |
| EU14+2   | Belgium        | 58         | 14        | -1                   | -1                   | -3                   | -3                   | -4                   | -6                   | -5                   | -5                   | -5                   | -1                  | -2                  | -3                  | -3                  | -3                  | -3                  | -4                  | -3                  | -3                  |
| EU14+2   | Cyprus         | 49         | 20        | -2                   | -3                   | -1                   | -3                   | -4                   | -3                   | -6                   | -8                   | -7                   | -1                  | -1                  | -1                  | -2                  | -3                  | -1                  | -3                  | -6                  | -4                  |
| EU14+2   | Denmark        | 72         | 1         | 0                    | 1                    | 0                    | -1                   | -2                   | -1                   | -3                   | -5                   | -5                   | 2                   | 3                   | 2                   | 1                   | 1                   | 2                   | 0                   | 0                   | 0                   |
| EU14+2   | Finland        | 72         | 2         | -1                   | -1                   | 1                    | 0                    | -3                   | -3                   | -1                   | -2                   | -1                   | -1                  | -1                  | 2                   | 1                   | -1                  | 0                   | 1                   | 1                   | 1                   |
| EU14+2   | France         | 60         | 11        | 1                    | 1                    | 3                    | 2                    | 2                    | -1                   | 0                    | -1                   | 0                    | 1                   | 2                   | 2                   | 1                   | 1                   | 1                   | 1                   | 1                   | 2                   |
| EU14+2   | Germany        | 67         | 8         | 0                    | -1                   | -2                   | 0                    | -2                   | 0                    | 0                    | 0                    | 0                    | 0                   | 0                   | -2                  | 1                   | 0                   | 0                   | -1                  | -1                  | -1                  |
| EU14+2   | Greece         | 39         | 27        | 1                    | 4                    | 6                    | 5                    | 5                    | 4                    | 2                    | 2                    | 0                    | 0                   | 2                   | 2                   | 1                   | 1                   | 0                   | 0                   | 0                   | -1                  |
| EU14+2   | Ireland        | 63         | 10        | -3                   | -2                   | -2                   | -4                   | -4                   | -2                   | -3                   | 0                    | -2                   | -1                  | -1                  | 0                   | 0                   | -1                  | -1                  | -2                  | 0                   | -1                  |
| EU14+2   | Italy          | 44         | 24        | 1                    | 2                    | 2                    | 3                    | 4                    | 2                    | 2                    | 1                    | 2                    | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | -1                  | -1                  |
| EU14+2   | Luxembourg     | 71         | 4         | -1                   | 0                    | 0                    | -1                   | 0                    | 1                    | 3                    | 0                    | 0                    | -2                  | 1                   | 1                   | 0                   | 1                   | 1                   | 2                   | 0                   | 0                   |
| EU14+2   | Malta          | 50         | 18        | -5                   | -6                   | -4                   | -5                   | -5                   | -9                   | -10                  | -10                  | -11                  | -1                  | -3                  | 0                   | -4                  | -5                  | -5                  | -5                  | -5                  | -6                  |
| EU14+2   | Netherlands    | 71         | 5         | 0                    | -1                   | -1                   | -1                   | -1                   | -1                   | -1                   | 1                    | 0                    | 0                   | -2                  | -3                  | 0                   | -1                  | -1                  | -1                  | 1                   | 0                   |
| EU14+2   | Portugal       | 60         | 12        | -1                   | -1                   | 1                    | 2                    | 6                    | 6                    | 7                    | 5                    | 4                    | -1                  | -1                  | 0                   | 1                   | 3                   | 2                   | 6                   | 5                   | 3                   |
| EU14+2   | Spain          | 54         | 17        | 2                    | 1                    | -1                   | 3                    | 2                    | 1                    | -1                   | 1                    | 1                    | 1                   | 1                   | 0                   | 2                   | 2                   | 1                   | -2                  | 1                   | 1                   |
| EU14+2   | Sweden         | 72         | 3         | 0                    | 0                    | -1                   | -2                   | -1                   | -4                   | -3                   | -3                   | -3                   | 1                   | -1                  | -2                  | -2                  | 0                   | -2                  | -1                  | -1                  | -1                  |
| EU11   | Bulgaria       | 38         | 28        | 0                    | 1                    | 3                    | 5                    | 6                    | 5                    | 3                    | 3                    | 3                    | 0                   | -1                  | 0                   | 1                   | 1                   | 1                   | 0                   | 0                   | 0                   |
| EU11   | Croatia        | 44         | 25        | 3                    | 2                    | 3                    | 4                    | 4                    | 5                    | 5                    | 5                    | 5                    | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 2                   |
| EU11   | Czech Republic | 56         | 16        | -1                   | -1                   | 1                    | 1                    | 2                    | 3                    | 1                    | -1                   | 0                    | -2                  | -2                  | 0                   | 0                   | 0                   | 0                   | -2                  | -1                  | 1                   |
| EU11   | Estonia        | 59         | 13        | 2                    | 3                    | 3                    | 4                    | 4                    | 6                    | 7                    | 9                    | 9                    | 2                   | 3                   | 1                   | 2                   | 1                   | 2                   | 6                   | 6                   | 6                   |
| EU11   | Hungary        | 41         | 26        | -2                   | -2                   | -3                   | -3                   | -2                   | -5                   | -8                   | -5                   | -6                   | -2                  | -2                  | -2                  | -2                  | -2                  | -4                  | -4                  | -4                  | -4                  |
| EU11   | Latvia         | 46         | 23        | 1                    | -1                   | -1                   | 1                    | 0                    | 2                    | 2                    | 6                    | 6                    | 0                   | -2                  | 0                   | 0                   | 0                   | 1                   | 0                   | 2                   | 2                   |
| EU11   | Lithuania      | 50         | 19        | 3                    | 2                    | 1                    | 0                    | 3                    | 5                    | 7                    | 8                    | 9                    | 1                   | 1                   | 1                   | 1                   | 3                   | 4                   | 5                   | 5                   | 5                   |
| EU11   | Poland         | 48         | 21        | 2                    | 2                    | 1                    | -1                   | -4                   | -3                   | -3                   | -2                   | 0                    | 1                   | 2                   | 1                   | 0                   | -1                  | -1                  | -1                  | -1                  | -1                  |
| EU11   | Romania        | 34         | 29        | 0                    | -1                   | -2                   | -1                   | -1                   | 1                    | 0                    | 0                    | 1                    | 0                   | -1                  | -2                  | -2                  | -2                  | -1                  | 0                   | 0                   | 0                   |
| EU11   | Slovakia       | 48         | 22        | 1                    | 1                    | 0                    | 2                    | 0                    | 0                    | -2                   | 1                    | 1                    | -1                  | 0                   | -1                  | 0                   | -1                  | -1                  | -1                  | -1                  | -1                  |
| EU11   | Slovenia       | 57         | 15        | 1                    | 1                    | 1                    | 4                    | 5                    | 4                    | 2                    | 2                    | 0                    | 1                   | 2                   | 0                   | 2                   | 3                   | 2                   | 1                   | 1                   | -1                  |
| CC   | Albania        | 22         | 33        | -3                   | -2                   | -1                   | 2                    | 5                    | 9                    | 7                    | 2                    | 2                    | 0                   | 0                   | 0                   | 0                   | 1                   | 2                   | 2                   | 0                   | 0                   |
| CC   | Montenegro     | 28         | 30        | -1                   | 4                    | 1                    | -1                   | -2                   | -1                   | -1                   | 4                    | 3                    | 0                   | 1                   | 1                   | 1                   | 0                   | 0                   | 0                   | 2                   | 0                   |
| CC   | North Macedon  | 26         | 31        | 1                    | 2                    | 2                    | 1                    | -3                   | 0                    | 2                    | 1                    | 1                    | 1                   | 1                   | 1                   | 1                   | 0                   | 1                   | 1                   | -1                  | 1                   |
| CC   | Serbia         | 26         | 32        | -1                   | -1                   | -2                   | -3                   | 1                    | 4                    | 4                    | 7                    | 8                    | -1                  | -2                  | -2                  | -2                  | 0                   | 1                   | 1                   | 2                   | 2                   |
| CC   | Turkey         | 15         | 34        | 2                    | 1                    | -1                   | -5                   | -7                   | -12                  | -11                  | -10                  | -10                  | 0                   | 0                   | 0                   | 0                   | -1                  | -3                  | -3                  | -3                  | -3                  |
| PCC  | BiH            | 12         | 35        | 0                    | -1                   | -1                   | -2                   | -4                   | -7                   | -7                   | -4                   | -4                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  | -1                  | 0                   | 0                   |
| Iceland  | Iceland        | 70         | 6         | 0                    | 0                    | 2                    | 2                    | 1                    | 2                    | 8                    | 4                    | 4                    | 0                   | 0                   | 2                   | 1                   | 1                   | 1                   | 5                   | 2                   | 2                   |
| UK   | UK             | 65         | 9         | 2                    | 0                    | -1                   | -3                   | -1                   | 0                    | 1                    | 0                    | 0                    | 1                   | 1                   | 0                   | -1                  | 1                   | 1                   | 0                   | 0                   | 1                   |

## The Economy category explained: methodology notes

The Economy category measures the economic performance and potential of the countries in the Index. Each of the four categories in the Catch Up Index is ascribed equal importance in terms of calculating a country's overall score.

The Economy category is measured through a set of nine indicators, each of which captures a different aspect of economic performance. Some indicators gauge more than one aspect of economic performance. The metrics of the indicators are based on 14 sub-indicators, of varying weightings. The specific indicators and the weightings assigned to the sub-indicators reflect the unique model of the Catch Up Index.

The raw data used for the indicators (e.g. GDP per capita or other composite indicator scores or coefficients) are converted into a Catch-Up Index score on a scale of 0 to 100 (lowest to highest) to allow for a standardized score that can be compared across countries or categories and indicators. Each of the indicators has different weight assigned to it, according to its importance in the Catch Up Index model.

| Economy Indicators              | Sub-indicators                                 | Weight      |
|---------------------------------|--|-------------|
| <b>GDP per capita</b>           | GDP per capita in PPS, EU28=100                | 25% (0,25)  |
| <b>Government debt</b>          | General government debt (% of GDP)             | 13% (0,125) |
| <b>Credit ratings</b>           | Sovereign credit ratings                       | 13% (0,125) |
| <b>Employment</b>               | Employment rate %                              | 8% (0,083)  |
| <b>Energy Intensity</b>         | Energy intensity of the economy                | 8% (0,083)  |
| <b>Information Society</b>      | Information and Communication Technology       | 8% (0,083)  |
| <b>Research and Development</b> | Patents granted by USPTO per capita            | 4% (0,042)  |
|                                 | High-tech exports as % of manufactured exports | 4% (0,042)  |
| <b>Market development</b>       | Doing Business rank                            | 4% (0,042)  |
|                                 | Economic Freedom score                         | 4% (0,042)  |
| <b>Transport infrastructure</b> | Motorways per area 1000 km <sup>2</sup>        | 2% (0,021)  |
|                                 | Motorways per 100,000 inhabitants              | 2% (0,021)  |
|                                 | Other roads per 1000 km <sup>2</sup>           | 2% (0,021)  |
|                                 | Other roads per 100,000 inhabitants            | 2% (0,021)  |

**GDP per Capita** (PPS with EU28=100 basis, Eurostat) remains the most important indicator of economic activity and is assigned 25% weight in the total Economy category.

**Government Debt**, measured as a % of GDP, is second in importance with 12.5%. The global economic calamities of recent years, and especially the ongoing debt crisis in Europe, have clearly demonstrated the critical importance of government debt as a factor for the economic vitality of a country.

The **Sovereign Credit Ratings** – or creditworthiness and level of investment risk - of a country are also attributed high importance in the Index, with a 12.5% weight. The Index uses a composite, rescaled score of the ratings of the three major agencies (Fitch, Moody's and Standard & Poor's).

**Employment**, with a weight of 8%, is a measure of an economy's potential to generate jobs and integrate as much as possible of the labor force in the labor market; this is measured through the share of working-age people in employment.

**Energy Intensity**, also ascribed an 8% weighting, is a measure of an economy's energy efficiency, calculating energy consumption divided by GDP as kilogram of oil equivalent per €1000. Energy intensity is also an important measure of an economy's competitiveness, because high energy inefficiency incurs more costs in production and services.

**Research and Development**, again with a weight of 8%, is a measure of the level of development and the "quality" of contemporary economies, including their competitiveness. The Index uses two sub-indicators. The first is the number of patents registered from a country with the United States Patent and Trademark Office (USPTO) annually on a per capita basis. The second indicator is the share of high-tech exports in a country's manufactured exports.

The **Market Development** indicator (also 8%) is the composite score of two sub-indicators – the World Bank's Ease of Doing Business ranking and the Heritage Foundation/Wall Street Journal Index of Economic Freedom. The latter defines the highest form of economic freedom as "an absolute right of property ownership, fully realized freedoms of movement for labor, capital, and goods, and an absolute absence of coercion or constraint of economic liberty beyond the extent necessary for citizens to protect and maintain liberty itself."

The **Transport Infrastructure Indicator** (8%) is a measure of a country's economic development and its potential for economic activity. The Index uses four sub-indicators, based on calculating coefficients of motorways and other roads on a per capita and country area basis.

## The ingredients of democracy: Methodology notes

Catching up in Democracy is essential for the post-communist member states of the EU, particularly given that the Copenhagen accession criteria for EU membership primarily focused on democracy. But although EU membership has often been perceived as a watershed in the political transition of the EU11 group, or even the end of that transition, it now appears that the newer members may not have achieved parity with more developed European nations in their progress in building democratic institutions and societies.

The Catch-Up Index was designed to analyse several aspects of democracy that are of particular significance for the newer member states, and those that are aspiring to be.

The Democracy category has equal weighting with the other three categories in the Catch-Up Index (Economy, Quality of Life and Governance). This category is measured through a set of seven indicators, which use nine sub-indicators. The raw data drawn from opinion polls and other composite indicator scores are converted into the Catch-Up Index score on a scale of 0 to 100 (lowest to highest) to give a standardized score that allows for comparison across countries, categories and indicators. Each of the indicators has a different weight assigned to it according to its importance in the Index model.

| Democracy Indicators        | Sub-indicators                                   | Weight      |
|-----------------------------|--|-------------|
| Democracy Indices           | Freedom House score Freedom in the World         | 20% (0,195) |
|                             | Economist Intelligence Unit Democracy Index      | 20% (0,195) |
| Media Freedom               | Freedom House Freedom of the Press score         | 10% (0,98)  |
|                             | Reporters without Borders Press Freedom Index    | 10% (0,98)  |
| Satisfaction with democracy | Satisfaction with democracy %                    | 10% (0,98)  |
| Trust in People             | Trust in people                                  | 10% (0,98)  |
| Voice and Accountability    | Voice and Accountability - WGI                   | 10% (0,98)  |
| Human Rights                | Political terror indicator by Global Peace Index | 10% (0,98)  |
| E-participation             | E-participation index                            | 2% (0,024)  |

The first indicator used to measure democracy is composed of two established **composite democracy indexes** – those of **Freedom House** and the **Economist Intelligence Unit (EIU)**. Each was attributed very high importance in the Democracy category with 20% weight (or 40% for both) because they assess the overall democracy in a country. The Freedom of the World index was used from Freedom House, rather than the specialized post-communist states' Nations in Transit index, because it does not encompass the Western European states. The EIU Democracy Index was used because its scores are more nuanced than the Freedom of the World scores, which allows for better distinction between the quality of democracy in the European states.

**Media Freedom** was attributed special attention in the Catch-Up Index because the media is essential to the democratic process – especially in the post-communist states. The Catch-Up Index relies again on two established media freedom indexes – of Freedom House and of Reporters without Borders. Each is assigned 10% weight, giving the Media Freedom indicator a 20% overall weight.

**Satisfaction with Democracy** measures the attitude of citizens towards the democratic systems of governance

in their countries. This is one of the only two indicators (along with Trust in People) that relies on public opinion surveys (in this case the main source is Eurobarometer), and the scores are based on the proportion of citizens who approve their countries' democratic systems.

**Trust in People** measures the level of people's trust of those who are outside of their immediate family or close friends. Literature abounds on the importance of trust for democracy - above all Francis Fukuyama's "Trust", - or economy and the successful organization of society. In this case, the Catch-Up Index employs the measure of Trust in People as a proxy for civil society development, given the limitations of available data on similar indicators for all the countries in the Index.

**Voice and Accountability**, with a weight of 10%, is a composite indicator of the World Bank's World Governance Indicators (WGI). This includes perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. The WGI scores also use World Bank assessments and reports that are not publicly available.

Absence of **Political terror** is also deemed essential for a functioning democracy and carries a weight of 10%. The scores are based on Global Peace Index "Political terror" indicator, e.g. identifying state terror, or violations of physical and personal integrity rights carried out by the state.

**E-participation** (2%) measures the level of participation in decision-making, governance or similar activities that is enabled by Information and Communication Technologies. For example, the facilitation of citizens' political participation through internet or cellular technologies within the broader "e-democracy" concept. Facebook advocacy or the "twitter revolutions" offer specific examples of similar phenomena.

### Quality of Life: Methodology notes

Quality of Life is the category most influenced by the “bottom-up” approach in constructing the index. The metrics of the category have been designed to establish how wealthy people are and to what degree social issues affect them, such as income inequality, risk of poverty and long-term unemployment. The indicators also aim to assess levels of access to higher education and the quality of education available, as well as whether people are living longer, healthier lives with access to good quality healthcare services.

These criteria are prerequisites for individuals to have good quality of life and for the “health” and successful development of society at large. It does not come as a surprise that the majority of the citizens of the newer member states (and the candidates) associate EU membership above all with improved quality of life, at least closer to that of their more established EU counterparts.

The raw data used for the indicators (e.g. life expectancy in years, and other composite indicator scores or coefficients) are converted into the standardized Catch-Up Index score, on a scale from 0 to 100 (lowest to highest), to allow for comparison across countries, categories and indicators. As was the case in the other categories, each of the indicators has a different weight assigned to it, reflecting its importance in the Catch-Up Index model.

| Quality of Life Indicators                               | Sub-indicators                                 | Weight     |
|--|--|------------|
| Welfare of consumers                                     | Actual individual consumption with EU28=100    | 20% (0,2)  |
| Social issues  | Inequality - Gini coefficient                  | 7% (0,067) |
|  | Relative median at-risk-of-poverty gap (%)     | 7% (0,067) |
|  | Long-term unemployment rate (%)                | 7% (0,067) |
| Education  | Share (%) of early school leavers              | 5% (0,05)  |
|  | Share of population (%) with university degree | 5% (0,05)  |
|  | PISA* score in reading literacy                | 3% (0,033) |
|  | PISA score mathematical literacy               | 3% (0,033) |
|  | PISA score in scientific literacy              | 3% (0,033) |
| Health   | Healthy life expectancy at birth in years      | 5% (0,05)  |
|  | Life expectancy in years                       | 5% (0,05)  |
|  | Infant mortality by age of 5                   | 5% (0,05)  |
|  | EuroHealth Consumer Index                      | 5% (0,05)  |
| Human Development  | Human Development Index (UN)                   | 20% (0,2)  |
| * Programme for International Student Assessment (OECD). |  |            |

**Welfare of Consumers** is attributed 20% weight in the category. It is based on data from Eurostat’s Actual Individual Consumption dataset, which is calculated on EU28=100 basis (rescaling each country’s data as a

fraction of the EU mean).

**The Social Issues indicator**, with a total weight of 21%, comprises three sub-indicators that measure different aspects of social problems in a society. The first assesses social inequality using the Gini coefficient – the greater the inequality, the lower a country's score in the Index. The second sub-indicator is based on Eurostat's relative median at-risk-of-poverty gap indicator. The third sub-indicator measures long-term unemployment in society, which signals the existence of more deep-seated social problems than the basic unemployment rate.

The **Education** indicator has been designed to reflect primarily the quality of education, rather than the quantity, given that the GDP share of education or the number of teachers or students do not always correspond to good outcomes. This is especially valid with regard to the new member states, where often inefficient and unreformed systems produce poor results, notwithstanding the funds or manpower channeled into them.

As is the case with many of the index indicators, their data can also be useful in assessing other aspects of the same category or, in this case, other categories. For example, as well as being a key indicator for Quality of life, education is relevant in assessing economic potential, democracy and good governance. The sub-indicator on early school-leavers assesses the share of young people giving up education and training prematurely; this may also help to gauge broader social problems. The second sub-indicator is the share of the population that hold university degrees. The next three education-related sub-indicators are based on the results of the Organisation for Economic Co-operation and Development's *Programme for International Student Assessment* (PISA). The PISA scores go beyond the performance of high-school students and survey the broader state of a country's education sector, for example qualification levels of teachers and the quality of universities.

The **Health** indicator is likewise designed to focus more on the outcomes than on less indicative criteria such as share of GDP or the number of medical workers. One sub-indicator is life expectancy, measuring how many years a person is expected to live, while another is healthy life expectancy, specifically taking into account life without major illness. The indicator for infant mortality is also indicative of the broader state of health services or social services in a country (or even the state of society more broadly) because it assesses the likelihood of children surviving to the age to 5. The fourth sub-indicator is a composite of the EuroHealth Consumer Index by the Health Consumer Powerhouse, which measures the quality of healthcare systems in a country (including by outcome).

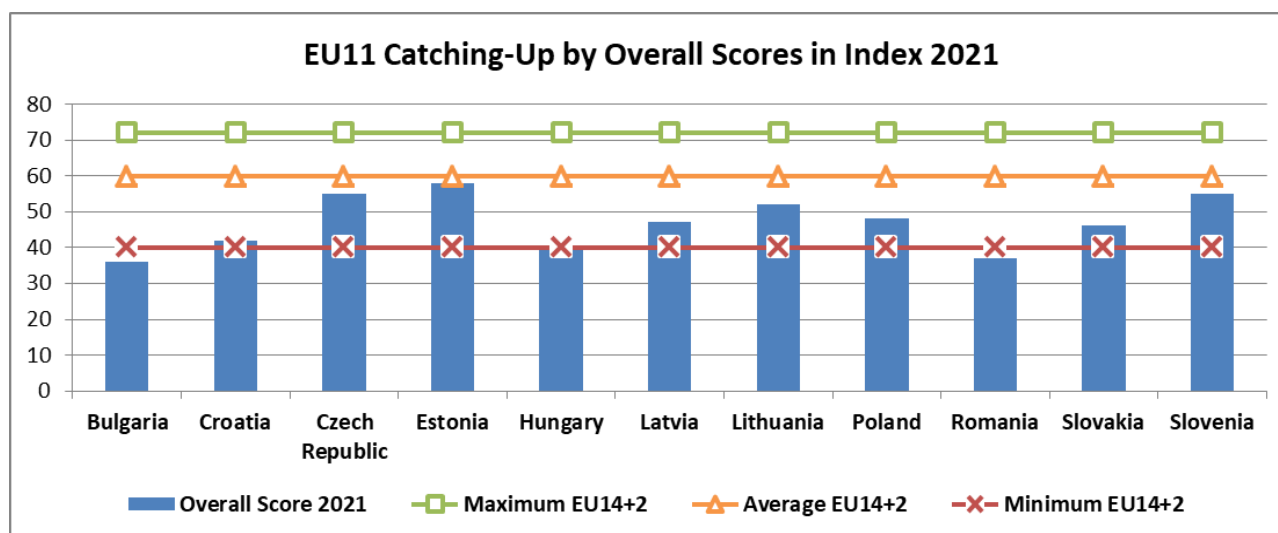
The United Nations' **Human Development Index** is a composite index measuring life expectancy, literacy, education and standards of living for countries worldwide. It has similar dimensions to the Catch-Up Index, but includes additional data and methodology, which complements the other indicators but does not overlap with them.

## The Catching-up of the EU11 Countries in Index 2021

### EU11 Catching-Up in Index 2021 by Overall Score

The catching-up by Overall Scores of Index 2021 compares the performance of the EU11 countries by their overall scores with three benchmarks – the maximum, average and minimum scores - of their counterparts of the EU14+2 group. The EU11 is comprised of the countries in Central and Eastern Europe, which joined the EU in 2004, 2007 and 2013. The EU14+2 are the countries which established and joined the EU before 2004 as well as Cyprus and Malta, which became EU member states in 2004.

The results of the index 2021 show that three EU11 countries - Estonia, the Czech Republic and Slovenia – are close to but do not outperform the average benchmark of 60 points with respectively 58, 55 and 55 points. Estonia is 13<sup>th</sup>, the Czech Republic 14<sup>th</sup> and Slovenia 15<sup>th</sup> in the overall ranking out of 35 countries. None of the EU11 countries is near the best performers of the EU14+2 group with the maximum score of 72 points. Eight of the EU11 countries outperform the minimum benchmark of the EU14+2 group of 40 points and the rest three of them – Hungary, Romania and Bulgaria – are on or below this minimum benchmark.





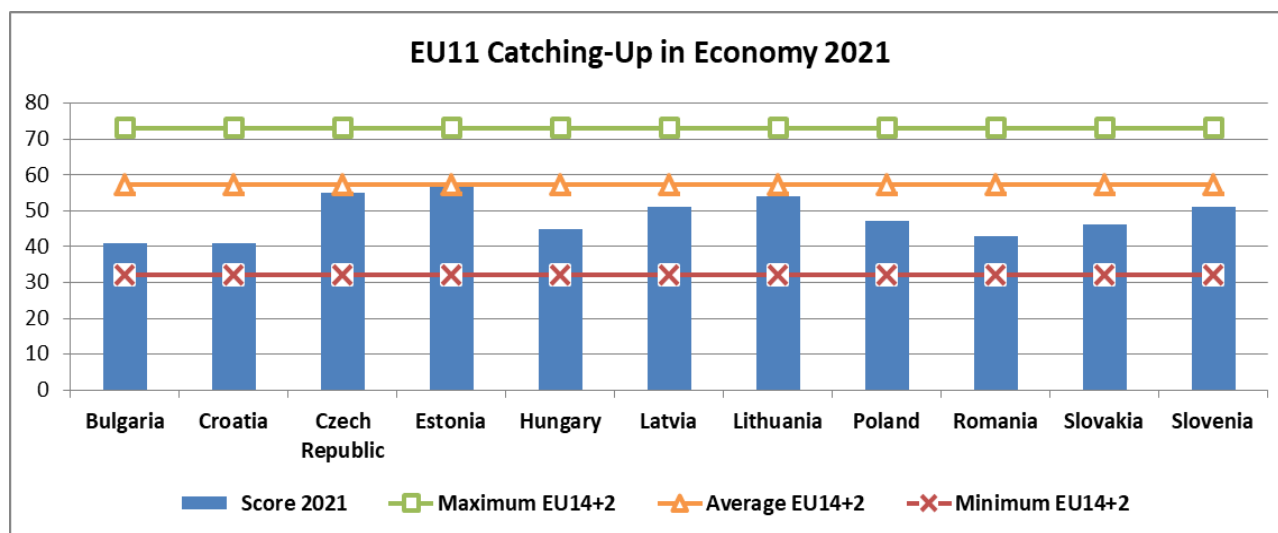
The trends in the catching-up process show that between 2011 and 2021 three countries –Estonia, Lithuania and Latvia – have improved continuously both their scores and rankings. Estonia jumped 5 positions up the ranking, Lithuania – 7 positions and Latvia – 5 too in 2021 compared to the starting position in 2011. There seems to be a regional pattern in the improvement as these are all Baltic counties. The table also shows that after 2012-2014 the improvement by overall score slows down or disappears.

Hungary and Slovakia register the biggest continuous downgrade in performance in the period 2011 - 2021. Hungary falls by 4 positions and Slovakia by 3 positions in 2021 compared to 2011 with deterioration in scores too. Among the other countries, Poland's performance worsens too with 3 positions lower in 2021 compared to 2015 and 2016. With the Czech Republic results oscillating in this period, the V4 (Visegrad 4) group performance in the index is not very good.

| Group | Country        | Overall Score 2021 | Overall Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank change vs 2019 | Rank change vs 2018 | Rank change vs 2017 | Rank change vs 2016 | Rank change vs 2015 | Rank change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
|-------|----------------|--------------------|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|       | Maximum EU14+2 | 72                 | 1                 |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|       | Average EU14+2 | 60                 |                   |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11  | Estonia        | 58                 | 13                | 1                    | 1                    | 2                    | 2                    | 3                    | 3                    | 5                    | 6                    | 6                    | 0                   | 0                   | 0                   | 0                   | 0                   | 1                   | 3                   | 5                   | 5                   |
| EU11  | Czech Republic | 55                 | 14                | 0                    | 0                    | 0                    | 0                    | 0                    | 1                    | 0                    | 0                    | 2                    | 0                   | 0                   | 0                   | 1                   | 0                   | 1                   | -1                  | 1                   | 3                   |
| EU11  | Slovenia       | 55                 | 15                | 0                    | 1                    | 0                    | 1                    | 3                    | 2                    | 1                    | 0                    | -1                   | 0                   | 1                   | 0                   | 1                   | 1                   | 1                   | -1                  | -2                  | -2                  |
| EU11  | Lithuania      | 52                 | 17                | 2                    | 3                    | 2                    | 2                    | 3                    | 4                    | 5                    | 8                    | 7                    | 3                   | 3                   | 2                   | 3                   | 2                   | 5                   | 5                   | 7                   | 7                   |
| EU11  | Poland         | 48                 | 21                | 1                    | 2                    | 0                    | -2                   | -3                   | -2                   | -1                   | -1                   | 1                    | 2                   | 2                   | 0                   | -2                  | -3                  | -3                  | -1                  | -1                  | 1                   |
| EU11  | Latvia         | 47                 | 22                | 0                    | -1                   | -1                   | 0                    | 0                    | 3                    | 5                    | 7                    | 6                    | 0                   | -1                  | 1                   | 2                   | 2                   | 2                   | 3                   | 5                   | 5                   |
| EU11  | Slovakia       | 46                 | 24                | -2                   | -1                   | -2                   | -3                   | -2                   | -2                   | -3                   | -2                   | -1                   | -3                  | -2                  | -2                  | -2                  | -2                  | -3                  | -5                  | -3                  | -3                  |
| EU11  | Croatia        | 42                 | 25                | 2                    | 1                    | 1                    | 1                    | 1                    | 2                    | 1                    | 1                    | 1                    | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   |
| EU11  | Hungary        | 40                 | 27                | -1                   | -1                   | -2                   | -2                   | -2                   | -4                   | -5                   | -6                   | -7                   | -2                  | -2                  | -2                  | -2                  | -2                  | -2                  | -3                  | -4                  | -4                  |
|       | Minimum EU14+2 | 40                 | 26                |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11  | Romania        | 37                 | 28                | 1                    | 0                    | 0                    | 1                    | 1                    | 3                    | 3                    | 2                    | 5                    | 0                   | -1                  | -1                  | 0                   | 0                   | 2                   | 1                   | 0                   | 1                   |
| EU11  | Bulgaria       | 36                 | 29                | 0                    | 0                    | 1                    | 2                    | 2                    | 2                    | 2                    | 1                    | 2                    | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | -1                  |

## EU11 Catching-Up in the Economy in Index 2021

In the Economy category, Estonia (11<sup>th</sup> out of 35 countries) performs on par with the average benchmark of 57 points of the EU14+2 countries, followed by the Czech Republic (13<sup>th</sup> position) and Lithuania (16<sup>th</sup> position) with 55 and 54 points respectively. None of the EU11 countries is close to the best result of the EU14+2 group of 73 points. All EU11 countries outperform the minimum benchmark in the Economy category.



The trends in the Economy catching-up show that most of the EU11 countries improved their performance compared to the starting year 2011, including Estonia, the Czech Republic, Lithuania, Latvia, , Poland, Hungary and Bulgaria. Three countries register deterioration in both rankings and scores –Slovenia, Slovakia and Croatia.

However, the table also shows that after 2012-2014 the improvement in the Economy category slows down or disappears.

| Economy: Changes in Ranks and Scores 2011-2021 |                |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|--|----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group  | Country        | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank Change vs 2019 | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| Maximum EU14+2                                 |                | 73         | 1         |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Average EU14+2                                 |                | 57         |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11   | Estonia        | 57         | 11        | 0                    | 0                    | 0                    | 0                    | 0                    | 2                    | 3                    | 5                    | 5                    | 1                   | 0                   | 0                   | 1                   | 2                   | 2                   | 2                   | 5                   | 5                   |
| EU11   | Czech Republic | 55         | 13        | 0                    | 1                    | 1                    | 1                    | 3                    | 4                    | 5                    | 5                    | 6                    | 1                   | 2                   | 1                   | 2                   | 4                   | 1                   | 3                   | 5                   | 5                   |
| EU11   | Lithuania      | 54         | 16        | 1                    | 2                    | 2                    | 2                    | 1                    | 3                    | 3                    | 7                    | 8                    | 0                   | 0                   | 0                   | 0                   | -2                  | 0                   | -1                  | 3                   | 5                   |
| EU11   | Latvia         | 51         | 17        | 0                    | 1                    | 0                    | 0                    | -1                   | 2                    | 4                    | 7                    | 7                    | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | 2                   | 5                   | 6                   |
| EU11   | Slovenia       | 51         | 18        | 0                    | 1                    | 2                    | 3                    | 1                    | 2                    | -1                   | -3                   | -4                   | 0                   | 0                   | 0                   | 1                   | 0                   | -1                  | -4                  | -5                  | -4                  |
| EU11   | Poland         | 47         | 21        | 1                    | 1                    | 1                    | 0                    | 1                    | 1                    | 2                    | 3                    | 5                    | 1                   | 1                   | 0                   | 0                   | 0                   | 0                   | 1                   | 3                   | 3                   |
| EU11   | Slovakia       | 46         | 22        | -1                   | -1                   | -2                   | -3                   | -2                   | -1                   | -1                   | -1                   | 0                    | -1                  | -2                  | -3                  | -4                  | -2                  | -2                  | -2                  | -2                  | -2                  |
| EU11   | Hungary        | 45         | 23        | 1                    | 1                    | 1                    | 1                    | 1                    | 1                    | 1                    | 2                    | 4                    | 0                   | 0                   | -1                  | -1                  | 0                   | -1                  | 1                   | 3                   | 3                   |
| EU11   | Romania        | 43         | 25        | 1                    | 1                    | 1                    | 0                    | 1                    | 3                    | 3                    | 4                    | 5                    | 0                   | -1                  | 0                   | 0                   | 1                   | 2                   | 2                   | 2                   | 4                   |
| EU11   | Bulgaria       | 41         | 26        | 1                    | 1                    | 1                    | 1                    | 2                    | 2                    | 2                    | 2                    | 3                    | 2                   | 2                   | 1                   | 1                   | 2                   | 3                   | 2                   | 2                   | 2                   |
| EU11   | Croatia        | 41         | 27        | 1                    | 1                    | 2                    | 2                    | 1                    | 2                    | -2                   | -3                   | -1                   | 0                   | 0                   | 1                   | 1                   | 0                   | 1                   | -2                  | -2                  | -2                  |
| Minimum EU14+2                                 |                | 32         | 32        |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |

## Indicators in the Economy Category in Index 2021

The following tables present the ranking and scores of the EU11 countries by the basic indicators, which are used to measure the Economy category.

| GDP per Capita |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Maximum EU14+2 | 100        | 1         |
| Average EU14+2 | 61         |           |
| Czech Republic | 50         | 15        |
| Slovenia       | 48         | 16        |
| Lithuania      | 47         | 18        |
| Estonia        | 47         | 20        |
| Poland         | 42         | 22        |
| Hungary        | 42         | 23        |
| Latvia         | 41         | 24        |
| Romania        | 41         | 25        |
| Slovakia       | 40         | 26        |
| Croatia        | 37         | 28        |
| Minimum EU14+2 | 37         | 27        |
| Bulgaria       | 33         | 30        |

In GDP per capita indicator, no new member state of the EU10+1 group is close to the EU15+2 average result of 61 score points. The closest ones are the Czech Republic with 15<sup>th</sup> position out of 35 and 50 points in the index on the scale 0 to 100 (lowest to highest), followed by Slovenia (16<sup>th</sup> position and 48 points and Lithuania and Estonia with nearly identical scores (18<sup>th</sup> and 20<sup>th</sup> place with 47 points). Bulgaria (30<sup>th</sup> position and 33 points), Croatia (28<sup>th</sup> position and 37 points) and Slovakia (28<sup>th</sup> position and 40 points) are last among the EU11.

| Employment     |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Maximum EU14+2 | 76         | 2         |
| Czech Republic | 68         | 7         |
| Estonia        | 66         | 9         |
| Latvia         | 61         | 12        |
| Lithuania      | 61         | 13        |
| Slovenia       | 59         | 14        |
| Hungary        | 57         | 16        |
| Average EU14+2 | 55         |           |
| Poland         | 54         | 18        |
| Bulgaria       | 52         | 20        |
| Slovakia       | 51         | 21        |
| Romania        | 47         | 24        |
| Croatia        | 38         | 26        |
| Minimum EU14+2 | 25         | 31        |

The Employment indicator ranking shows that six of the EU11 countries are above the EU14+2 average with the Czech Republic and Estonia closest to the maximum score of the old member states with identical scores of 68 and 66 points and 7<sup>th</sup> and 9<sup>th</sup> position respectively. Romania (24<sup>th</sup> place and 47 points) and Croatia (38<sup>st</sup> place and 26 points) are last in the group.

The research and development indicator uses data of two sub-indicators - patents granted by United States Patent and Trademark Office (USPTO) per capita and high-tech exports as a percentage of manufactured exports (World Bank data). The Czech Republic is close to the desired average of the EU14+2 with 13<sup>th</sup> place and 54 point, followed by Hungary (15<sup>th</sup> place and 52 points) and Latvia (16<sup>th</sup> place and 50 points). Estonia somewhat surprisingly came last in 2021, after being second among the EU11 in the previous index. The drop is due to over threefold decrease in the volume high-technology exports (% of manufactured exports), according to UN statistics, e.g. from nearly 17.9 % in 2017 to 5.8% in 2019 but further explanation is not provided.

| Research and Development |            |           |
|--------------------------|------------|-----------|
| Country                  | Score 2021 | Rank 2021 |
| Maximum EU14+2           | 77         | 2         |
| Average EU14+2           | 59         |           |
| Czech Republic           | 54         | 13        |
| Hungary                  | 49         | 16        |
| Latvia                   | 48         | 17        |
| Lithuania                | 42         | 20        |
| Bulgaria                 | 40         | 21        |
| Romania                  | 40         | 22        |
| Poland                   | 40         | 23        |
| Slovenia                 | 40         | 24        |
| Slovakia                 | 40         | 25        |
| Croatia                  | 37         | 27        |
| Minimum EU14+2           | 37         | 28        |
| Estonia                  | 36         | 29        |

| Energy Efficiency |            |           |
|-------------------|------------|-----------|
| Country           | Score 2021 | Rank 2021 |
| Maximum EU14+2    | 76         | 1         |
| Average EU14+2    | 63         |           |
| Slovenia          | 56         | 17        |
| Croatia           | 54         | 19        |
| Romania           | 51         | 20        |
| Slovakia          | 50         | 21        |
| Lithuania         | 48         | 22        |
| Hungary           | 48         | 23        |
| Latvia            | 48         | 24        |
| Poland            | 48         | 25        |
| Czech Republic    | 46         | 26        |
| Estonia           | 42         | 27        |
| Minimum EU14+2    | 33         | 29        |
| Bulgaria          | 13         | 32        |

Energy efficiency reflects the energy intensity of the economy. The new member states have generally poor performance in this indicator. Slovenia is the closest to the desired average score with 18<sup>th</sup> place and 54 points, followed by Croatia (20<sup>th</sup> place and 52 points) and Latvia (21<sup>st</sup> place and 49 points).

The transport infrastructure indicator uses data from four sub-indicators – length of roads and highways both per population and per the country size. Three new member states perform above the average benchmark with Slovenia very close to the EU14+2 maximum too with 65 points and 4<sup>nd</sup> place among 35 countries. It is followed by Hungary (6<sup>th</sup> place and 59 points) and Estonia (8<sup>th</sup> place and 57 points). Romania (33<sup>rd</sup> place with 34 points) and Bulgaria (30<sup>th</sup> with 37 points) are last among the new member states.

| Transport Infrastructure |            |           |
|--------------------------|------------|-----------|
| Country                  | Score 2021 | Rank 2021 |
| Maximum EU14+2           | 72         | 1         |
| Slovenia                 | 65         | 4         |
| Hungary                  | 59         | 6         |
| Estonia                  | 57         | 8         |
| Average EU14+2           | 56         |           |
| Lithuania                | 55         | 10        |
| Croatia                  | 55         | 13        |
| Czech Republic           | 49         | 18        |
| Latvia                   | 45         | 23        |
| Minimum EU14+2           | 44         | 25        |
| Slovakia                 | 41         | 28        |
| Poland                   | 41         | 29        |
| Bulgaria                 | 37         | 30        |
| Romania                  | 34         | 33        |

| Government Debt |            |           |
|-----------------|------------|-----------|
| Country         | Score 2021 | Rank 2021 |
| Estonia         | 78         | 1         |
| Maximum EU14+2  | 74         | 2         |
| Bulgaria        | 74         | 3         |
| Czech Republic  | 68         | 5         |
| Latvia          | 65         | 9         |
| Lithuania       | 63         | 10        |
| Romania         | 63         | 11        |
| Poland          | 58         | 15        |
| Slovakia        | 57         | 17        |
| Hungary         | 47         | 23        |
| Slovenia        | 47         | 24        |
| Croatia         | 43         | 27        |
| Average EU14+2  | 42         |           |
| Minimum EU14+2  | 0          | 35        |

The new member states excel in the government debt indicator with very low levels of debt. Estonia is 1<sup>st</sup> among 35 countries and 80 points, above the old member states maximum score. Bulgaria is 3<sup>rd</sup> among 35 countries with 72 points and the Czech Republic is 6<sup>th</sup> with 67 points. Even the last among the new member states in this indicator are performing above the EU15+2 average – Croatia (27<sup>th</sup> place and 43 points), Slovenia (24<sup>th</sup> place and 46 points) and Hungary (23<sup>rd</sup> and 46 points).

The Market Development indicator consists of two sub-indicators – of Doing Business and Index of Economic Freedom. Four new member states score above the average benchmark with Lithuania (4<sup>th</sup> place with 75 points), Estonia (5<sup>th</sup> place and 74 points) outperforming the rest by a large margin. The last in the new member states ranking are Croatia (31<sup>th</sup> place and 31 points) and Hungary (29<sup>th</sup> place and 37 points).

| Market Development |            |           |
|--------------------|------------|-----------|
| Country            | Score 2021 | Rank 2021 |
| Maximum EU14+2     | 80         | 1         |
| Lithuania          | 75         | 4         |
| Estonia            | 74         | 5         |
| Latvia             | 62         | 9         |
| Czech Republic     | 55         | 14        |
| Average EU14+2     | 52         |           |
| Poland             | 48         | 17        |
| Slovenia           | 47         | 18        |
| Romania            | 40         | 25        |
| Bulgaria           | 39         | 27        |
| Slovakia           | 39         | 28        |
| Hungary            | 37         | 29        |
| Croatia            | 31         | 31        |
| Minimum EU14+2     | 13         | 34        |

| Information&Communication Technology |            |           |
|--------------------------------------|------------|-----------|
| Country                              | Score 2021 | Rank 2021 |
| <b>Maximum EU14+2</b>                | <b>78</b>  | <b>2</b>  |
| Estonia                              | 66         | 9         |
| <b>Average EU14+2</b>                | <b>62</b>  |           |
| Slovenia                             | 49         | 17        |
| Latvia                               | 47         | 18        |
| Croatia                              | 46         | 19        |
| Lithuania                            | 45         | 21        |
| Czech Republic                       | 45         | 22        |
| Slovakia                             | 43         | 24        |
| <b>Minimum EU14+2</b>                | <b>42</b>  | <b>25</b> |
| Hungary                              | 40         | 26        |
| Poland                               | 39         | 27        |
| Bulgaria                             | 38         | 28        |
| Romania                              | 30         | 30        |

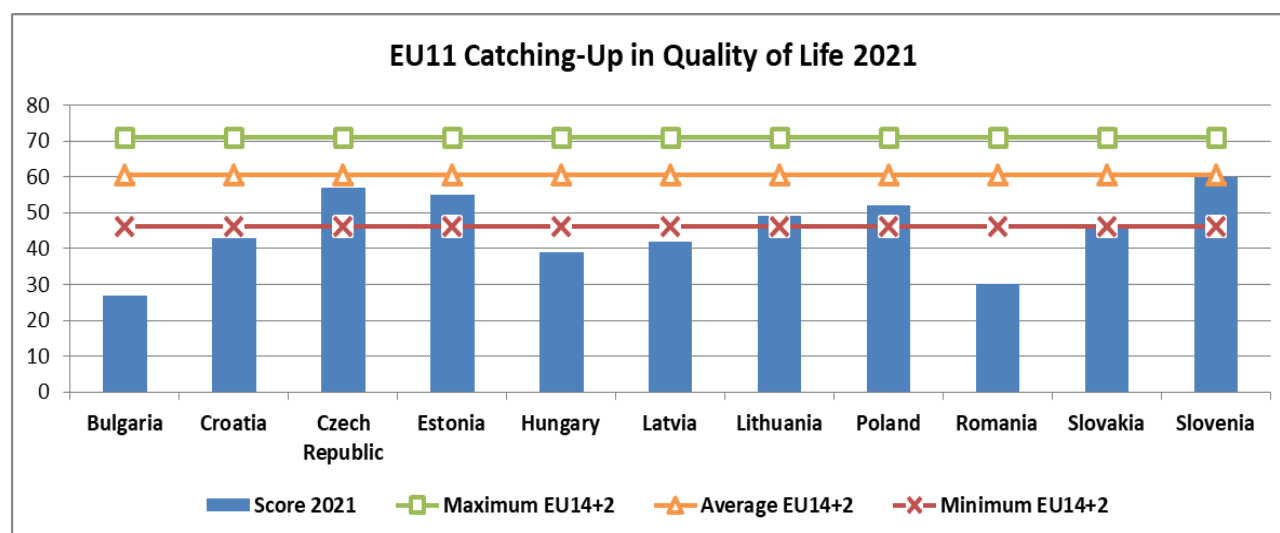
The Information and Communication Technology index of the United Nations measures the level of development of the information society in a country. Estonia is above the average benchmark and is closest among its peers to the old member states minimum – with 9<sup>th</sup> place and 66 points. It is followed by a large margin by Slovenia (17<sup>th</sup> place with 49 points) and Latvia (18<sup>th</sup> place and 47 points). Romania (30<sup>th</sup> with 30 points), Bulgaria (28<sup>th</sup> with 38 points) and Poland (27<sup>th</sup> with 39 points) are last among the new member states.

The Credit Rating is the average score of the sovereign rating risks of the three big credit agencies - Moody's, S&P and Fitch. The Czech Republic and Estonia with 61 points each and 12<sup>th</sup> and 13<sup>th</sup> place respectively outperform the average benchmark of the old member states. The worst performing countries in this indicator among the new member states are Croatia (28<sup>th</sup> place and 32 points), Romania (27<sup>th</sup> place and 36 points) and Hungary (24<sup>th</sup> place and 39 points).

| Credit Rating         |            |           |
|-----------------------|------------|-----------|
| Country               | Score 2021 | Rank 2021 |
| <b>Maximum EU14+2</b> | <b>79</b>  | <b>1</b>  |
| Czech Republic        | 61         | 12        |
| Estonia               | 61         | 13        |
| <b>Average EU14+2</b> | <b>61</b>  |           |
| Lithuania             | 55         | 14        |
| Slovakia              | 55         | 15        |
| Slovenia              | 55         | 16        |
| Latvia                | 52         | 19        |
| Poland                | 51         | 20        |
| Bulgaria              | 43         | 22        |
| Hungary               | 39         | 24        |
| Romania               | 36         | 27        |
| Croatia               | 32         | 28        |
| <b>Minimum EU14+2</b> | <b>25</b>  | <b>31</b> |

## EU11 Catching-Up in Quality of Life in Index 2021

In the Quality of Life category, Slovenia (13<sup>th</sup> out of 35 countries) reaches the average benchmark of 60 points, followed by the Czech Republic (14<sup>th</sup>) and Estonia (16<sup>th</sup>) with 57 and 55 points respectively. No country of the EU11 group is close to the best result of 71 points of the EU14+1 group. Romania and Bulgaria are farthest from the desired benchmark with 30 and 27 points respectively. In fact, 5 out of the 11 CEE countries score below the minimum score of their counterparts in the EU14+1 group, leaving Quality of Life the category of poorest performance in the index.





The trends in the period 2011-2021 show that the Czech Republic, Estonia, Poland, Lithuania and to a lesser extent Latvia and Romania register improvements in the Quality of Life category, but the process slowed down or stopped after 2014. Hungary registered the most serious downgrade in this category losing respectively 5 and 6 positions compared to 2011 and 2012. Slovakia and Bulgaria's performance deteriorated too.

| Quality of Life: Change in Ranks and Scores 2011-2021 |                |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|---|----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group   | Country        | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank Change vs 2019 | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| Maximum EU14+2  |                | 71         | 1         |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| Average EU14+2  |                | 60         |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11  | Slovenia       | 60         | 13        | 1                    | 2                    | 0                    | 1                    | 4                    | 2                    | 3                    | 2                    | 3                    | 0                   | 0                   | 0                   | 0                   | 1                   | 0                   | 1                   | 1                   | 2                   |
| EU11  | Czech Republic | 57         | 14        | 0                    | 1                    | 2                    | 1                    | 1                    | 1                    | -1                   | 2                    | 4                    | 0                   | 0                   | 0                   | 0                   | -1                  | 0                   | -1                  | 2                   | 4                   |
| EU11  | Estonia        | 55         | 16        | 1                    | 2                    | 2                    | 2                    | 3                    | 5                    | 7                    | 7                    | 6                    | 0                   | 2                   | 2                   | 1                   | 2                   | 3                   | 5                   | 4                   | 4                   |
| EU11  | Poland         | 52         | 18        | 1                    | 4                    | 2                    | 3                    | 4                    | 2                    | 4                    | 5                    | 7                    | 1                   | 3                   | 3                   | 3                   | 2                   | 2                   | 4                   | 6                   | 5                   |
| EU11  | Lithuania      | 49         | 22        | 2                    | 3                    | 3                    | 3                    | 3                    | 3                    | 4                    | 11                   | 8                    | 1                   | 1                   | 2                   | 2                   | 1                   | 2                   | 2                   | 4                   | 4                   |
| EU11  | Slovakia       | 46         | 24        | -2                   | -1                   | 0                    | 0                    | 2                    | 0                    | -3                   | -1                   | 1                    | -2                  | -2                  | -1                  | -1                  | 0                   | -1                  | -5                  | -2                  | 0                   |
| Minimum EU14+2  |                | 46         | 23        |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11  | Croatia        | 43         | 25        | 1                    | 1                    | -1                   | 0                    | -1                   | 0                    | 2                    | 2                    | -1                   | 0                   | 2                   | 1                   | 1                   | 1                   | 1                   | 1                   | 0                   | 0                   |
| EU11  | Latvia         | 42         | 26        | 0                    | -2                   | 0                    | 1                    | 0                    | 2                    | 4                    | 6                    | 6                    | 0                   | -1                  | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   |
| EU11  | Hungary        | 39         | 27        | -2                   | -4                   | -5                   | -5                   | -5                   | -5                   | -5                   | -9                   | -8                   | 0                   | -1                  | -2                  | -2                  | -2                  | -2                  | -6                  | -5                  |                     |
| EU11  | Romania        | 30         | 29        | 0                    | -3                   | 1                    | 2                    | 0                    | 0                    | 2                    | -2                   | 3                    | 0                   | 0                   | 0                   | 1                   | 0                   | 0                   | 2                   | 1                   | 2                   |
| EU11  | Bulgaria       | 27         | 32        | -2                   | -3                   | -1                   | -2                   | -3                   | -3                   | -2                   | -3                   | -3                   | -2                  | -2                  | -2                  | -3                  | -2                  | -2                  | -2                  | -1                  | -2                  |

## Indicators in the Quality of Life Category in Index 2021

| Consumption per capita |            |           |
|------------------------|------------|-----------|
| Country                | Score 2021 | Rank 2021 |
| Maximum EU14+2         | 85         | 1         |
| Average EU14+2         | 64         |           |
| Lithuania              | 57         | 14        |
| Czech Republic         | 49         | 17        |
| Poland                 | 46         | 20        |
| Slovenia               | 44         | 21        |
| Estonia                | 43         | 22        |
| Romania                | 43         | 23        |
| Minimum EU14+2         | 42         | 24        |
| Slovakia               | 38         | 25        |
| Latvia                 | 37         | 26        |
| Hungary                | 35         | 28        |
| Croatia                | 33         | 29        |
| Bulgaria               | 29         | 30        |

The consumption indicator is used for comparing the relative welfare of consumers between countries. The countries of the EU11 are still far from the desired average benchmark and even farther from the best performers in the old member states group. The difference between the best performer Lithuania with 57 points (14<sup>th</sup> place out of 35) and the maximum score of 85 points (1<sup>st</sup> place) is evident. The Czech Republic (17<sup>th</sup> with 49 points) and Poland with 46 points and 20<sup>th</sup> place also performs well. The last in the ranking of new member states are Bulgaria (30<sup>th</sup> place with 29 points), Croatia (29<sup>th</sup> place with 33 points) and Hungary (28<sup>th</sup> place with 35 points).

Social Issues is a composite indicator that includes three sub-indicators on inequality, risk of poverty and long-term unemployment. One of the EU11 member states outperforms all the rest of the 35 countries in the index. The Czech Republic is 1<sup>st</sup> in the ranking with 74 points, Slovenia is 4<sup>nd</sup> with 70 points and Poland with 11<sup>th</sup> place and 62 points perform above the average benchmark. The last in the ranking of the EU11 are Latvia and Romania with 23<sup>rd</sup> and 25<sup>th</sup> place with nearly identical scores of 40 points and Bulgaria is last with 30<sup>th</sup> place with 33 points.

| Social Issues  |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Czech Republic | 74         | 1         |
| Maximum EU14+2 | 70         | 3         |
| Slovenia       | 70         | 4         |
| Slovakia       | 65         | 8         |
| Poland         | 62         | 11        |
| Average EU14+2 | 56         |           |
| Estonia        | 56         | 16        |
| Croatia        | 51         | 18        |
| Lithuania      | 45         | 21        |
| Hungary        | 44         | 22        |
| Latvia         | 40         | 23        |
| Romania        | 40         | 25        |
| Minimum EU14+2 | 33         | 29        |
| Bulgaria       | 33         | 30        |

| Gini index (social issues sub-indicator) |            |           |
|--|------------|-----------|
| Country                                  | Score 2021 | Rank 2021 |
| Slovakia                                 | 92         | 1         |
| Slovenia                                 | 81         | 2         |
| Czech Republic                           | 78         | 3         |
| Maximum EU14+2                           | 72         | 5         |
| Poland                                   | 64         | 9         |
| Hungary                                  | 59         | 13        |
| Croatia                                  | 59         | 14        |
| Average EU14+2                           | 54         |           |
| Estonia                                  | 49         | 18        |
| Romania                                  | 35         | 28        |
| Minimum EU14+2                           | 32         | 31        |
| Lithuania                                | 29         | 32        |
| Latvia                                   | 28         | 33        |
| Bulgaria                                 | 7          | 34        |

The data for one of the sub-indicators – inequality - measured by the Gini index, shows that EU11 societies either very equal or among the most unequal. Three of the new EU member states are at the top of the overall ranking – Slovakia, Slovenia and the Czech Republic. Slovakia is the best performing country with the lowest Gini coefficient and lowest inequality among the 35 countries in the index. Slovenia is 2<sup>nd</sup> with 81 points and the Czech Republic is 3<sup>rd</sup> with 78 points. They are above the maximum score of the EU14+2 countries with 5<sup>th</sup> place and 72 points. Three other countries – Poland, Hungary and Croatia - are performing above the average benchmark.

But they are also countries lagging behind – Bulgaria is just 34<sup>th</sup> out of 35 countries with 7 points, Latvia is 33<sup>th</sup> with 28 points and Lithuania is 32<sup>nd</sup> with 29 points.

The Education indicator is a composite of several sub-indicators – share of people with university education and the PISA results. Estonia is the best performing country among all 35 included in the index with 1<sup>st</sup> place and 73 points. Poland (4<sup>th</sup>, 66 points), Slovenia (5<sup>th</sup>, 66 points), Lithuania (12<sup>th</sup>, 59 points), Latvia (15<sup>th</sup>, 57 points) perform well too as they score above the average benchmark with respectively. Romania with 34<sup>th</sup> place and 22 points and Bulgaria with 31<sup>st</sup> place and 28 points are last among the new member states.

| Education      |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Estonia        | 73         | 1         |
| Maximum EU14+2 | 71         | 2         |
| Poland         | 66         | 4         |
| Slovenia       | 66         | 5         |
| Lithuania      | 59         | 12        |
| Latvia         | 57         | 15        |
| Average EU14+2 | 56         |           |
| Czech Republic | 55         | 17        |
| Croatia        | 51         | 21        |
| Slovakia       | 47         | 22        |
| Hungary        | 47         | 23        |
| Minimum EU14+2 | 38         | 27        |
| Bulgaria       | 28         | 31        |
| Romania        | 22         | 34        |

| PISA (education sub-indicator) |            |           |
|--------------------------------|------------|-----------|
| Country                        | Score 2021 | Rank 2021 |
| Estonia                        | 80         | 1         |
| Maximum EU15+2                 | 75         | 2         |
| Poland                         | 73         | 3         |
| Slovenia                       | 67         | 5         |
| Czech Republic                 | 62         | 12        |
| Average EU15+2                 | 58         |           |
| Latvia                         | 56         | 17        |
| Lithuania                      | 53         | 19        |
| Hungary                        | 53         | 20        |
| Croatia                        | 48         | 23        |
| Slovakia                       | 47         | 24        |
| Minimum EU15+2                 | 28         | 29        |
| Romania                        | 23         | 30        |
| Bulgaria                       | 22         | 31        |

In regard to the PISA scores, which is a sub-indicator for education and which remains unchanged since the last edition of the index, Estonia is 1<sup>st</sup> among all 35 countries with a score of 80 points. Poland, Slovenia and the Czech Republic are also performing well with Poland on 3<sup>rd</sup> place of 35 in total and 73 points, Slovenia (5<sup>th</sup> with 67 points) and the Czech Republic (12<sup>th</sup> with 62 points). Bulgaria (31<sup>st</sup> with 22 points) and Romania (30<sup>th</sup> with 23 points) are last among the new member states.

The Health indicator uses several sub-indicators: life expectancy, healthy life expectancy, quality of the healthcare system and the infant mortality. No country is above the average benchmark, but Slovenia (16<sup>th</sup> with 59 points), Estonia (18<sup>th</sup> with 54 points) and the Czech Republic (20<sup>th</sup> with 50 points) perform better than their peers. Bulgaria (34<sup>th</sup> place with 20 points) and Romania (35<sup>th</sup> with 19 points) are last in the group.

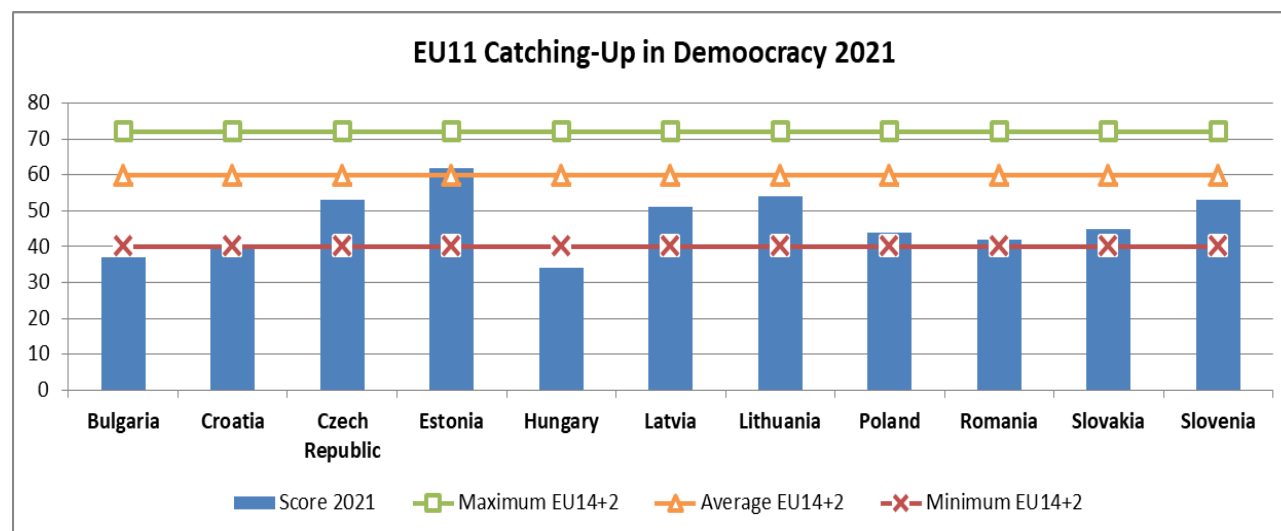
| Health         |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Maximum EU14+2 | 70         | 2         |
| Average EU14+2 | 63         |           |
| Slovenia       | 59         | 16        |
| Estonia        | 54         | 18        |
| Czech Republic | 50         | 20        |
| Minimum EU14+2 | 49         | 21        |
| Croatia        | 40         | 23        |
| Slovakia       | 40         | 24        |
| Poland         | 36         | 25        |
| Lithuania      | 33         | 28        |
| Hungary        | 32         | 29        |
| Latvia         | 32         | 30        |
| Bulgaria       | 20         | 34        |
| Romania        | 19         | 35        |

| Human Development Index |            |           |
|-------------------------|------------|-----------|
| Country                 | Score 2021 | Rank 2021 |
| <b>Maximum EU14+2</b>   | <b>78</b>  | <b>1</b>  |
| Slovenia                | 63         | 11        |
| <b>Average EU14+2</b>   | <b>63</b>  |           |
| Czech Republic          | 57         | 15        |
| Estonia                 | 54         | 18        |
| Lithuania               | 50         | 21        |
| Poland                  | 49         | 22        |
| Latvia                  | 43         | 23        |
| <b>Minimum EU14+2</b>   | <b>43</b>  | <b>24</b> |
| Slovakia                | 41         | 25        |
| Hungary                 | 39         | 26        |
| Croatia                 | 38         | 27        |
| Romania                 | 29         | 29        |
| Bulgaria                | 24         | 31        |

The Human Development Index of the United Nations is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. No new EU member state is above the average benchmark of the EU14+2, but Slovenia is very close with 11<sup>th</sup> place out of 35 and 63 score points. The Czech Republic (15<sup>th</sup> with 57 points) and Estonia (18<sup>th</sup> with 54 points) follow closely. The last in line are Romania and Bulgaria with respectively score of 29<sup>th</sup> and 31<sup>st</sup> place and 29 and 24 points.

## EU11 Catching-up in the Democracy Category in Index 2021

In the Democracy category, Estonia with 62 points outperforms the average benchmark of 60 points, followed by Lithuania and the Czech Republic, which are the top 3 countries in the EU11 group. Estonia, with its 9<sup>th</sup> position out of 35 countries, is the best performing EU11 country in any category. Croatia, Bulgaria and Hungary are at the bottom of the EU11 ranking with scores equal (Croatia) or lower than the minimum score of 40 points of the EU14+2 group.



The long-term trends in Democracy in the period 2011-2021 present a mixed picture. A number of countries register significant deterioration in – most of all Hungary, followed by Poland, the Czech Republic and to a lesser extent Slovenia, Slovakia and Croatia. Estonia, Lithuania, Latvia and Romania register improvement in their scores and ranking.

| Democracy: Change in Ranks and Scores 2011-2021 |                |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
|---|----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group   | Country        | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 | Rank Change vs 2019 | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| Maximum EU14+2                                  |                | 72         | 1         |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11  | Estonia        | 62         | 9         | 1                    | 2                    | 2                    | 3                    | 3                    | 2                    | 3                    | 3                    | 5                    | 3                   | 2                   | 4                   | 4                   | 4                   | 3                   | 3                   | 2                   | 3                   |
| Average EU14+2                                  |                | 60         |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11  | Lithuania      | 54         | 15        | 2                    | 3                    | 2                    | 2                    | 2                    | 3                    | 5                    | 4                    | 3                    | 4                   | 4                   | 3                   | 6                   | 3                   | 6                   | 6                   | 6                   | 5                   |
| EU11  | Czech Republic | 53         | 17        | 0                    | -1                   | -3                   | -4                   | -3                   | -3                   | -4                   | -4                   | -4                   | 1                   | -2                  | -1                  | -3                  | -2                  | -2                  | -3                  | -4                  | -3                  |
| EU11  | Slovenia       | 53         | 18        | 0                    | 1                    | -1                   | -1                   | 1                    | 0                    | -1                   | -1                   | -1                   | -1                  | 0                   | -1                  | 1                   | 2                   | -2                  | -1                  | -2                  | -1                  |
| EU11  | Latvia         | 51         | 22        | 0                    | 0                    | 0                    | 2                    | 4                    | 8                    | 11                   | 10                   | 7                    | -2                  | -2                  | -2                  | 1                   | 1                   | 2                   | 4                   | 4                   | 3                   |
| EU11  | Slovakia       | 45         | 23        | -4                   | -3                   | -3                   | -9                   | -7                   | -7                   | -6                   | -8                   | -4                   | 0                   | 0                   | 1                   | -5                  | -4                  | -4                  | -3                  | -4                  | 0                   |
| EU11  | Poland         | 44         | 24        | -1                   | -2                   | -4                   | -11                  | -12                  | -8                   | -8                   | -9                   | -7                   | 0                   | 0                   | -1                  | -9                  | -8                  | -6                  | -6                  | -6                  | -3                  |
| EU11  | Romania        | 42         | 25        | 4                    | 3                    | 2                    | 4                    | 6                    | 7                    | 8                    | 6                    | 10                   | 1                   | 1                   | 1                   | 1                   | 3                   | 4                   | 4                   | 3                   | 4                   |
| EU11  | Croatia        | 40         | 27        | 2                    | 0                    | -1                   | -2                   | -2                   | -1                   | -2                   | -2                   | 0                    | 0                   | -2                  | -2                  | -2                  | -2                  | -1                  | -2                  | -2                  | 0                   |
| Minimum EU14+2                                  |                | 40         | 26        |                      |                      |                      |                      |                      |                      |                      |                      |                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11  | Bulgaria       | 37         | 28        | 2                    | 1                    | 2                    | 5                    | 3                    | 1                    | 3                    | 1                    | 3                    | 1                   | 1                   | 1                   | 2                   | 1                   | 0                   | 0                   | 1                   | 0                   |
| EU11  | Hungary        | 34         | 29        | -2                   | -2                   | -2                   | -4                   | -3                   | -8                   | -9                   | -11                  | -17                  | -1                  | -1                  | -1                  | -2                  | -2                  | -4                  | -5                  | -5                  | -7                  |

## Indicators in the Democracy Category in Index 2021

| Satisfaction with Democracy |            |           |
|-----------------------------|------------|-----------|
| Country                     | Score 2021 | Rank 2021 |
| Maximum EU14+2              | 89         | 1         |
| Average EU14+2              | 62         |           |
| Estonia                     | 60         | 10        |
| Hungary                     | 51         | 13        |
| Lithuania                   | 49         | 17        |
| Czech Republic              | 44         | 20        |
| Latvia                      | 44         | 21        |
| Poland                      | 44         | 22        |
| Bulgaria                    | 37         | 24        |
| Slovakia                    | 37         | 25        |
| Romania                     | 36         | 27        |
| Croatia                     | 34         | 29        |
| Minimum EU14+2              | 31         | 30        |
| Slovenia                    | 22         | 32        |

The Satisfaction with Democracy indicator is based on the results of public opinion surveys (Eurobarometer). No new EU member state scores above the average benchmark, but Estonia with 60 points and respectively 13<sup>th</sup> place is closest. The most disappointed with the state of democracy in their countries are Croatia (34<sup>nd</sup> place and 29 points) and Slovenia with (32<sup>nd</sup> place and 22 points).

Trust in People is a proxy indicator for civil society development. It measures to what extent people trust others that are not their immediate friends and relatives. This is a fundamental measure for a democratic society. No new EU member state is above the maximum benchmark, but Estonia is above the average benchmark with 8<sup>th</sup> place and 62 points, followed by Slovenia and Lithuania with identical scores of 57 points and 11<sup>th</sup> and 12<sup>th</sup> place respectively. The last among their peers are Poland (26<sup>th</sup> with 38 points), Slovakia (28<sup>th</sup> with 36 points) and Bulgaria with identical result (30<sup>th</sup> with 31 points).

| Trust in People |            |           |
|-----------------|------------|-----------|
| Country         | Score 2021 | Rank 2021 |
| Maximum EU14+2  | 99         | 1         |
| Estonia         | 62         | 8         |
| Average EU14+2  | 60         |           |
| Slovenia        | 57         | 11        |
| Lithuania       | 57         | 12        |
| Romania         | 53         | 15        |
| Latvia          | 52         | 17        |
| Czech Republic  | 42         | 21        |
| Hungary         | 40         | 22        |
| Croatia         | 38         | 24        |
| Poland          | 38         | 26        |
| Slovakia        | 36         | 28        |
| Bulgaria        | 31         | 30        |
| Minimum EU14+2  | 30         | 32        |

| Democracy Indices |            |           |
|-------------------|------------|-----------|
| Country           | Score 2021 | Rank 2021 |
| Maximum EU14+2    | 74         | 2         |
| Average EU14+2    | 63         |           |
| Estonia           | 59         | 12        |
| Slovenia          | 57         | 16        |
| Czech Republic    | 55         | 18        |
| Latvia            | 51         | 21        |
| Minimum EU14+2    | 50         | 22        |
| Lithuania         | 50         | 23        |
| Slovakia          | 49         | 24        |
| Poland            | 43         | 25        |
| Croatia           | 42         | 26        |
| Romania           | 40         | 27        |
| Bulgaria          | 39         | 28        |
| Hungary           | 32         | 29        |

The Democracy Indexes is a composite score of Freedom House and Economist Intelligence Unit reports. According to these results, all new member states are below the average benchmark and far from the best performer among the old member states. Estonia is the closest with 12<sup>th</sup> place and 59 points. Slovenia (16<sup>th</sup> with 57 points) and the Czech Republic (18<sup>th</sup> with 55 points) are next in the ranking.

Hungary is last among its peers with 29<sup>th</sup> place and 32 points, Bulgaria is 28<sup>th</sup> with 39 points and Romania is 27<sup>th</sup> with 40 points.

Media freedom is measured through the Freedom House Freedom of the Press score and the Reporters without Borders Press Freedom Index. Estonia scores (6<sup>th</sup>, 66 points) above the average benchmark and is even close to the maximum of the EU14+2. The next in the ranking are Lithuania (13<sup>th</sup> place with 58 points) and Latvia (15<sup>th</sup> place with 55 points). The last among their peers are Bulgaria – 33<sup>rd</sup> place out of 35 countries with 26 points and Hungary with 28<sup>th</sup> place and 31 points.

| Media Freedom  |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Maximum EU14+2 | 77         | 2         |
| Estonia        | 66         | 9         |
| Average EU14+2 | 62         |           |
| Lithuania      | 58         | 13        |
| Latvia         | 55         | 15        |
| Czech Republic | 54         | 16        |
| Slovenia       | 53         | 18        |
| Slovakia       | 51         | 21        |
| Romania        | 42         | 24        |
| Poland         | 40         | 25        |
| Croatia        | 37         | 26        |
| Minimum EU14+2 | 34         | 27        |
| Hungary        | 31         | 28        |
| Bulgaria       | 26         | 33        |



| Civil and Political Rights |            |           |
|----------------------------|------------|-----------|
| Country                    | Score 2021 | Rank 2021 |
| <b>Maximum EU14+2</b>      | <b>68</b>  | <b>1</b>  |
| Estonia                    | 63         | 11        |
| <b>Average EU14+2</b>      | <b>60</b>  |           |
| Lithuania                  | 59         | 13        |
| Slovenia                   | 59         | 14        |
| Czech Republic             | 57         | 16        |
| Latvia                     | 56         | 17        |
| Poland                     | 46         | 22        |
| Croatia                    | 43         | 24        |
| <b>Minimum EU14+2</b>      | <b>42</b>  | <b>27</b> |
| Romania                    | 42         | 26        |
| Bulgaria                   | 41         | 27        |
| Slovakia                   | 41         | 28        |
| Hungary                    | 30         | 32        |

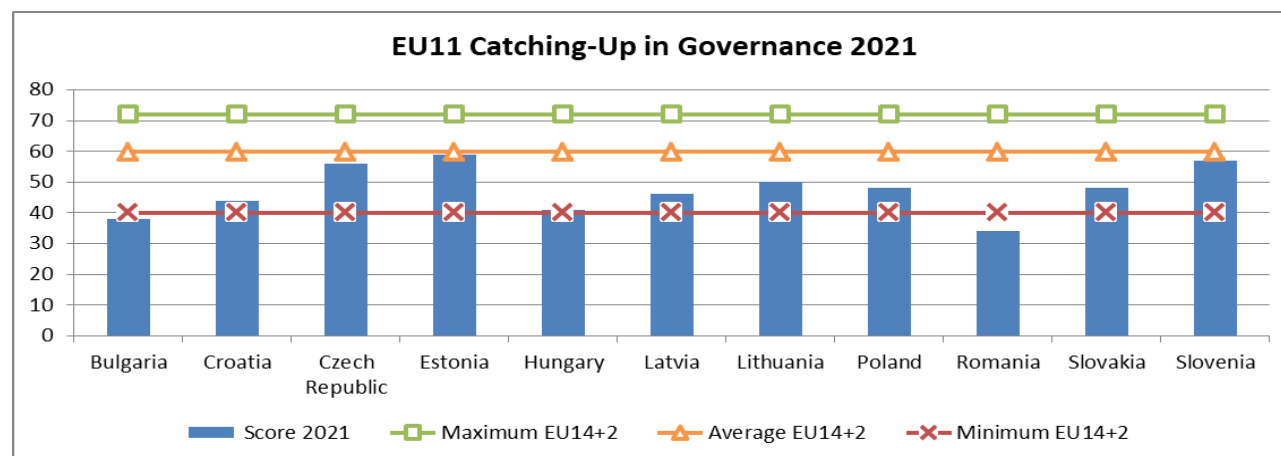
This indicator is based on two sub-indicators - Voice and Accountability of the World Bank and the Political Terror indicator of the Global Peace Index. Estonia is performing above the average benchmark with 11<sup>th</sup> place and 63 points. Next are Lithuania (13<sup>th</sup> with 59 points) and Slovenia (14<sup>th</sup> with 59 points), with identical scores. The last among their peers are Bulgaria (27<sup>th</sup> place with 41 points) and Slovakia (28<sup>th</sup> place with 41 points) with identical scores and Hungary (32<sup>nd</sup> with 30 points).

The E-participation indicator measures the "ICT-supported participation in processes involved in government and governance", referring to citizen participation in the process. Estonia is even above the EU14+2 maximum with several others following suit – Poland, Bulgaria, Croatia and Slovenia.

| E-participation       |            |           |
|-----------------------|------------|-----------|
| Country               | Score 2021 | Rank 2021 |
| Estonia               | 80         | 1         |
| <b>Maximum EU14+2</b> | <b>76</b>  | <b>2</b>  |
| Poland                | 74         | 6         |
| Bulgaria              | 62         | 10        |
| Croatia               | 62         | 11        |
| Slovenia              | 56         | 14        |
| <b>Average EU14+2</b> | <b>55</b>  |           |
| Romania               | 48         | 23        |
| Lithuania             | 36         | 27        |
| Czech Republic        | 34         | 28        |
| Slovakia              | 30         | 30        |
| Hungary               | 26         | 31        |
| <b>Minimum EU14+2</b> | <b>22</b>  | <b>32</b> |
| Latvia                | 10         | 34        |

## EU11 Catching-Up in the Governance Category in Index 2021

Estonia (13<sup>th</sup> out of 35 countries), Slovenia (15<sup>th</sup> out of 35) and the Czech Republic (16<sup>th</sup> out of 35) are the top ranking EU11 countries in the Governance category. The scores of these countries are equal (Estonia) or very close to the average benchmark of 60 points of the EU14+2 group. No EU11 country is close enough to the top performers in the EU14+2 group with 72 points. Bulgaria and Romania are below the EU14+2 minimum score of 40 points with Hungary barely above this threshold.



The long-term trends in the period 2011-2021 show that Estonia and Lithuania register the most significant improvements. Latvia and Croatia have modest progress too. Hungary show the most significant deterioration in the Governance category with 4 positions down the ranking compared to the period 2011-2014. The Czech Republic, Poland, Slovakia and to a lesser extent Romania also have problematic development over the years.

| Governance: Change in Ranks and Scores 2011-2021 |                |            |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |    |                     |                     |                     |                     |                     |                     |                     |                     |
|--|----------------|------------|-----------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Group  | Country        | Score 2021 | Rank 2021 | Score change vs 2019 | Score change vs 2018 | Score change vs 2017 | Score change vs 2016 | Score change vs 2015 | Score change vs 2014 | Score change vs 2013 | Score change vs 2012 | Score change vs 2011 |    | Rank Change vs 2018 | Rank Change vs 2017 | Rank Change vs 2016 | Rank Change vs 2015 | Rank Change vs 2014 | Rank change vs 2013 | Rank change vs 2012 | Rank change vs 2011 |
| Maximum EU14+2                                   |                | 72         | 1         |                      |                      |                      |                      |                      |                      |                      |                      |                      |    |                     |                     |                     |                     |                     |                     |                     |                     |
| Average EU14+2                                   |                | 60         |           |                      |                      |                      |                      |                      |                      |                      |                      |                      |    |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11   | Estonia        | 59         | 13        | 2                    | 3                    | 3                    | 4                    | 4                    | 6                    | 7                    | 9                    | 9                    | 2  | 3                   | 1                   | 2                   | 1                   | 2                   | 6                   | 6                   |                     |
| EU11   | Slovenia       | 57         | 15        | 1                    | 1                    | 1                    | 4                    | 5                    | 4                    | 2                    | 2                    | 0                    | 1  | 2                   | 0                   | 2                   | 3                   | 2                   | 1                   | 1                   |                     |
| EU11   | Czech Republic | 56         | 16        | -1                   | -1                   | 1                    | 1                    | 2                    | 3                    | 1                    | -1                   | 0                    | -2 | -2                  | 0                   | 0                   | 0                   | 0                   | -2                  | -1                  |                     |
| EU11   | Lithuania      | 50         | 19        | 3                    | 2                    | 1                    | 0                    | 3                    | 5                    | 7                    | 8                    | 9                    | 1  | 1                   | 1                   | 1                   | 3                   | 4                   | 5                   | 5                   |                     |
| EU11   | Poland         | 48         | 21        | 2                    | 2                    | 1                    | -1                   | -4                   | -3                   | -3                   | -2                   | 0                    | 1  | 2                   | 1                   | 0                   | -1                  | -1                  | -1                  | -1                  |                     |
| EU11   | Slovakia       | 48         | 22        | 1                    | 1                    | 0                    | 2                    | 0                    | 0                    | -2                   | 1                    | 1                    | -1 | 0                   | -1                  | 0                   | -1                  | -1                  | -1                  | -1                  |                     |
| EU11   | Latvia         | 46         | 23        | 1                    | -1                   | -1                   | 1                    | 0                    | 2                    | 2                    | 6                    | 6                    | 0  | -2                  | 0                   | 0                   | 0                   | 1                   | 0                   | 2                   |                     |
| EU11   | Croatia        | 44         | 25        | 3                    | 2                    | 3                    | 4                    | 4                    | 5                    | 5                    | 5                    | 5                    | 1  | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   | 1                   |                     |
| EU11   | Hungary        | 41         | 26        | -2                   | -2                   | -3                   | -3                   | -2                   | -5                   | -8                   | -5                   | -6                   | -2 | -2                  | -2                  | -2                  | -2                  | -4                  | -4                  | -4                  |                     |
| Minimum EU14+2                                   |                | 40         | 26        |                      |                      |                      |                      |                      |                      |                      |                      |                      |    |                     |                     |                     |                     |                     |                     |                     |                     |
| EU11   | Bulgaria       | 38         | 28        | 0                    | 1                    | 3                    | 5                    | 6                    | 5                    | 3                    | 3                    | 3                    | 0  | -1                  | 0                   | 1                   | 1                   | 1                   | 0                   | 0                   |                     |
| EU11   | Romania        | 34         | 29        | 0                    | -1                   | -2                   | -1                   | -1                   | 1                    | 0                    | 0                    | 1                    | 0  | -1                  | -2                  | -2                  | -2                  | -1                  | 0                   | 0                   |                     |

## Indicators in the Governance Category in Index 2021

| Corruption     |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Maximum EU14+2 | 79         | 1         |
| Estonia        | 68         | 11        |
| Average EU14+2 | 62         |           |
| Slovenia       | 54         | 14        |
| Lithuania      | 51         | 17        |
| Poland         | 47         | 19        |
| Latvia         | 46         | 20        |
| Czech Republic | 45         | 21        |
| Slovakia       | 40         | 24        |
| Minimum EU14+2 | 36         | 25        |
| Croatia        | 36         | 26        |
| Hungary        | 33         | 27        |
| Romania        | 31         | 29        |
| Bulgaria       | 30         | 30        |

The corruption indicator uses data from two sub-indicators - the Corruption Perception Index of Transparency International and Control of Corruption of the World Bank. Estonia performs above the EU15+2 average with 11<sup>th</sup> place and a score of 68 points. Slovenia is next, but below the average benchmark with 14<sup>th</sup> place and 54 points. Lithuania is third in its group with 17<sup>th</sup> place among 35 countries and a score of 51 points. The last among their peers are Bulgaria (30<sup>th</sup> with 30 points), Romania (29<sup>th</sup> with 31 points) and Hungary (27<sup>th</sup> with 33 points).

The political stability indicator uses two sub-indicators - Political Instability of the Economist Intelligence Unit and Political Stability and Absence of Violence of the World Governance Indicators. Slovenia (10<sup>th</sup> place and 62 points) scores above the average benchmark, the Czech Republic (11<sup>th</sup> with 58 points), Lithuania (14<sup>th</sup> with 58 points) and Hungary (14<sup>th</sup> with 59 points) following closely. The most politically unstable countries are Bulgaria (22<sup>nd</sup> with 49 points) and Romania (23<sup>rd</sup> with 49 points) with identical scores, Poland (27<sup>th</sup> with 45 points), and Latvia (28<sup>th</sup> with 44 points).

| Political Stability |            |           |
|---------------------|------------|-----------|
| Country             | Score 2021 | Rank 2021 |
| Maximum EU14+2      | 74         | 2         |
| Slovenia            | 62         | 10        |
| Average EU14+2      | 59         |           |
| Czech Republic      | 59         | 11        |
| Lithuania           | 58         | 14        |
| Hungary             | 58         | 15        |
| Slovakia            | 53         | 17        |
| Croatia             | 53         | 18        |
| Estonia             | 50         | 20        |
| Bulgaria            | 49         | 22        |
| Romania             | 49         | 23        |
| Poland              | 45         | 27        |
| Latvia              | 44         | 28        |
| Minimum EU14+2      | 43         | 29        |

| Government Effectiveness |            |           |
|--------------------------|------------|-----------|
| Country                  | Score 2021 | Rank 2021 |
| Maximum EU14+2           | 76         | 1         |
| Average EU14+2           | 62         |           |
| Estonia                  | 61         | 12        |
| Latvia                   | 59         | 14        |
| Slovenia                 | 57         | 15        |
| Lithuania                | 56         | 16        |
| Czech Republic           | 52         | 20        |
| Slovakia                 | 48         | 22        |
| Poland                   | 46         | 23        |
| Hungary                  | 43         | 24        |
| Croatia                  | 40         | 26        |
| Minimum EU14+2           | 39         | 27        |
| Bulgaria                 | 38         | 28        |
| Romania                  | 9          | 34        |

The Governance Effectiveness indicator of the World Bank shows that no new EU member state outperforms the average benchmark, But Estonia (12<sup>th</sup> with 6 points), Latvia (14<sup>th</sup> with 59 points), (Slovenia (15<sup>th</sup> with 57 points) and Lithuania (16<sup>th</sup> with 56 points) are closest to it. The last among these 11 countries are Bulgaria (28<sup>th</sup> with 38 points) and Romania (34<sup>th</sup> with 9 points).

In Regulatory Quality, Estonia has surpassed the average benchmark with a score of 69 points and 8<sup>th</sup> place out of 35 countries. Next, but below the benchmark, is the Czech Republic (14<sup>th</sup> with 59 points). The last among their peers are Croatia (26<sup>th</sup> with 37 points), Bulgaria (27<sup>th</sup> with 35 points), and Romania (30<sup>th</sup> with 30 points).

| Regulatory Quality |            |           |
|--------------------|------------|-----------|
| Country            | Score 2021 | Rank 2021 |
| Maximum EU14+2     | 77         | 1         |
| Estonia            | 69         | 8         |
| Average EU14+2     | 61         |           |
| Czech Republic     | 59         | 14        |
| Latvia             | 55         | 15        |
| Lithuania          | 54         | 16        |
| Poland             | 51         | 18        |
| Slovenia           | 50         | 20        |
| Slovakia           | 49         | 21        |
| Hungary            | 38         | 25        |
| Croatia            | 37         | 26        |
| Bulgaria           | 35         | 27        |
| Minimum EU14+2     | 35         | 28        |
| Romania            | 30         | 30        |

| Rule of Law           |            |           |
|-----------------------|------------|-----------|
| Country               | Score 2021 | Rank 2021 |
| <b>Maximum EU14+2</b> | <b>77</b>  | <b>1</b>  |
| Estonia               | 62         | 13        |
| <b>Average EU14+2</b> | <b>62</b>  |           |
| Slovenia              | 59         | 15        |
| Czech Republic        | 56         | 16        |
| Lithuania             | 56         | 17        |
| Latvia                | 55         | 18        |
| Slovakia              | 45         | 22        |
| Hungary               | 41         | 23        |
| Poland                | 39         | 24        |
| Croatia               | 38         | 25        |
| Romania               | 37         | 26        |
| <b>Minimum EU14+2</b> | <b>33</b>  | <b>28</b> |
| Bulgaria              | 26         | 30        |

In the Rule of Law indicator, part of the World Governance Indicators, Estonia has surpassed the desired average benchmark with 13<sup>th</sup> place and 62 points. Next are Slovenia (15<sup>th</sup> and 59 points) and the Czech Republic (16<sup>th</sup> place and 56 points), but below the average benchmark. Bulgaria is last in the group with 30<sup>th</sup> position and 26 points. Croatia (25<sup>th</sup> place with 38 points) and Romania (26<sup>th</sup> place with 37 points) also perform poorly.

This indicator is composed of two sub-indicators by selected Global Peace Index data and the homicide rates per 100,000 people. The Czech Republic's score far above the desired average benchmark and are on par with the best performing EU15+2 state with 4<sup>th</sup> place and 66 points. Croatia and Slovenia is next in the group and it reaches the average benchmark with 6<sup>th</sup> and 9<sup>th</sup> place and 64 and 63 points respectively. The worst performing countries in the group are Latvia (34<sup>th</sup> place with 18 points), Lithuania (33<sup>rd</sup> with 24 points) and Hungary (29<sup>th</sup> with 36 points).

| Internal Conflict and Crime |            |           |
|-----------------------------|------------|-----------|
| Country                     | Score 2021 | Rank 2021 |
| <b>Maximum EU14+2</b>       | <b>71</b>  | <b>1</b>  |
| Czech Republic              | 66         | 4         |
| Croatia                     | 64         | 6         |
| Slovenia                    | 63         | 9         |
| Poland                      | 58         | 13        |
| <b>Average EU14+2</b>       | <b>58</b>  |           |
| Slovakia                    | 54         | 18        |
| Romania                     | 53         | 20        |
| Bulgaria                    | 50         | 22        |
| <b>Minimum EU14+2</b>       | <b>41</b>  | <b>27</b> |
| Estonia                     | 39         | 28        |
| Hungary                     | 36         | 29        |
| Lithuania                   | 24         | 33        |
| Latvia                      | 18         | 34        |

| E-government   |            |           |
|----------------|------------|-----------|
| Country        | Score 2021 | Rank 2021 |
| Maximum EU14+2 | 87         | 1         |
| Estonia        | 80         | 2         |
| Average EU14+2 | 60         |           |
| Lithuania      | 59         | 12        |
| Slovenia       | 56         | 14        |
| Poland         | 56         | 15        |
| Czech Republic | 45         | 21        |
| Minimum EU14+2 | 43         | 22        |
| Bulgaria       | 42         | 24        |
| Slovakia       | 37         | 25        |
| Latvia         | 37         | 26        |
| Hungary        | 35         | 27        |
| Croatia        | 35         | 28        |
| Romania        | 32         | 30        |

The E-government indicator is based on the UN's E-government surveys and scores. It is included in the Index because it is a measure of government efficiency and delivery of services to citizens. Estonia is leader in the CEE group with 2<sup>th</sup> place out of 35 and 80 points. The country scores well above the average benchmark. Lithuania is next with 12<sup>th</sup> place and 59, close to the average benchmark. The last in their group are Romania (30<sup>nd</sup> with 32 points), Croatia (28<sup>th</sup> with 35 points) and Hungary (27<sup>th</sup> with 35 points) with identical scores.

## Something New: The Global Catch-Up Index 2021

The Catch-Up Index was created in 2010 to measure the convergence and divergence of the then new EU member states with the old ones. The EU candidate and potential candidate countries were also added to the list and thus, the choice of countries followed the logic of level of association with the EU with a total of 35 countries. .

This however limited comparing the EU members from CEE to the generally most developed, wealthiest, democratic and best governed countries. This often made for a somewhat depressing reading for the laggards in the rankings. Thus, the Global Catch-Up Index came into existence expanding the comparison to 57 countries. The Global Index includes several groups of countries – the EU member states – “old” and “new”, the candidate and potential candidate countries, those closely associated with the EU – such as the European Economic Area and Switzerland, EU’s neighbors that are former socialist countries too and in different ways engaged with the EU, including those in Central Asia. The rest are a number of countries around the world – Canada, the US, China, Russia, Australia, Japan, South Korea and Israel.

The methodology followed largely the model of the Catch-Up Index with the indicators divided into Economy, Quality of Life, Democracy and Governance categories. At the same time, a much smaller number of indicators were included. Not all indicators of the two indices are the same. This was done for practical reasons – even for the EU members and candidate countries, there wasn’t readily available, regularly released data. As the Global Index, comparable, but different indicators had to be selected with available and comparable for all the 57 countries.

Although the Catch-Up Index and the Global Index are very similar, the Global Index uses a smaller number of indicators, which has impact on the results, including differences in the ranking of countries.

As with the regular index, the data, where applicable, is on per capita basis, which eliminates the size of the country and is fairer comparison. This model of the index, such as any model, has its limitations and imperfections, so the results should be viewed as a good starting point for comparisons.

| Category        | Indicator  | Weight |
|-----------------|--|--------|
| Economy         | GDP per capita, PPP (current international \$, World Bank    | 90%    |
|                 | High Tech Exports as Share of Global Exports, World Bank, UN | 10%    |
| Quality of Life | Gini (inequality), World Bank                                | 15%    |
|                 | PISA Science, OECD   | 10%    |
|                 | PISA math, OECD  | 10%    |
|                 | PISA reading, OECD   | 10%    |
|                 | Tertiary Education enrolment, World Bank                     | 10%    |
|                 | Life Expectancy at birth, WHO                                | 45%    |
| Democracy       | Democracy Index, Economist Intelligence Unit                 | 40%    |
|                 | Global Freedom Score, Freedom House                          | 40%    |
|                 | World Press Freedom Index, Reporters without Borders         | 20%    |

|            |   |     |
|------------|---|-----|
| Governance | Corruption Perception Index, Transparency International | 35% |
|            | World Governance Indicators, World Bank                 | 65% |

### Something good, something bad: the results of the Global Index

As with the regular Index, the Global Index is presented in the following ways – ranking of the countries according to their overall score, which is the average of the scores of the four categories as well as ranking according to the score in each of the categories. Cluster analysis was also made, dividing the countries into clusters with similar characteristics. The different political and geographic groups are color-coded, so are the different clusters, which are hierarchical - from the best performers to those last in the ranking.

- In the global ranking, the winner is Norway (1<sup>st</sup> out of 74 countries with 74 points), followed by Ireland with an identical score (2<sup>nd</sup> with 74 points) with a minimal difference after the decimal separator.
- The best performing EU11 country in the global ranking is Estonia (20<sup>th</sup> out of 57 countries with 60 points), followed closely by Slovenia (21<sup>st</sup> with 59 points), which are part of the third cluster of good performers.
- In Economy global ranking, Ireland and Luxembourg are 1<sup>st</sup> and 2<sup>nd</sup> with identical score of 94 points with minimal difference, followed by Norway (3<sup>rd</sup>) and Switzerland (4<sup>th</sup>) with identical score of 77 points and a minimal difference.
- The best performer among the EU11 countries in the Economy ranking is the Czech Republic (20<sup>th</sup> with 56 points), In the Quality of Life global ranking, South Korea (1<sup>st</sup> with 73 points) and Japan (2<sup>nd</sup> with 69 points) top the ranking, following by two North European countries with identical scores - Finland (3<sup>rd</sup> with 68 points) and Norway (4<sup>th</sup> with 68 points).
- Among the EU11 countries in the Quality of Life category, the best performers are the Czech Republic (21<sup>st</sup> with 59 points) and Estonia (22<sup>nd</sup> with 59) with identical scores and part of the second cluster of very good performers.
- In the Democracy global index, the North European countries dominate the ranking with Norway (1<sup>st</sup> with 74 points), followed by Sweden (2<sup>nd</sup> with 72 points) and Finland (3<sup>rd</sup> with 72 points).
- The best performer among the EU11 in Democracy is Estonia (17<sup>th</sup> with 63 points), which is the best achievement of any EU11 country in any of the categories; it is followed by Slovenia (22<sup>nd</sup> with 60 points), the Czech Republic (23<sup>rd</sup> with 60 points) and together with three other EU11 countries are part of the second cluster of very good performers.
- In the Governance global ranking, the top spot is shared by four countries with identical scores - Denmark (1<sup>st</sup> with 77 points), Switzerland (2<sup>nd</sup> with 77 points), Norway (3<sup>rd</sup> with 77 points) and Sweden (4<sup>th</sup> with 77 points).
- Among the EU11 countries, Estonia is the best performer in Governance (16<sup>th</sup> with 67 points) and part of the first cluster of top achievers.

There are several outtakes of results as far as the EU as a block and the EU11 countries are concerned:



- The EU countries dominate the best performing clusters, along with those most closely associated with them such as the EEA and Switzerland or recent member UK.
- The other developed Western-style democracies around the world perform generally remarkably well in each of the four categories and in the overall global ranking.
- In Quality of Life, which is measured by education, life expectancy and inequality indicators, the European countries give up the first two spots to two Asian democracies – South Korea and Japan – but continue to perform excellently.
- Several of the EU11 countries hold their own against a number of developed countries, including in Quality of Life, Democracy and Governance, with Slovenia, the Czech Republic and the three Baltic countries generally outshining the others.
- Several of the EU11 countries punch below their weight – Bulgaria, Romania, Croatia, Hungary and Poland – such as in Democracy or Governance – though they are performing better than their counterparts outside of the EU.

As the already quoted Economist article (12 February 2022 edition) says to the EU member states in CEE “You don’t know how lucky you are”, when comparing the catching-up of the former communist bloc countries, which is supported by the data of the Global Catch-up Index. This comes to say that:

- As a whole, the EU11 countries outperform their counterparts outside of the EU - i.e. the other former socialist block members - across the board, performing better than the candidate countries and those with no prospect for EU membership in all categories.
- The EU’s candidate countries generally fall behind the EU11 in the ranking, but themselves perform better than the countries in EU’s neighborhood and in Central Asia.
- The EU neighbors – Moldova, Ukraine, Georgia and Armenia fare better than their counterparts further East, despite they lag behind the countries in CEE, who are EU member states.
- The Central Asian countries as a whole perform poorly and occupy the last two clusters, with the exception of Kyrgyzstan in Democracy and Kazakhstan in Economy, Quality of Life and Governance.

## Global Catch-Up Index: ranking and clusters by overall score

| Global Catch-Up Index 2021          |               |      |         |
|-------------------------------------|---------------|------|---------|
| Overall Score: Ranking and Clusters |               |      |         |
| Country                             | Overall Score | Rank | Cluster |
| Norway                              | 74            | 1    | 1       |
| Ireland                             | 74            | 2    |         |
| Luxembourg                          | 72            | 3    |         |
| Switzerland                         | 72            | 4    |         |
| Netherlands                         | 70            | 5    |         |
| Denmark                             | 70            | 6    |         |
| Sweden                              | 70            | 7    |         |
| Iceland                             | 70            | 8    |         |
| Finland                             | 69            | 9    |         |
| Australia                           | 67            | 10   | 2       |
| Canada                              | 67            | 11   |         |
| Austria                             | 66            | 12   |         |
| Belgium                             | 65            | 13   |         |
| Germany                             | 65            | 14   |         |
| Japan                               | 63            | 15   |         |
| UK                                  | 63            | 16   |         |
| France                              | 63            | 17   |         |
| South Korea                         | 62            | 18   |         |
| USA                                 | 61            | 19   |         |
| Estonia                             | 60            | 20   | 3       |
| Slovenia                            | 59            | 21   |         |
| Spain                               | 59            | 22   |         |
| Malta                               | 58            | 23   |         |
| Portugal                            | 58            | 24   |         |
| Czech Republic                      | 58            | 25   |         |
| Italy                               | 57            | 26   |         |
| Cyprus                              | 56            | 27   |         |
| Israel                              | 55            | 28   |         |
| Lithuania                           | 53            | 29   | 4       |
| Greece                              | 52            | 30   |         |
| Poland                              | 52            | 31   |         |
| Latvia                              | 51            | 32   |         |
| Slovakia                            | 51            | 33   |         |
| Croatia                             | 49            | 34   |         |
| Hungary                             | 47            | 35   |         |
| Romania                             | 44            | 36   |         |
| Bulgaria                            | 41            | 37   |         |
| Montenegro                          | 39            | 38   | 5       |
| Albania                             | 38            | 39   |         |
| Serbia                              | 37            | 40   |         |
| Georgia                             | 37            | 41   |         |
| North Macedonia                     | 36            | 42   |         |
| Turkey                              | 35            | 43   |         |
| Armenia                             | 35            | 44   |         |
| Ukraine                             | 34            | 45   |         |
| Moldova                             | 33            | 46   |         |
| BiH                                 | 33            | 47   |         |
| China                               | 33            | 48   | 6       |
| Kazakhstan                          | 32            | 49   |         |
| Belarus                             | 31            | 50   |         |
| Kosovo                              | 30            | 51   |         |
| Russia                              | 30            | 52   |         |
| Kyrgyzstan                          | 23            | 53   |         |
| Azerbaijan                          | 23            | 54   |         |
| Uzbekistan                          | 16            | 55   |         |
| Tajikistan                          | 14            | 56   |         |
| Turkmenistan                        | 11            | 57   |         |

The results by overall scores show that the Western and Northern EU member states and the developed Western countries in the world dominate the ranking. Actually, Norway is on top of the index, the EU's EEA partner country as well as Iceland and Switzerland. The two best performing clusters are composed of such countries.

The EU11 countries are in the third and fourth clusters with the rest, South European EU member states. The only exclusion in these two clusters is Israel, which fits in the middle of these two clusters. The EU candidate countries are in the fifth cluster, which contains also EU's neighbors to the East – Georgia, Armenia, Ukraine and Moldova with Belarus further down the ranking but in the same cluster. Kazakhstan is the only Central Asian country in the fifth cluster. The rest of the Central Asian countries are in the last, sixth cluster.

### \*Legend - groups of countries

|  |  |
|--|--|
|  | EU "old" member states                 |
|  | EU "new" member states                 |
|  | EU candidates and potential candidate  |
|  | EEA and Switzerland                    |
|  | Other European countries, EU neighbors |
|  | Central Asian countries                |
|  | Other countries                        |

## Global Catch-Up Index: scores, ranking and clusters in the Economy category

| Global Catch-Up Index 2021           |       |      |         |
|--------------------------------------|-------|------|---------|
| Economy Scores, Ranking and Clusters |       |      |         |
| Country                              | Score | Rank | Cluster |
| Ireland                              | 94    | 1    | 1       |
| Luxembourg                           | 94    | 2    |         |
| Norway                               | 77    | 3    | 2       |
| Switzerland                          | 77    | 4    |         |
| USA                                  | 74    | 5    | 3       |
| Iceland                              | 72    | 6    |         |
| Netherlands                          | 70    | 7    |         |
| Denmark                              | 69    | 8    |         |
| Austria                              | 67    | 9    |         |
| Germany                              | 66    | 10   |         |
| Sweden                               | 65    | 11   |         |
| Belgium                              | 64    | 12   |         |
| Australia                            | 64    | 13   |         |
| France                               | 63    | 14   |         |
| Canada                               | 61    | 15   |         |
| UK                                   | 61    | 16   |         |
| Finland                              | 61    | 17   |         |
| Malta                                | 61    | 18   |         |
| South Korea                          | 58    | 19   |         |
| Czech Republic                       | 56    | 20   | 4       |
| Israel                               | 56    | 21   |         |
| Italy                                | 55    | 22   |         |
| Japan                                | 55    | 23   |         |
| Cyprus                               | 55    | 24   |         |
| Spain                                | 53    | 25   |         |
| Slovenia                             | 52    | 26   |         |
| Lithuania                            | 51    | 27   |         |
| Estonia                              | 50    | 28   | 5       |
| Portugal                             | 48    | 29   |         |
| Hungary                              | 48    | 30   |         |
| Poland                               | 47    | 31   |         |
| Latvia                               | 46    | 32   |         |
| Romania                              | 45    | 33   |         |
| Kazakhstan                           | 45    | 34   |         |
| Slovakia                             | 45    | 35   |         |
| Greece                               | 44    | 36   |         |
| Russia                               | 43    | 37   |         |
| Croatia                              | 43    | 38   |         |
| Turkey                               | 39    | 39   | 6       |
| Bulgaria                             | 39    | 40   |         |
| China                                | 37    | 41   |         |
| Montenegro                           | 36    | 42   |         |
| Belarus                              | 33    | 43   |         |
| Serbia                               | 33    | 44   |         |
| North Macedonia                      | 32    | 45   |         |
| BiH                                  | 30    | 46   |         |
| Armenia                              | 30    | 47   |         |
| Azerbaijan                           | 30    | 48   |         |
| Georgia                              | 30    | 49   |         |
| Turkmenistan                         | 29    | 50   |         |
| Ukraine                              | 28    | 51   |         |
| Moldova                              | 28    | 52   |         |
| Albania                              | 28    | 53   |         |
| Kosovo                               | 27    | 54   |         |
| Uzbekistan                           | 22    | 55   |         |
| Kyrgyzstan                           | 21    | 56   |         |
| Tajikistan                           | 19    | 57   |         |

In Economy, the best performing countries in the first, second and third cluster are older EU member states and Western countries in Europe and the world.

The “new” member states are in the fourth and fifth cluster with some additional members – Kazakhstan, Russia, China, Turkey, among others.

In the last, sixth cluster are the EU’s candidate countries, EU’s eastern neighbors and those in Central Asia.

| *Legend - groups of countries |  |
|-------------------------------|--|
|                               | EU "old" member states                 |
|                               | EU "new" member states                 |
|                               | EU candidates and potential candidate  |
|                               | EEA and Switzerland                    |
|                               | Other European countries, EU neighbors |
|                               | Central Asian countries                |
|                               | Other countries                        |

## Global Catch-Up Index: scores, ranking and clusters in the Quality of Life category

| Global Catch-Up Index 2021                   |       |      |         |
|--|-------|------|---------|
| Quality of Life Scores, Ranking and Clusters |       |      |         |
| Country                                      | Score | Rank | Cluster |
| South Korea                                  | 73    | 1    | 1       |
| Japan  | 69    | 2    |         |
| Finland                                      | 68    | 3    |         |
| Norway                                       | 68    | 4    |         |
| Australia                                    | 66    | 5    |         |
| Netherlands                                  | 66    | 6    |         |
| Sweden                                       | 66    | 7    |         |
| Slovenia                                     | 66    | 8    |         |
| Iceland                                      | 65    | 9    |         |
| Belgium                                      | 65    | 10   |         |
| Italy  | 65    | 11   |         |
| Switzerland                                  | 65    | 12   |         |
| Ireland                                      | 64    | 13   | 2       |
| Spain  | 64    | 14   |         |
| Denmark                                      | 64    | 15   |         |
| Canada                                       | 64    | 16   |         |
| Austria                                      | 63    | 17   |         |
| France                                       | 62    | 18   |         |
| Greece                                       | 61    | 19   |         |
| Malta  | 60    | 20   |         |
| Czech Republic                               | 59    | 21   |         |
| Estonia                                      | 59    | 22   |         |
| Portugal                                     | 57    | 23   | 3       |
| UK   | 57    | 24   |         |
| Germany                                      | 56    | 25   |         |
| Poland                                       | 56    | 26   |         |
| China  | 56    | 27   |         |
| Israel                                       | 55    | 28   |         |
| Luxembourg                                   | 54    | 29   |         |
| Cyprus                                       | 54    | 30   |         |
| Croatia                                      | 52    | 31   |         |
| Slovakia                                     | 51    | 32   |         |
| USA  | 50    | 33   |         |
| Belarus                                      | 48    | 34   |         |
| Hungary                                      | 47    | 35   |         |
| Turkey                                       | 46    | 36   |         |
| Latvia                                       | 46    | 37   |         |
| Lithuania                                    | 45    | 38   |         |
| Albania                                      | 44    | 39   |         |
| Ukraine                                      | 41    | 40   | 4       |
| Russia                                       | 39    | 41   |         |
| Serbia                                       | 38    | 42   |         |
| BiH  | 38    | 43   |         |
| Montenegro                                   | 37    | 44   |         |
| Romania                                      | 36    | 45   |         |
| Moldova                                      | 34    | 46   |         |
| Kazakhstan                                   | 34    | 47   |         |
| North Macedonia                              | 34    | 48   |         |
| Bulgaria                                     | 33    | 49   |         |
| Armenia                                      | 33    | 50   | 5       |
| Azerbaijan                                   | 32    | 51   |         |
| Georgia                                      | 28    | 52   |         |
| Kosovo                                       | 28    | 53   |         |
| Kyrgyzstan                                   | 25    | 54   |         |
| Tajikistan                                   | 19    | 55   |         |
| Uzbekistan                                   | 16    | 56   |         |
| Turkmenistan                                 | 5     | 57   | 6       |

In the Quality of Life ranking, which is composed of indicators for quality of education, life expectancy and inequality, two Asian countries lead the way – South Korea and Japan, followed by a mix of Scandinavian and Western European countries as well as Australia. But there is one “new” EU member state – Slovenia – which is 8<sup>th</sup> among 57 countries.

The second cluster is composed of „old” EU member states, Canada as well as two “new” EU member states – the Czech Republic and Estonia with identical score of 59 points and 21<sup>st</sup> and 22<sup>nd</sup> place.

The third and fourth clusters are composed of a considerable and diverse number of countries from all the groups in the index. The last fifth and sixth clusters include the Central Asian countries without Kazakhstan

| *Legend - groups of countries |  |
|-------------------------------|--|
|                               | EU "old" member states                 |
|                               | EU "new" member states                 |
|                               | EU candidates and potential candidate  |
|                               | EEA and Switzerland                    |
|                               | Other European countries, EU neighbors |
|                               | Central Asian countries                |
|                               | Other countries                        |

## Global Catch-Up Index: scores, ranking and clusters in the Democracy category

| Global Catch-Up Index 2021             |       |      |         |
|--|-------|------|---------|
| Democracy Scores, Ranking and Clusters |       |      |         |
| Country                                | Score | Rank | Cluster |
| Norway                                 | 74    | 1    | 1       |
| Sweden                                 | 72    | 2    |         |
| Finland                                | 72    | 3    |         |
| Denmark                                | 70    | 4    |         |
| Netherlands                            | 70    | 5    |         |
| Canada                                 | 69    | 6    |         |
| Ireland                                | 69    | 7    |         |
| Iceland                                | 69    | 8    |         |
| Switzerland                            | 69    | 9    |         |
| Australia                              | 67    | 10   | 2       |
| Luxembourg                             | 66    | 11   |         |
| Germany                                | 66    | 12   |         |
| Portugal                               | 65    | 13   |         |
| UK                                     | 64    | 14   |         |
| Austria                                | 64    | 15   |         |
| Belgium                                | 63    | 16   |         |
| Estonia                                | 63    | 17   |         |
| Spain                                  | 62    | 18   |         |
| Japan                                  | 61    | 19   |         |
| Cyprus                                 | 61    | 20   |         |
| France                                 | 61    | 21   |         |
| Slovenia                               | 60    | 22   |         |
| Czech Republic                         | 60    | 23   |         |
| Italy                                  | 60    | 24   |         |
| South Korea                            | 59    | 25   |         |
| Latvia                                 | 59    | 26   |         |
| USA                                    | 58    | 27   |         |
| Lithuania                              | 58    | 28   |         |
| Malta                                  | 58    | 29   |         |
| Slovakia                               | 57    | 30   |         |
| Greece                                 | 56    | 31   | 3       |
| Israel                                 | 54    | 32   |         |
| Poland                                 | 53    | 33   |         |
| Croatia                                | 53    | 34   |         |
| Romania                                | 52    | 35   |         |
| Bulgaria                               | 49    | 36   |         |
| Hungary                                | 48    | 37   |         |
| Albania                                | 45    | 38   | 4       |
| Serbia                                 | 45    | 39   |         |
| North Macedonia                        | 44    | 40   |         |
| Moldova                                | 43    | 41   |         |
| Montenegro                             | 42    | 42   |         |
| Ukraine                                | 42    | 43   |         |
| Georgia                                | 41    | 44   |         |
| Armenia                                | 40    | 45   |         |
| Kosovo                                 | 40    | 46   |         |
| BiH                                    | 38    | 47   |         |
| Kyrgyzstan                             | 28    | 48   | 5       |
| Turkey                                 | 26    | 49   |         |
| Russia                                 | 18    | 50   | 6       |
| Kazakhstan                             | 18    | 51   |         |
| Belarus                                | 13    | 52   |         |
| Uzbekistan                             | 11    | 53   |         |
| Azerbaijan                             | 11    | 54   |         |
| Tajikistan                             | 8     | 55   |         |
| China                                  | 7     | 56   |         |
| Turkmenistan                           | 3     | 57   |         |

Norway leads a group of North European countries and Canada in the first cluster in the Democracy ranking. While the first cluster consists of a limited number of countries, the second cluster consists of larger number of European and Western countries – from Australia and UK to South Korea and the US. Among them are 6 out of 11 “new” member states. In the third cluster there are only new EU member states – Poland, Croatia, Romania, Bulgaria and Hungary – as well as Israel.

The fourth cluster is composed of the EU’s candidate countries and EU’s neighbors. The fifth cluster is the smallest and consists of Turkey and Kyrgyzstan. The last, sixth cluster is composed of Central Asian countries, Belarus, Azerbaijan and China.

## \*Legend - groups of countries

|  |  |
|--|--|
|  | EU "old" member states                 |
|  | EU "new" member states                 |
|  | EU candidates and potential candidate  |
|  | EEA and Switzerland                    |
|  | Other European countries, EU neighbors |
|  | Central Asian countries                |
|  | Other countries                        |

## Global Catch-Up Index: scores, ranking and clusters in the Governance category

| Global Catch-Up Index 2021              |       |      |         |
|---|-------|------|---------|
| Governance Scores, Ranking and Clusters |       |      |         |
| Country                                 | Score | Rank | Cluster |
| Denmark                                 | 77    | 1    | 1       |
| Switzerland                             | 77    | 2    |         |
| Norway                                  | 77    | 3    |         |
| Sweden                                  | 77    | 4    |         |
| Finland                                 | 76    | 5    |         |
| Luxembourg                              | 75    | 6    |         |
| Netherlands                             | 74    | 7    |         |
| Australia                               | 72    | 8    |         |
| Canada                                  | 72    | 9    |         |
| Iceland                                 | 72    | 10   |         |
| Germany                                 | 71    | 11   |         |
| Austria                                 | 71    | 12   |         |
| UK                                      | 69    | 13   |         |
| Ireland                                 | 68    | 14   |         |
| Japan                                   | 68    | 15   |         |
| Estonia                                 | 67    | 16   | 2       |
| Belgium                                 | 67    | 17   |         |
| France                                  | 64    | 18   |         |
| USA                                     | 62    | 19   |         |
| Portugal                                | 61    | 20   |         |
| Slovenia                                | 59    | 21   |         |
| Lithuania                               | 58    | 22   |         |
| South Korea                             | 58    | 23   |         |
| Spain                                   | 57    | 24   |         |
| Czech Republic                          | 56    | 25   |         |
| Cyprus                                  | 55    | 26   | 3       |
| Malta                                   | 55    | 27   |         |
| Latvia                                  | 55    | 28   |         |
| Israel                                  | 54    | 29   |         |
| Poland                                  | 53    | 30   |         |
| Slovakia                                | 51    | 31   |         |
| Italy                                   | 50    | 32   |         |
| Georgia                                 | 48    | 33   |         |
| Greece                                  | 47    | 34   |         |
| Croatia                                 | 47    | 35   |         |
| Hungary                                 | 45    | 36   | 4       |
| Bulgaria                                | 43    | 37   |         |
| Romania                                 | 41    | 38   |         |
| Montenegro                              | 40    | 39   |         |
| Armenia                                 | 38    | 40   |         |
| Serbia                                  | 34    | 41   |         |
| North Macedonia                         | 33    | 42   |         |
| Albania                                 | 33    | 43   |         |
| China                                   | 32    | 44   |         |
| Kazakhstan                              | 31    | 45   |         |
| Belarus                                 | 31    | 46   | 5       |
| Turkey                                  | 30    | 47   |         |
| Moldova                                 | 28    | 48   |         |
| Kosovo                                  | 27    | 49   |         |
| BiH                                     | 27    | 50   |         |
| Ukraine                                 | 23    | 51   |         |
| Russia                                  | 22    | 52   |         |
| Azerbaijan                              | 20    | 53   |         |
| Kyrgyzstan                              | 20    | 54   |         |
| Uzbekistan                              | 14    | 55   |         |
| Tajikistan                              | 10    | 56   | 6       |
| Turkmenistan                            | 7     | 57   |         |

In Governance, the top spots are occupied by the Scandinavian and Western European countries, with Australia, Canada, UK and Japan joining the first cluster. But Estonia is also among the top performers in this cluster with 15<sup>th</sup> place.

The new EU member states are mostly in the second and third cluster, along with several old member states and others countries across the world, among them Georgia.

The fourth cluster is composed of EU's candidate countries and two of the neighbors – Belarus and Moldova.

The last, fifth and sixth clusters consists of Ukraine, Russia and the Central Asian countries.

### \*Legend - groups of countries

|  |  |
|--|--|
|  | EU "old" member states                 |
|  | EU "new" member states                 |
|  | EU candidates and potential candidate  |
|  | EEA and Switzerland                    |
|  | Other European countries, EU neighbors |
|  | Central Asian countries                |
|  | Other countries                        |

## Supplements

## Supplement I: Country Scores by Indicators and Categories

| Catch-Up Index 2021: Economy Scores (in z-scores on a scale 100-0) *   |                                     |   |                                     |  |                                 |                            |                                  |                          |                                    |                                    |                     |                        |  |                          |               |
|--|-------------------------------------|---|-------------------------------------|--|---------------------------------|----------------------------|----------------------------------|--------------------------|------------------------------------|------------------------------------|---------------------|------------------------|--|--------------------------|---------------|
| Economy Scores   | GDP per capita                      | Employment  | Research and Development            |  | Energy Intensity                | Transport infrastructure   |                                  |                          |                                    | Government debt                    | Market development  |                        | Information Society                      | Credit ratings           | Economy Score |
|  | GDP per capita in PPS with EU27=100 | Employment as percentage of population, age group 15-64 | Patents granted by USPTO per capita | High-tech exports as % of manufactured exports | Energy intensity of the economy | Motorways per area 1000km2 | Motorways per 100000 inhabitants | Other roads per 1000 km2 | Other roads per 100000 inhabitants | General government debt (% of GDP) | Doing Business rank | Economic Freedom score | Information and Communication Technology | Sovereign credit ratings |               |
| Country  | 100-0                               | 100-0   | 100-0                               | 100-0  | 100-0                           | 100-0                      | 100-0                            | 100-0                    | 100-0                              | 100-0                              | 100-0               | 100-0                  | 100-0                                    | 100-0                    | 100-0         |
| Austria  | 63                                  | 63  | 72                                  | 47   | 67                              | 52                         | 61                               | 51                       | 54                                 | 45                                 | 61                  | 62                     | 63                                       | 73                       | 61            |
| Belgium  | 60                                  | 45  | 61                                  | 48   | 57                              | 92                         | 52                               | 93                       | 51                                 | 30                                 | 44                  | 48                     | 59                                       | 64                       | 54            |
| Cyprus   | 47                                  | 57  | 37                                  | 66   | 61                              | 77                         | 80                               | 59                       | 53                                 | 28                                 | 36                  | 53                     | 58                                       | 38                       | 48            |
| Denmark  | 68                                  | 68  | 84                                  | 48   | 74                              | 63                         | 67                               | 54                       | 50                                 | 66                                 | 83                  | 77                     | 78                                       | 79                       | 71            |
| Finland  | 59                                  | 62  | 94                                  | 41   | 55                              | 33                         | 55                               | 37                       | 64                                 | 52                                 | 68                  | 70                     | 60                                       | 73                       | 61            |
| France   | 54                                  | 48  | 58                                  | 83   | 65                              | 53                         | 56                               | 57                       | 57                                 | 29                                 | 57                  | 31                     | 68                                       | 65                       | 55            |
| Germany  | 62                                  | 72  | 83                                  | 58   | 67                              | 70                         | 53                               | 55                       | 40                                 | 52                                 | 66                  | 57                     | 71                                       | 79                       | 65            |
| Greece   | 37                                  | 25  | 36                                  | 49   | 61                              | 45                         | 56                               | 44                       | 47                                 | 0                                  | 13                  | 13                     | 46                                       | 25                       | 32            |
| Ireland  | 100                                 | 52  | 74                                  | 80   | 76                              | 45                         | 61                               | 50                       | 64                                 | 57                                 | 64                  | 90                     | 63                                       | 61                       | 73            |
| Italy  | 50                                  | 29  | 47                                  | 38   | 68                              | 55                         | 44                               | 42                       | 33                                 | 9                                  | 32                  | 28                     | 42                                       | 38                       | 40            |
| Luxembourg   | 100                                 | 51  | 63                                  | 35   | 70                              | 98                         | 74                               | 47                       | 34                                 | 74                                 | 19                  | 70                     | 73                                       | 79                       | 73            |
| Malta  | 51                                  | 66  | 42                                  | 89   | 33                              | 30                         | 20                               | 100                      | 36                                 | 60                                 | 59                  | 48                     | 60                                       | 53                       | 54            |
| Netherlands  | 67                                  | 76  | 76                                  | 73   | 64                              | 100                        | 53                               | 77                       | 41                                 | 60                                 | 47                  | 73                     | 73                                       | 79                       | 69            |
| Portugal   | 43                                  | 55  | 37                                  | 36   | 62                              | 66                         | 82                               | 35                       | 27                                 | 20                                 | 50                  | 38                     | 44                                       | 39                       | 43            |
| Spain  | 47                                  | 36  | 39                                  | 36   | 65                              | 63                         | 88                               | 37                       | 31                                 | 27                                 | 59                  | 47                     | 58                                       | 49                       | 47            |
| Sweden   | 63                                  | 70  | 100                                 | 54   | 65                              | 35                         | 63                               | 38                       | 63                                 | 67                                 | 77                  | 65                     | 72                                       | 79                       | 68            |
| UK   | 54                                  | 70  | 61                                  | 74   | 70                              | 47                         | 32                               | 54                       | 38                                 | 35                                 | 79                  | 79                     | 77                                       | 64                       | 60            |
| Bulgaria   | 33                                  | 52  | 36                                  | 45   | 13                              | 38                         | 44                               | 35                       | 31                                 | 74                                 | 30                  | 49                     | 38                                       | 43                       | 41            |
| Czech Republic   | 50                                  | 68  | 41                                  | 68   | 46                              | 48                         | 45                               | 53                       | 49                                 | 68                                 | 48                  | 62                     | 45                                       | 61                       | 55            |
| Estonia  | 47                                  | 66  | 40                                  | 33   | 42                              | 34                         | 45                               | 49                       | 100                                | 78                                 | 70                  | 78                     | 66                                       | 61                       | 57            |
| Hungary  | 42                                  | 57  | 37                                  | 60   | 48                              | 50                         | 57                               | 61                       | 69                                 | 47                                 | 38                  | 37                     | 40                                       | 39                       | 45            |
| Latvia   | 41                                  | 61  | 36                                  | 60   | 48                              | 30                         | 20                               | 44                       | 86                                 | 65                                 | 69                  | 56                     | 47                                       | 52                       | 51            |
| Lithuania  | 47                                  | 61  | 35                                  | 48   | 48                              | 37                         | 50                               | 49                       | 85                                 | 63                                 | 76                  | 73                     | 45                                       | 55                       | 54            |
| Poland   | 42                                  | 54  | 36                                  | 43   | 48                              | 36                         | 29                               | 49                       | 47                                 | 58                                 | 49                  | 46                     | 39                                       | 51                       | 47            |
| Romania  | 41                                  | 47  | 35                                  | 46   | 51                              | 34                         | 29                               | 38                       | 34                                 | 63                                 | 35                  | 46                     | 30                                       | 36                       | 43            |
| Slovakia   | 40                                  | 51  | 36                                  | 43   | 50                              | 41                         | 39                               | 44                       | 41                                 | 57                                 | 45                  | 34                     | 43                                       | 55                       | 46            |
| Slovenia   | 48                                  | 59  | 43                                  | 37   | 56                              | 63                         | 81                               | 56                       | 61                                 | 47                                 | 52                  | 41                     | 49                                       | 55                       | 51            |
| Croatia  | 37                                  | 38  | 35                                  | 39   | 54                              | 55                         | 87                               | 39                       | 38                                 | 43                                 | 39                  | 23                     | 46                                       | 32                       | 41            |
| North Macedonia  | 26                                  | 21  | 34                                  | 30   | 27                              | 44                         | 54                               | 40                       | 39                                 | 61                                 | 71                  | 42                     | 20                                       | 27                       | 34            |
| Turkey   | 37                                  | 4   | 34                                  | 27   | 61                              | 35                         | 28                               | 37                       | 31                                 | 66                                 | 56                  | 25                     | 22                                       | 18                       | 36            |
| Montenegro   | 30                                  | 11  | 34                                  | 27   | 35                              | 30                         | 20                               | 40                       | 50                                 | 43                                 | 40                  | 23                     | 29                                       | 17                       | 29            |
| Iceland  | 63                                  | 82  | 67                                  | 100  | 3                               | 31                         | 26                               | 35                       | 94                                 | 47                                 | 62                  | 75                     | 84                                       | 53                       | 59            |
| Albania  | 23                                  | 35  | 34                                  | 20   | 27                              | 30                         | 20                               | 35                       | 28                                 | 48                                 | 10                  | 29                     | 1  | 19                       | 26            |
| BiH  | 24                                  | 1   | 34                                  | 32   | 2                               | 34                         | 30                               | 37                       | 35                                 | 71                                 | 2                   | 21                     | 7  | 12                       | 24            |
| Serbia   | 28                                  | 37  | 35                                  | 28   | 11                              | 44                         | 49                               | 40                       | 38                                 | 56                                 | 45                  | 37                     | 33                                       | 30                       | 34            |
| The table shows the standardized scores on a scale 0-100 (lowest to highest) for the indicators in this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methodology in the report. |                                     |   |                                     |  |                                 |                            |                                  |                          |                                    |                                    |                     |                        |  |                          |               |

| Catch-Up Index 2021: Quality of Life Scores (in z-scores on a scale 100-0)* |   |                               |  |                                 |                                   |  |                                |                                     |                                   |   |                              |                          |                           |                         |                       |
|---|---|-------------------------------|--|---------------------------------|-----------------------------------|--|--------------------------------|-------------------------------------|-----------------------------------|---|------------------------------|--------------------------|---------------------------|-------------------------|-----------------------|
| Quality of Life Scores  | Welfare of consumers                        | Social issues                 |  |                                 | Education                         |  |                                |                                     |                                   | Health                                    |                              |                          |                           | Human Development       | Quality of Life Score |
|   | Actual individual consumption with EU27=100 | Inequality - Gini coefficient | Relative median at-risk-of-poverty gap (%) | Long term unemployment rate (%) | Share (%) of early school leavers | Share of population (%) with university degree | PISA score in reading literacy | PISA score in mathematical literacy | PISA score in scientific literacy | Healthy life expectancy at birth in years | Infant mortality by age of 5 | Life expectancy in years | EuroHealth Consumer Index | Human Development Index |                       |
| Country   | 100-0                                       | 100-0                         | 100-0                                      | 100-0                           | 100-0                             | 100-0  | 100-0                          | 100-0                               | 100-0                             | 100-0                                     | 100-0                        | 100-0                    | 100-0                     | 100-0                   | 100-0                 |
| Austria   | 71  | 65                            | 54   | 61                              | 55                                | 54   | 57                             | 63                                  | 60                                | 62  | 58                           | 63                       | 71                        | 65                      | 63                    |
| Belgium   | 70  | 72                            | 74   | 56                              | 55                                | 70   | 62                             | 68                                  | 65                                | 59  | 59                           | 60                       | 82                        | 69                      | 67                    |
| Cyprus  | 58  | 55                            | 72   | 57                              | 42                                | 76   | 23                             | 32                                  | 29                                | 77  | 70                           | 70                       | 36                        | 52                      | 56                    |
| Denmark   | 77  | 64                            | 64   | 63                              | 50                                | 60   | 67                             | 69                                  | 61                                | 63  | 55                           | 65                       | 83                        | 72                      | 68                    |
| Finland   | 71  | 67                            | 81   | 61                              | 55                                | 75   | 77                             | 68                                  | 79                                | 63  | 69                           | 69                       | 80                        | 71                      | 71                    |
| France  | 67  | 55                            | 57   | 53                              | 56                                | 64   | 62                             | 60                                  | 61                                | 74  | 48                           | 70                       | 71                        | 57                      | 61                    |
| Germany   | 78  | 32                            | 27   | 62                              | 44                                | 41   | 65                             | 63                                  | 67                                | 62  | 55                           | 61                       | 68                        | 75                      | 62                    |
| Greece  | 42  | 47                            | 41   | 12                              | 73                                | 47   | 42                             | 34                                  | 37                                | 62  | 55                           | 62                       | 32                        | 52                      | 46                    |
| Ireland   | 55  | 59                            | 78   | 61                              | 68                                | 82   | 76                             | 63                                  | 63                                | 64  | 60                           | 75                       | 44                        | 78                      | 66                    |
| Italy   | 58  | 39                            | 31   | 43                              | 35                                | 20   | 53                             | 55                                  | 47                                | 72  | 62                           | 70                       | 47                        | 54                      | 50                    |
| Luxembourg  | 85  | 46                            | 69   | 59                              | 55                                | 78   | 49                             | 53                                  | 52                                | 69  | 66                           | 66                       | 73                        | 63                      | 67                    |
| Malta   | 46  | 50                            | 74   | 62                              | 20                                | 46   | 37                             | 46                                  | 40                                | 68  | 23                           | 72                       | 36                        | 55                      | 50                    |
| Netherlands   | 74  | 63                            | 71   | 63                              | 60                                | 67   | 58                             | 75                                  | 67                                | 67  | 52                           | 64                       | 89                        | 74                      | 69                    |
| Portugal  | 48  | 46                            | 49   | 56                              | 52                                | 39   | 62                             | 59                                  | 61                                | 63  | 56                           | 61                       | 60                        | 43                      | 51                    |
| Spain   | 49  | 42                            | 33   | 42                              | 23                                | 66   | 64                             | 52                                  | 56                                | 74  | 62                           | 70                       | 50                        | 58                      | 52                    |
| Sweden  | 69  | 65                            | 62   | 62                              | 57                                | 71   | 69                             | 65                                  | 65                                | 72  | 67                           | 70                       | 71                        | 74                      | 68                    |
| UK  | 68  | 36                            | 53   | 63                              | 44                                | 78   | 68                             | 65                                  | 69                                | 55  | 50                           | 60                       | 56                        | 69                      | 61                    |
| Bulgaria  | 29  | 7                             | 37   | 56                              | 36                                | 40   | 21                             | 24                                  | 21                                | 18  | 25                           | 8                        | 27                        | 24                      | 27                    |
| Czech Republic  | 49  | 78                            | 80   | 64                              | 57                                | 31   | 60                             | 63                                  | 64                                | 42  | 61                           | 41                       | 57                        | 57                      | 57                    |
| Estonia   | 43  | 49                            | 57   | 61                              | 58                                | 68   | 79                             | 77                                  | 83                                | 46  | 69                           | 44                       | 56                        | 54                      | 55                    |
| Hungary   | 35  | 59                            | 12   | 62                              | 39                                | 35   | 53                             | 52                                  | 54                                | 27  | 56                           | 23                       | 21                        | 39                      | 39                    |
| Latvia  | 37  | 28                            | 37   | 56                              | 59                                | 59   | 54                             | 55                                  | 58                                | 17  | 57                           | 23                       | 30                        | 43                      | 42                    |
| Lithuania   | 57  | 29                            | 52   | 55                              | 66                                | 72   | 53                             | 52                                  | 55                                | 22  | 56                           | 19                       | 34                        | 50                      | 49                    |
| Poland  | 46  | 64                            | 59   | 64                              | 66                                | 48   | 73                             | 73                                  | 72                                | 41  | 49                           | 30                       | 26                        | 49                      | 52                    |
| Romania   | 43  | 35                            | 25   | 60                              | 25                                | 16   | 25                             | 21                                  | 22                                | 23  | 23                           | 13                       | 18                        | 29                      | 30                    |
| Slovakia  | 38  | 92                            | 51   | 51                              | 57                                | 35   | 42                             | 55                                  | 44                                | 39  | 35                           | 32                       | 55                        | 41                      | 46                    |
| Slovenia  | 44  | 81                            | 72   | 58                              | 72                                | 54   | 63                             | 69                                  | 70                                | 60  | 72                           | 58                       | 46                        | 63                      | 60                    |
| Croatia   | 33  | 59                            | 37   | 57                              | 79                                | 31   | 54                             | 41                                  | 49                                | 40  | 45                           | 38                       | 38                        | 38                      | 43                    |
| North Macedonia   | 15  | 48                            | 25   | 4                               | 65                                | 26   | 6                              | 0                                   | 14                                | 16  | 31                           | 32                       | 37                        | 8                       | 21                    |
| Turkey  | 37  | 0                             | 39   | 50                              | 0                                 | 25   | 47                             | 35                                  | 47                                | 38  | 0                            | 46                       | 37                        | 26                      | 30                    |
| Montenegro  | 29  | 33                            | 22   | 6                               | 68                                | 31   | 21                             | 21                                  | 15                                | 25  | 70                           | 32                       | 43                        | 29                      | 31                    |
| Iceland   | 79  | 78                            | 71   | 65                              | 28                                | 68   | 51                             | 60                                  | 51                                | 73  | 73                           | 75                       | 71                        | 76                      | 70                    |
| Albania   | 12  | 32                            | 36   | 25                              | 18                                | 26   | 12                             | 25                                  | 16                                | 45  | 0                            | 47                       | 17                        | 16                      | 21                    |
| BIH   | 14  | 38                            | 22   | 0                               | 66                                | 26   | 11                             | 6                                   | 5                                 | 27  | 34                           | 35                       | 37                        | 10                      | 21                    |
| Serbia  | 21  | 37                            | 25   | 45                              | 66                                | 28   | 32                             | 32                                  | 30                                | 24  | 39                           | 25                       | 50                        | 20                      | 30                    |

The table shows the standardized z-scores on a scale 0-100 (lowest to highest) for the indicators in this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methodology in the report.



| Catch-Up Index 2021: Democracy Scores (in z-scores on a scale 100-0)* |                               |                 |  |   |   |  |                                |   |                       |                 |
|---|-------------------------------|-----------------|--|---|---|--|--------------------------------|---|-----------------------|-----------------|
| Democracy Scores  | Satisfaction with democracy   | Trust in People | Democracy Indices                        |   | Media Freedom                               |  | Voice and Accountability       | Human Rights                                      | E-participation       | Democracy Score |
|   | Satisfaction with democracy % | Trust in people | Freedom House score Freedom in the World | Economist Intelligence Unit Democracy Index | Freedom of the Press score by Freedom House | Press Freedom Index by Reporters without Borders | Voice and Accountability - WGI | Disrespect for human rights by Global Peace Index | E-participation index |                 |
| Country   | 100-0                         | 100-0           | 100-0                                    | 100-0                                       | 100-0                                       | 100-0  | 100-0                          | 100-0   | 100-0                 | 100-0           |
| Austria   | 64                            | 54              | 60                                       | 61  | 59  | 62   | 67                             | 48  | 76                    | 60              |
| Belgium   | 50                            | 63              | 64                                       | 51  | 72  | 72   | 69                             | 64  | 22                    | 61              |
| Cyprus  | 36                            | 37              | 61                                       | 51  | 58  | 55   | 56                             | 48  | 72                    | 52              |
| Denmark   | 89                            | 99              | 65                                       | 77  | 72  | 79   | 72                             | 64  | 74                    | 76              |
| Finland   | 79                            | 92              | 69                                       | 78  | 72  | 82   | 72                             | 64  | 72                    | 75              |
| France  | 49                            | 61              | 56                                       | 58  | 54  | 49   | 61                             | 64  | 64                    | 57              |
| Germany   | 74                            | 53              | 61                                       | 69  | 62  | 65   | 69                             | 64  | 38                    | 64              |
| Greece  | 31                            | 29              | 52                                       | 49  | 32  | 36   | 51                             | 33  | 44                    | 41              |
| Ireland   | 76                            | 71              | 65                                       | 75  | 64  | 72   | 68                             | 64  | 56                    | 69              |
| Italy   | 52                            | 51              | 56                                       | 54  | 48  | 48   | 53                             | 48  | 50                    | 52              |
| Luxembourg  | 81                            | 60              | 65                                       | 69  | 69  | 60   | 70                             | 64  | 30                    | 66              |
| Malta   | 52                            | 39              | 56                                       | 53  | 58  | 33   | 58                             | 48  | 52                    | 51              |
| Netherlands   | 83                            | 86              | 67                                       | 74  | 73  | 76   | 71                             | 64  | 74                    | 74              |
| Portugal  | 47                            | 45              | 64                                       | 57  | 66  | 75   | 63                             | 48  | 50                    | 58              |
| Spain   | 49                            | 54              | 56                                       | 60  | 52  | 54   | 56                             | 33  | 54                    | 53              |
| Sweden  | 84                            | 71              | 69                                       | 79  | 73  | 81   | 73                             | 64  | 50                    | 74              |
| UK  | 29                            | 50              | 60                                       | 67  | 56  | 51   | 64                             | 64  | 76                    | 57              |
| Bulgaria  | 37                            | 31              | 40                                       | 38  | 34  | 19   | 34                             | 48  | 62                    | 37              |
| Czech Republic  | 44                            | 42              | 57                                       | 53  | 61  | 48   | 51                             | 64  | 34                    | 53              |
| Estonia   | 60                            | 62              | 61                                       | 56  | 67  | 65   | 62                             | 64  | 80                    | 62              |
| Hungary   | 51                            | 40              | 28                                       | 35  | 32  | 30   | 28                             | 33  | 26                    | 34              |
| Latvia  | 44                            | 52              | 55                                       | 46  | 54  | 56   | 48                             | 64  | 10                    | 51              |
| Lithuania   | 49                            | 57              | 56                                       | 44  | 61  | 54   | 55                             | 64  | 36                    | 54              |
| Poland  | 44                            | 38              | 47                                       | 40  | 44  | 36   | 44                             | 48  | 74                    | 44              |
| Romania   | 36                            | 53              | 47                                       | 33  | 39  | 44   | 35                             | 48  | 48                    | 42              |
| Slovakia  | 37                            | 36              | 56                                       | 42  | 54  | 48   | 49                             | 33  | 30                    | 45              |
| Slovenia  | 22                            | 57              | 63                                       | 51  | 58  | 48   | 54                             | 64  | 56                    | 53              |
| Croatia   | 34                            | 38              | 50                                       | 34  | 36  | 38   | 37                             | 48  | 62                    | 40              |
| North Macedonia   | 35                            | 17              | 25                                       | 24  | 7   | 30   | 18                             | 48  | 52                    | 26              |
| Turkey  | 46                            | 38              | 0  | 2   | 0   | 0  | 0                              | 0   | 62                    | 10              |
| Montenegro  | 20                            | 36              | 21                                       | 22  | 32  | 25   | 20                             | 48  | 4                     | 26              |
| Iceland   | 81                            | 73              | 61                                       | 81  | 68  | 64   | 68                             | 64  | 42                    | 69              |
| Albania   | 44                            | 6               | 25                                       | 27  | 23  | 33   | 26                             | 33  | 54                    | 27              |
| BIH   | 21                            | 28              | 7  | 7   | 23  | 37   | 12                             | 33  | 14                    | 18              |
| Serbia  | 20                            | 31              | 22                                       | 30  | 26  | 30   | 19                             | 48  | 50                    | 28              |

The table shows the standartized z-scores on a scale 0-100 (lowest to highest) for the indicators in this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methology in the report.

| Catch-Up Index 2021: Governance Scores (in z-scores on a scale 100-0)* |                                  |                             |                           |   |                                |                          |                   |                       |                     |                                |                  |
|--|----------------------------------|-----------------------------|---------------------------|---|--------------------------------|--------------------------|-------------------|-----------------------|---------------------|--------------------------------|------------------|
| Governance Scores  | Corruption                       |                             | Political Stability       |   | Government                     | Regulations              | Rule of Law       | Conflict and tensions |                     | E-government                   | Governance Score |
|  | Corruption Perception Index (TI) | Control of Corruption (WGI) | Political instability EIU | Political Stability and Absence of Violence (WGI) | Government Effectiveness (WGI) | Regulatory Quality (WGI) | Rule of Law (WGI) | Global Peace Index    | Homicide rates (UN) | E-government Development Index |                  |
| Country  | 100-0                            | 100-0                       | 100-0                     | 100-0   | 100-0                          | 100-0                    | 100-0             | 100-0                 | 100-0               | 100-0                          | 100-0            |
| Austria  | 70                               | 68                          | 68                        | 67  | 68                             | 67                       | 73                | 71                    | 59                  | 66                             | 68               |
| Belgium  | 70                               | 69                          | 61                        | 44  | 55                             | 61                       | 64                | 58                    | 44                  | 43                             | 58               |
| Cyprus   | 46                               | 50                          | 47                        | 45  | 53                             | 50                       | 50                | 40                    | 53                  | 61                             | 49               |
| Denmark  | 84                               | 75                          | 68                        | 68  | 76                             | 68                       | 74                | 71                    | 58                  | 87                             | 72               |
| Finland  | 81                               | 76                          | 68                        | 63  | 76                             | 76                       | 77                | 71                    | 45                  | 79                             | 72               |
| France   | 61                               | 66                          | 54                        | 40  | 65                             | 66                       | 65                | 53                    | 54                  | 61                             | 60               |
| Germany  | 75                               | 72                          | 68                        | 49  | 70                             | 74                       | 68                | 62                    | 59                  | 56                             | 67               |
| Greece   | 38                               | 35                          | 61                        | 39  | 39                             | 35                       | 33                | 22                    | 59                  | 43                             | 39               |
| Ireland  | 65                               | 67                          | 61                        | 67  | 62                             | 70                       | 64                | 53                    | 61                  | 53                             | 63               |
| Italy  | 41                               | 41                          | 43                        | 43  | 42                             | 44                       | 34                | 49                    | 67                  | 48                             | 44               |
| Luxembourg   | 75                               | 75                          | 68                        | 81  | 72                             | 73                       | 72                | 63                    | 72                  | 49                             | 71               |
| Malta  | 41                               | 40                          | 43                        | 74  | 51                             | 45                       | 54                | 51                    | 46                  | 56                             | 50               |
| Netherlands  | 77                               | 74                          | 68                        | 59  | 73                             | 77                       | 72                | 62                    | 67                  | 74                             | 71               |
| Portugal   | 51                               | 55                          | 68                        | 76  | 59                             | 46                       | 59                | 80                    | 62                  | 49                             | 60               |
| Spain  | 52                               | 52                          | 54                        | 41  | 54                             | 52                       | 55                | 53                    | 66                  | 63                             | 54               |
| Sweden   | 81                               | 76                          | 68                        | 71  | 74                             | 75                       | 75                | 62                    | 56                  | 77                             | 72               |
| UK   | 71                               | 71                          | 64                        | 46  | 66                             | 70                       | 67                | 62                    | 54                  | 77                             | 65               |
| Bulgaria   | 30                               | 30                          | 50                        | 49  | 38                             | 35                       | 26                | 49                    | 52                  | 42                             | 38               |
| Czech Republic   | 43                               | 47                          | 54                        | 64  | 52                             | 59                       | 56                | 66                    | 66                  | 45                             | 56               |
| Estonia  | 68                               | 68                          | 50                        | 51  | 61                             | 69                       | 62                | 44                    | 35                  | 80                             | 59               |
| Hungary  | 30                               | 37                          | 61                        | 54  | 43                             | 38                       | 41                | 44                    | 27                  | 35                             | 41               |
| Latvia   | 46                               | 47                          | 47                        | 42  | 59                             | 55                       | 55                | 35                    | 0                   | 37                             | 46               |
| Lithuania  | 50                               | 53                          | 57                        | 59  | 56                             | 54                       | 56                | 49                    | 0                   | 59                             | 50               |
| Poland   | 45                               | 49                          | 43                        | 47  | 46                             | 51                       | 39                | 53                    | 64                  | 56                             | 48               |
| Romania  | 30                               | 31                          | 50                        | 48  | 9                              | 30                       | 37                | 53                    | 52                  | 32                             | 34               |
| Slovakia   | 37                               | 43                          | 50                        | 56  | 48                             | 49                       | 45                | 53                    | 55                  | 37                             | 48               |
| Slovenia   | 50                               | 58                          | 68                        | 57  | 57                             | 50                       | 59                | 58                    | 69                  | 56                             | 57               |
| Croatia  | 34                               | 39                          | 50                        | 55  | 40                             | 37                       | 38                | 62                    | 67                  | 35                             | 44               |
| North Macedonia  | 19                               | 19                          | 15                        | 27  | 23                             | 33                       | 17                | 35                    | 54                  | 18                             | 26               |
| Turkey   | 25                               | 24                          | 0                         | 0   | 25                             | 10                       | 15                | 0                     | 25                  | 35                             | 15               |
| Montenegro   | 32                               | 34                          | 12                        | 28  | 30                             | 27                       | 29                | 31                    | 32                  | 16                             | 28               |
| Iceland  | 68                               | 70                          | 68                        | 86  | 69                             | 64                       | 71                | 80                    | 60                  | 70                             | 70               |
| Albania  | 21                               | 13                          | 29                        | 34  | 20                             | 24                       | 9                 | 26                    | 31                  | 27                             | 22               |
| BiH  | 19                               | 10                          | 5                         | 9   | 0                              | 0                        | 17                | 13                    | 54                  | 0                              | 12               |
| Serbia   | 23                               | 17                          | 26                        | 25  | 24                             | 18                       | 21                | 40                    | 53                  | 28                             | 26               |

The table shows the standartized scores on a scale 0-100 (lowest to highest) for the indicators in this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methology in the report.

## Supplement II: Indicators Data by Country

## Catch-Up Index 2021 Data

| Catch-Up Index 2021: Economy Indicators Data |  |  |   |  |  |   |  |  |  |   |  |   |  |  |
|--|--|--|---|--|--|---|--|--|--|---|--|---|--|--|
| Indicators/<br>Country                       | GDP per<br>capita  | Employment   | Research and<br>Development   |  | Energy<br>Intensity  | Transport infrastructure  |  |  |  | Government<br>debt  | Market<br>development  |   | Information<br>on<br>Society   | Credit<br>ratings  |
|  | GDP per<br>capita in PPS<br>with<br>EU27=100<br>(the higher<br>the better) | Employment<br>as<br>percentage<br>of<br>population,<br>age group 15-<br>64 (the<br>higher the<br>better) | Patents<br>granted by<br>USPTO per<br>capita<br>(recalculated;<br>the higher<br>the better) | High-tech<br>exports as %<br>of<br>manufactured<br>exports (the<br>higher the<br>better) | Energy<br>intensity of<br>the economy<br>(the lower<br>the better) | Motorways<br>per area<br>1000 km2<br>(recalculated<br>; the higher<br>the better) | Motorways<br>per 100000<br>inhabitants<br>(recalculated<br>; the higher<br>the better) | Other roads<br>per 1000<br>km2<br>(recalculated<br>; the higher<br>the better) | Other roads<br>per 100000<br>inhabitants<br>(recalculated<br>; the higher<br>the better) | General<br>government<br>debt (% of<br>GDP) (0-100;<br>the lower the<br>better) | Doing<br>Business rank<br>(1-190; 1 is<br>highest, 190<br>lowest rank) | Economic<br>Freedom<br>score (0-100;<br>the higher<br>the better) | Information<br>and<br>Communicati<br>on<br>Technology<br>(scale 1-10;<br>the higher<br>the better) | Sovereigns<br>credit ratings<br>(recalculated<br>on a scale 1-<br>10; the<br>higher the<br>better) |
| Austria                                      | 124  | 72.4   | 18.00   | 11.498671  | 102.45   | 20.782  | 19.513   | 1,534  | 1440.16  | 83.9  | 27   | 73.9  | 8.02   | 9.5  |
| Belgium                                      | 117  | 64.7   | 12.81   | 12.020893  | 157.36   | 57.750  | 15.243   | 5,026  | 1326.70  | 114.1   | 46   | 70.1  | 7.81   | 8.8  |
| Cyprus                                       | 87   | 69.9   | 1.56  | 19.874214  | 134.46   | 43.589  | 28.683   | 2,172  | 1429.12  | 118.2   | 54   | 71.4  | 7.77   | 6.8  |
| Denmark                                      | 136  | 74.4   | 23.53   | 12.044409  | 62.42  | 30.352  | 22.397   | 1,704  | 1257.42  | 42.2  | 4  | 77.8  | 8.71   | 10.0   |
| Finland                                      | 115  | 72.1   | 28.05   | 9.2145411  | 168.17   | 2.736   | 16.734   | 321  | 1963.16  | 69.2  | 20   | 76.1  | 7.88   | 9.5  |
| France                                       | 103  | 66.1   | 11.29   | 26.992412  | 112.80   | 21.455  | 17.306   | 2,008  | 1619.84  | 115.7   | 32   | 65.7  | 8.24   | 8.9  |
| Germany                                      | 121  | 76.2   | 23.06   | 16.426327  | 103.07   | 36.915  | 15.854   | 1,805  | 775.03   | 69.8  | 22   | 72.5  | 8.39   | 10.0   |
| Greece                                       | 64   | 56.3   | 1.18  | 12.51487   | 137.02   | 13.965  | 17.251   | 877  | 1083.66  | 205.6   | 79   | 60.9  | 7.23   | 5.8  |
| Ireland                                      | 211  | 67.7   | 18.81   | 25.973487  | 50.93  | 14.159  | 19.873   | 1,394  | 1956.94  | 59.5  | 24   | 81.4  | 8.02   | 8.6  |
| Italy  | 94   | 58.1   | 6.40  | 7.8332642  | 97.37  | 23.041  | 11.717   | 757  | 384.97   | 155.8   | 58   | 64.9  | 7.04   | 6.8  |
| Luxembourg                                   | 266  | 67.2   | 13.71   | 6.5609371  | 87.33  | 63.805  | 25.995   | 1,127  | 459.09   | 24.9  | 72   | 76.0  | 8.47   | 10.0   |
| Malta  | 97   | 73.7   | 3.88  | 29.781676  | 285.61   | 0.000   | 0.000  | 9,035  | 553.19   | 54.3  | 30   | 70.2  | 7.86   | 8.0  |
| Netherlands                                  | 133  | 77.8   | 19.55   | 23.064811  | 121.02   | 74.691  | 15.965   | 3,685  | 787.70   | 54.5  | 42   | 76.8  | 8.49   | 10.0   |
| Portugal                                     | 77   | 69.0   | 1.55  | 6.9422153  | 129.74   | 33.283  | 29.762   | 122  | 109.22   | 133.6   | 39   | 67.5  | 7.13   | 6.9  |
| Spain  | 86   | 60.9   | 2.48  | 6.8609323  | 113.03   | 30.678  | 32.753   | 297  | 316.58   | 120.0   | 30   | 69.9  | 7.79   | 7.7  |
| Sweden                                       | 123  | 75.5   | 32.86   | 14.612669  | 114.57   | 4.737   | 20.551   | 438  | 1899.58  | 39.9  | 10   | 74.7  | 8.41   | 10.0   |
| UK   | 102  | 75.4   | 12.71   | 23.46813   | 84.15  | 15.657  | 5.706  | 1,725  | 628.53   | 104.5   | 8  | 78.4  | 8.65   | 8.8  |
| Bulgaria                                     | 55   | 67.6   | 0.85  | 10.852453  | 396.43   | 7.125   | 11.422   | 172  | 275.99   | 25.0  | 61   | 70.4  | 6.86   | 7.2  |
| Czech Republic                               | 94   | 74.4   | 3.18  | 20.804636  | 219.86   | 16.180  | 11.923   | 1,641  | 1209.25  | 38.1  | 41   | 73.8  | 7.16   | 8.6  |
| Estonia                                      | 86   | 73.7   | 2.71  | 5.7727112  | 239.89   | 3.560   | 12.105   | 1,306  | 4440.90  | 18.2  | 18   | 78.2  | 8.14   | 8.6  |
| Hungary                                      | 74   | 69.7   | 1.69  | 17.457801  | 205.98   | 18.523  | 17.709   | 2,351  | 2247.28  | 80.4  | 52   | 67.2  | 6.93   | 6.9  |
| Latvia                                       | 72   | 71.6   | 0.95  | 17.241521  | 206.49   | 0.000   | 0.000  | 902  | 3077.34  | 43.5  | 19   | 72.3  | 7.26   | 7.9  |
| Lithuania                                    | 87   | 71.6   | 0.75  | 12.030128  | 204.22   | 6.172   | 14.415   | 1,297  | 3029.07  | 47.3  | 11   | 76.9  | 7.19   | 8.1  |
| Poland                                       | 76   | 68.7   | 1.15  | 10.112883  | 208.95   | 5.360   | 4.429  | 1,359  | 1122.93  | 57.5  | 40   | 69.7  | 6.89   | 7.8  |
| Romania                                      | 72   | 65.6   | 0.61  | 11.072565  | 187.73   | 3.633   | 4.514  | 359  | 445.76   | 47.3  | 55   | 69.5  | 6.48   | 6.7  |
| Slovakia                                     | 71   | 67.5   | 1.14  | 9.9125706  | 196.86   | 10.094  | 9.066  | 912  | 818.99   | 60.6  | 45   | 66.3  | 7.06   | 8.1  |
| Slovenia                                     | 89   | 70.9   | 4.13  | 7.3540298  | 159.86   | 30.731  | 29.540   | 1,875  | 1801.96  | 80.8  | 37   | 68.3  | 7.38   | 8.1  |
| Croatia                                      | 64   | 62.0   | 0.52  | 8.3043743  | 174.04   | 23.147  | 32.455   | 449  | 629.33   | 88.7  | 51   | 63.6  | 7.24   | 6.4  |
| North Macedonia                              | 38   | 54.7   | 0.05  | 4.2225754  | 321.27   | 13.028  | 16.193   | 563  | 699.68   | 51.1  | 17   | 68.6  | 6.01   | 6.0  |
| Turkey                                       | 64   | 47.5   | 0.27  | 3.0435678  | 133.67   | 3.905   | 3.660  | 316  | 296.21   | 41.4  | 33   | 64.0  | 6.08   | 5.3  |
| Montenegro                                   | 46   | 50.3   | 0   | 3.1538489  | 277.33   | 0.000   | 0.000  | 574  | 1277.19  | 87.3  | 50   | 63.4  | 6.44   | 5.2  |
| Iceland                                      | 125  | 80.3   | 15.46   | 38.079204  | 453.47   | 0.107   | 2.983  | 125  | 3492.21  | 79.9  | 26   | 77.4  | 8.98   | 8.0  |
| Albania                                      | 31   | 60.6   | 0.04  | 0.0447019  | 321.27   | 0.000   | 0.000  | 142  | 144.54   | 78.8  | 82   | 65.2  | 5.14   | 5.4  |
| BiH  | 33   | 46.4   | 0.03  | 5.2708775  | 459.52   | 3.360   | 4.926  | 340  | 498.28   | 32.2  | 90   | 62.9  | 5.39   | 4.8  |
| Serbia                                       | 43   | 61.3   | 0.44  | 3.6321165  | 407.54   | 12.430  | 14.014   | 559  | 629.79   | 61.5  | 44   | 67.2  | 6.61   | 6.2  |

The table shows the raw data (or recalculated in some cases as indicated) used for this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methodology in the report.

| Catch-Up Index 2021: Quality of Life Indicators Data |   |  |   |  |  |  |  |   |   |  |   |  |   |   |
|--|---|--|---|--|--|--|--|---|---|--|---|--|---|---|
| Indicators/<br>Country                               | Welfare of<br>consumers   | Social issues  |   |  | Education  |  |  |   |   | Health   |   |  |   | Human<br>Development  |
|  | Actual<br>individual<br>consumption<br>with<br>EU27=100<br>(the higher<br>the better) | Inequality -<br>Gini<br>coefficient<br>(the lower<br>the better) | Relative<br>median at-<br>risk-of-<br>poverty gap<br>(%) (the<br>lower the<br>better) | Long term<br>unemployment<br>rate (%)<br>(the lower<br>the better) | Share (%) of<br>early school<br>leavers (the<br>lower the<br>better) | Share of<br>population<br>(%) with<br>university<br>degree (the<br>higher the<br>better) | PISA score in<br>reading<br>literacy (the<br>higher the<br>better) | PISA score<br>mathematic<br>al literacy<br>(the higher<br>the better) | PISA score in<br>scientific<br>literacy (the<br>higher the<br>better) | Healthy life<br>expectancy<br>at birth in<br>years (the<br>higher the<br>better) | Infant<br>mortality by<br>age of 5 (the<br>lower the<br>better) | Life<br>expectancy<br>in years (the<br>higher the<br>better) | EuroHealth<br>Consumer<br>Index (the<br>higher the<br>better) | Human<br>Development<br>Index (the<br>higher the<br>better) |
| Austria  | 114   | 27.0   | 22.7  | 1.3  | 8.1  | 31.3   | 484  | 499   | 490   | 70.90  | 3.47  | 81.3   | 799   | 0.922   |
| Belgium  | 113   | 25.4   | 16.2  | 2.3  | 8.1  | 37.6   | 493  | 508   | 499   | 70.60  | 3.41  | 80.9   | 849   | 0.931   |
| Cyprus   | 98  | 29.3   | 16.9  | 2.1  | 11.5   | 40.2   | 424  | 448   | 439   | 72.40  | 2.3   | 82.3   | 635   | 0.887   |
| Denmark  | 121   | 27.3   | 19.3  | 0.9  | 9.3  | 33.7   | 501  | 509   | 493   | 71.00  | 3.77  | 81.6   | 855   | 0.94  |
| Finland  | 114   | 26.5   | 13.7  | 1.2  | 8.2  | 39.8   | 520  | 507   | 522   | 71.00  | 2.38  | 82.2   | 839   | 0.938   |
| France   | 109   | 29.3   | 21.5  | 2.8  | 8.0  | 35.3   | 493  | 495   | 493   | 72.10  | 4.46  | 82.3   | 796   | 0.901   |
| Germany  | 123   | 34.4   | 31.5  | 1.1  | 11.0   | 26.0   | 498  | 500   | 503   | 70.90  | 3.81  | 81.1   | 785   | 0.947   |
| Greece   | 78  | 31.1   | 26.9  | 10.9   | 3.8  | 28.5   | 457  | 451   | 452   | 70.90  | 3.75  | 81.2   | 615   | 0.888   |
| Ireland  | 94  | 28.3   | 14.8  | 1.3  | 5.0  | 42.8   | 518  | 500   | 496   | 71.10  | 3.28  | 83.  | 669   | 0.955   |
| Italy  | 97  | 32.8   | 30.0  | 4.7  | 13.1   | 17.9   | 476  | 487   | 468   | 71.90  | 3.14  | 82.4   | 687   | 0.892   |
| Luxembourg   | 131   | 31.2   | 17.7  | 1.7  | 8.2  | 40.9   | 470  | 483   | 477   | 71.60  | 2.75  | 81.8   | 809   | 0.916   |
| Malta  | 83  | 30.3   | 16.0  | 1.1  | 16.7   | 28.0   | 448  | 472   | 457   | 71.5   | 6.98  | 82.6   | 631   | 0.895   |
| Netherlands  | 117   | 27.5   | 17.1  | 0.9  | 7.0  | 36.6   | 485  | 519   | 503   | 71.4   | 4.04  | 81.5   | 883   | 0.944   |
| Portugal   | 85  | 31.2   | 24.4  | 2.3  | 8.9  | 25.4   | 492  | 492   | 492   | 71   | 3.68  | 81.1   | 745   | 0.864   |
| Spain  | 87  | 32.1   | 29.4  | 5.0  | 16.0   | 36.0   | 496  | 481   | 483   | 72.1   | 3.1   | 82.4   | 698   | 0.904   |
| Sweden   | 111   | 26.9   | 19.9  | 1.1  | 7.7  | 38.3   | 506  | 502   | 499   | 71.9   | 2.57  | 82.4   | 800   | 0.945   |
| UK   | 110   | 33.5   | 23.0  | 0.9  | 10.9   | 41.0   | 504  | 502   | 505   | 70.1   | 4.27  | 81.  | 728   | 0.932   |
| Bulgaria   | 61  | 40.0   | 28.3  | 2.3  | 12.8   | 25.6   | 420  | 436   | 424   | 66.3   | 6.73  | 73.6   | 591   | 0.816   |
| Czech Republic                                       | 87  | 24.0   | 14.1  | 0.6  | 7.6  | 22.1   | 490  | 499   | 497   | 68.8   | 3.18  | 78.3   | 731   | 0.9   |
| Estonia  | 79  | 30.5   | 21.8  | 1.2  | 7.5  | 37.1   | 523  | 523   | 530   | 69.2   | 2.4   | 78.6   | 729   | 0.892   |
| Hungary  | 69  | 28.3   | 36.3  | 1.1  | 12.1   | 23.6   | 476  | 481   | 481   | 67.2   | 3.67  | 76   | 565   | 0.854   |
| Latvia   | 72  | 35.2   | 28.2  | 2.2  | 7.2  | 33.2   | 479  | 486   | 487   | 66.2   | 3.61  | 75.7   | 605   | 0.866   |
| Lithuania  | 96  | 35.1   | 23.2  | 2.5  | 5.6  | 38.7   | 476  | 481   | 482   | 66.7   | 3.65  | 75.1   | 622   | 0.882   |
| Poland   | 83  | 27.2   | 21.0  | 0.6  | 5.4  | 28.9   | 512  | 516   | 511   | 68.7   | 4.39  | 76.6   | 585   | 0.88  |
| Romania  | 79  | 33.8   | 31.9  | 1.5  | 15.6   | 16.2   | 428  | 430   | 426   | 66.8   | 6.98  | 74.2   | 549   | 0.828   |
| Slovakia   | 73  | 20.9   | 23.7  | 3.2  | 7.6  | 23.9   | 458  | 486   | 464   | 68.5   | 5.75  | 76.9   | 722   | 0.86  |
| Slovenia   | 80  | 23.5   | 16.9  | 1.9  | 4.1  | 31.5   | 495  | 509   | 507   | 70.7   | 2.08  | 80.6   | 678   | 0.917   |
| Croatia  | 67  | 28.3   | 28.0  | 2.1  | 2.2  | 22.0   | 479  | 464   | 472   | 68.6   | 4.78  | 78   | 644   | 0.851   |
| North Macedonia                                      | 44  | 30.7   | 32.0  | 12.4   | 5.7  | 20.0   | 393  | 394   | 413   | 66.1   | 6.12  | 77   | 638   | 0.774   |
| Turkey   | 72  | 41.7   | 27.4  | 3.3  | 26.7   | 19.7   | 466  | 454   | 468   | 68.4   | 10.05   | 79.  | 638   | 0.82  |
| Montenegro   | 61  | 34.1   | 33.1  | 12.0   | 5.0  | 22.0   | 421  | 430   | 415   | 67   | 2.33  | 77.  | 668   | 0.829   |
| Iceland  | 124   | 24.1   | 17.0  | 0.5  | 14.8   | 36.8   | 474  | 495   | 475   | 72   | 1.97  | 83.1   | 797   | 0.949   |
| Albania  | 40  | 34.3   | 28.6  | 8.3  | 17.4   | 20.0   | 405  | 437   | 417   | 69.1   | 9.68  | 79.1   | 544   | 0.795   |
| BiH  | 43  | 33.0   | 33.1  | 17.1   | 5.4  | 20.0   | 403  | 406   | 398   | 67.2   | 5.85  | 77.4   | 638   | 0.78  |
| Serbia   | 52  | 33.3   | 32.1  | 4.3  | 5.6  | 21.0   | 439  | 448   | 440   | 66.9   | 5.32  | 76.  | 699   | 0.806   |

The table shows the raw data (or recalculated in some cases as indicated) used for this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methodology in the report.

| Catch-Up Index 2021: Democracy Indicators Data |   |  |  |   |   |  |   |   |   |
|--|---|--|--|---|---|--|---|---|---|
| Indicators/<br>Country                         | Satisfaction<br>with<br>democracy                                 | Trust in<br>People                                     | Democracy Indices  |   | Media Freedom   |  | Voice and<br>Accountability   | Human<br>Rights   | E-<br>participation   |
|  | Satisfaction<br>with<br>democracy %<br>(the higher<br>the better) | Trust in<br>people (0-10;<br>the higher<br>the better) | Freedom<br>House score<br>Freedom in<br>the World (0-<br>100; the<br>higher the<br>better) | Economist<br>Intelligence<br>Unit<br>Democracy<br>Index (0-10;<br>the higher<br>the better) | Freedom of<br>the Press<br>score by<br>Freedom<br>House (0-<br>100; the<br>lower the<br>better) | Press<br>Freedom<br>Index by<br>Reporters<br>without<br>Borders (the<br>lower the<br>better) | Voice and<br>Accountability -<br>WGI (0-100; the<br>higher the<br>better) | Disrespect<br>for human<br>rights by<br>Global Peace<br>Index (1-5;<br>the lower the<br>better) | E-participation<br>index (0-1; the<br>higher the<br>better) |
| Austria  | 64  | 5.5  | 93   | 8.16  | 22  | 16.34  | 93.60   | 1.5   | 0.9762  |
| Belgium  | 51  | 5.8  | 96   | 7.51  | 12  | 11.69  | 95.57   | 1.0   | 0.6548  |
| Cyprus   | 38  | 5.0  | 94   | 7.56  | 23  | 19.85  | 82.27   | 1.5   | 0.9524  |
| Denmark  | 87  | 6.7  | 97   | 9.15  | 12  | 8.57   | 98.52   | 1.0   | 0.9643  |
| Finland  | 78  | 6.5  | 100  | 9.2   | 12  | 6.99   | 99.01   | 1.0   | 0.9524  |
| France   | 50  | 5.7  | 90   | 7.99  | 26  | 22.6   | 87.68   | 1.0   | 0.9048  |
| Germany  | 73  | 5.5  | 94   | 8.67  | 20  | 15.24  | 95.07   | 1.0   | 0.75  |
| Greece   | 33  | 4.8  | 87   | 7.39  | 44  | 29.01  | 77.34   | 2.0   | 0.7857  |
| Ireland  | 75  | 6.0  | 97   | 9.05  | 18  | 11.91  | 94.58   | 1.0   | 0.8571  |
| Italy  | 53  | 5.4  | 90   | 7.74  | 31  | 23.39  | 79.80   | 1.5   | 0.8214  |
| Luxembourg                                     | 80  | 5.7  | 97   | 8.68  | 14  | 17.56  | 96.55   | 1.00  | 0.7024  |
| Malta  | 53  | 5.1  | 90   | 7.68  | 23  | 30.46  | 84.24   | 1.50  | 0.8333  |
| Netherlands                                    | 82  | 6.4  | 98   | 8.96  | 11  | 9.67   | 97.54   | 1.0   | 0.9643  |
| Portugal                                       | 48  | 5.3  | 96   | 7.9   | 17  | 10.11  | 89.16   | 1.5   | 0.8214  |
| Spain  | 50  | 5.5  | 90   | 8.12  | 28  | 20.44  | 82.76   | 2.0   | 0.8452  |
| Sweden   | 83  | 6.0  | 100  | 9.26  | 11  | 7.24   | 99.51   | 1.0   | 0.8214  |
| UK   | 31  | 5.4  | 93   | 8.54  | 25  | 21.59  | 90.64   | 1.0   | 0.9762  |
| Bulgaria                                       | 39  | 4.9  | 78   | 6.71  | 42  | 37.29  | 60.59   | 1.5   | 0.8929  |
| Czech Republic                                 | 45  | 5.2  | 91   | 7.67  | 21  | 23.38  | 77.83   | 1.0   | 0.7262  |
| Estonia  | 60  | 5.7  | 94   | 7.84  | 16  | 15.25  | 88.67   | 1.0   | 1   |
| Hungary  | 52  | 5.1  | 69   | 6.56  | 44  | 31.76  | 54.68   | 2.0   | 0.6786  |
| Latvia   | 45  | 5.4  | 89   | 7.24  | 26  | 19.26  | 74.38   | 1.0   | 0.5833  |
| Lithuania                                      | 50  | 5.6  | 90   | 7.13  | 21  | 20.15  | 81.77   | 1.0   | 0.7381  |
| Poland   | 45  | 5.1  | 83   | 6.85  | 34  | 28.84  | 70.94   | 1.5   | 0.9643  |
| Romania  | 38  | 5.5  | 83   | 6.4   | 38  | 24.91  | 61.58   | 1.5   | 0.8095  |
| Slovakia                                       | 39  | 5.0  | 90   | 6.97  | 26  | 23.02  | 75.37   | 2.0   | 0.7024  |
| Slovenia                                       | 25  | 5.6  | 95   | 7.54  | 23  | 23.1   | 80.79   | 1.0   | 0.8571  |
| Croatia  | 36  | 5.1  | 85   | 6.5   | 41  | 27.95  | 64.04   | 1.5   | 0.8929  |
| North Macedonia                                | 37  | 4.5  | 66   | 5.89  | 64  | 31.67  | 44.83   | 1.5   | 0.8333  |
| Turkey   | 47  | 5.1  | 32   | 4.48  | 76  | 49.79  | 24.63   | 4.5   | 0.8929  |
| Montenegro                                     | 23  | 5.0  | 63   | 5.77  | 44  | 34.33  | 46.31   | 1.5   | 0.5476  |
| Iceland  | 80  | 6.0  | 94   | 9.37  | 15  | 15.37  | 94.09   | 1.0   | 0.7738  |
| Albania  | 45  | 4.2  | 66   | 6.08  | 51  | 30.59  | 52.22   | 2.0   | 0.8452  |
| BIH  | 24  | 4.8  | 53   | 4.84  | 51  | 28.34  | 38.92   | 2.0   | 0.6071  |
| Serbia   | 23  | 4.9  | 64   | 6.22  | 49  | 32.03  | 45.81   | 1.5   | 0.8214  |

The table shows the raw data (or recalculated in some cases as indicated) used for this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methodology in the report.

| Catch-Up Index 2021: Governance Indicators Data |   |  |  |  |   |   |  |  |   |   |
|---|---|--|--|--|---|---|--|--|---|---|
| Indicators/<br>Country                          | Corruption  |  | Political Stability                                  |  | Government  | Regulations   | Rule of Law                                      | Conflict and tensions                          |   | E-government  |
|   | Corruption Perception Index (TI) (0-100; the higher the better) | Control of Corruption (WGI) (1-100; the higher the better) | Political instability EU (1-5; the lower the better) | Political Stability and Absence of Violence (WGI) (1-100; the higher the better) | Government Effectiveness (WGI) (1-100; the higher the better) | Regulatory Quality (WGI) (1-100; the higher the better) | Rule of Law (WGI) (1-100; the higher the better) | Global Peace Index (1-5; the lower the better) | Homicide rates (UN) (per 100,000 inhabitants; the lower the better) | E-government Development Index (0-1; the higher the better) |
| Austria   | 76  | 90.87  | 1.0  | 82.86  | 91.83   | 91.35   | 97.12  | 1.3  | 1.0   | 0.8914  |
| Belgium   | 76  | 91.35  | 1.3  | 61.90  | 80.77   | 87.50   | 88.46  | 1.6  | 1.7   | 0.8047  |
| Cyprus  | 57  | 71.63  | 1.8  | 63.33  | 78.85   | 80.77   | 76.44  | 2.0  | 1.3   | 0.8731  |
| Denmark   | 88  | 97.60  | 1.0  | 83.81  | 99.04   | 92.31   | 98.08  | 1.3  | 1.0   | 0.9758  |
| Finland   | 85  | 99.04  | 1.0  | 79.05  | 98.56   | 97.60   | 100.00   | 1.3  | 1.6   | 0.9452  |
| France  | 69  | 88.94  | 1.5  | 58.57  | 89.42   | 90.87   | 89.42  | 1.7  | 1.2   | 0.8718  |
| Germany   | 80  | 95.19  | 1.0  | 66.67  | 93.27   | 96.15   | 92.31  | 1.5  | 0.9   | 0.8524  |
| Greece  | 50  | 56.25  | 1.3  | 57.14  | 66.83   | 70.67   | 60.58  | 2.4  | 0.9   | 0.8021  |
| Ireland   | 72  | 89.42  | 1.3  | 82.38  | 86.54   | 93.27   | 88.94  | 1.7  | 0.9   | 0.8433  |
| Italy   | 53  | 62.02  | 1.9  | 60.95  | 69.23   | 76.92   | 61.54  | 1.8  | 0.6   | 0.8231  |
| Luxembourg                                      | 80  | 98.08  | 1.0  | 95.71  | 95.67   | 95.19   | 95.67  | 1.5  | 0.3   | 0.8272  |
| Malta   | 53  | 61.54  | 1.9  | 89.05  | 77.40   | 77.40   | 79.81  | 1.8  | 1.6   | 0.8547  |
| Netherlands                                     | 82  | 96.63  | 1.0  | 75.71  | 96.63   | 98.08   | 96.15  | 1.5  | 0.6   | 0.9228  |
| Portugal  | 61  | 77.40  | 1.0  | 90.95  | 84.13   | 77.88   | 84.62  | 1.1  | 0.8   | 0.8255  |
| Spain   | 62  | 73.56  | 1.5  | 59.05  | 79.81   | 81.73   | 80.29  | 1.7  | 0.6   | 0.8801  |
| Sweden  | 85  | 98.56  | 1.0  | 86.67  | 97.12   | 96.63   | 98.56  | 1.5  | 1.1   | 0.9365  |
| UK  | 77  | 93.75  | 1.1  | 63.81  | 90.38   | 93.75   | 91.35  | 1.5  | 1.2   | 0.9358  |
| Bulgaria  | 44  | 50.48  | 1.6  | 66.19  | 65.38   | 71.15   | 54.81  | 1.8  | 1.3   | 0.798   |
| Czech Republic                                  | 54  | 68.75  | 1.5  | 80.48  | 78.37   | 86.54   | 81.73  | 1.4  | 0.6   | 0.8135  |
| Estonia   | 75  | 90.38  | 1.6  | 68.10  | 85.58   | 92.79   | 87.02  | 1.9  | 2.1   | 0.9473  |
| Hungary   | 44  | 57.69  | 1.3  | 71.43  | 70.19   | 72.60   | 68.27  | 1.9  | 2.5   | 0.7745  |
| Latvia  | 57  | 68.27  | 1.8  | 60.00  | 83.65   | 83.65   | 80.77  | 2.1  | 4.4   | 0.7798  |
| Lithuania                                       | 60  | 74.52  | 1.4  | 75.24  | 81.25   | 83.17   | 81.25  | 1.8  | 4.6   | 0.8665  |
| Poland  | 56  | 71.15  | 1.9  | 64.29  | 73.08   | 81.25   | 66.35  | 1.7  | 0.7   | 0.8531  |
| Romania   | 44  | 51.44  | 1.6  | 65.24  | 40.38   | 67.31   | 64.42  | 1.7  | 1.3   | 0.7605  |
| Slovakia  | 49  | 64.42  | 1.6  | 72.38  | 74.04   | 79.81   | 71.15  | 1.7  | 1.1   | 0.7817  |
| Slovenia  | 60  | 80.29  | 1.0  | 73.81  | 82.21   | 80.29   | 84.13  | 1.6  | 0.5   | 0.8546  |
| Croatia   | 47  | 60.10  | 1.6  | 71.90  | 67.31   | 72.12   | 64.90  | 1.5  | 0.6   | 0.7745  |
| North Macedonia                                 | 35  | 38.94  | 2.9  | 46.67  | 52.40   | 69.71   | 46.15  | 2.1  | 1.2   | 0.7083  |
| Turkey  | 40  | 44.71  | 3.9  | 10.00  | 54.33   | 54.81   | 44.71  | 3.4  | 2.6   | 0.7718  |
| Montenegro                                      | 45  | 55.29  | 3.0  | 47.62  | 58.65   | 65.38   | 57.21  | 2.2  | 2.2   | 0.7006  |
| Iceland   | 75  | 92.79  | 1.0  | 99.52  | 92.31   | 89.90   | 95.19  | 1.1  | 0.9   | 0.9101  |
| Albania   | 36  | 33.17  | 2.4  | 52.86  | 50.48   | 63.94   | 38.94  | 2.3  | 2.3   | 0.7399  |
| BiH   | 35  | 30.29  | 3.3  | 30.48  | 28.85   | 47.12   | 46.63  | 2.6  | 1.2   | 0.6372  |
| Serbia  | 38  | 37.02  | 2.5  | 45.24  | 53.37   | 60.10   | 50.00  | 2.0  | 1.2   | 0.7474  |

The table shows the raw data (or recalculated in some cases as indicated) used for the indicators of this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methodology in the report.

## Global Catch-Up Index 2021 data

| Global Catch-Up Index 2021 Indicators Data |  |   |  |                    |                 |                    |  |                                      |  |                                    |  |   |   |
|--|--|---|--|--------------------|-----------------|--------------------|--|--------------------------------------|--|------------------------------------|--|---|---|
| Category                                   | Economy  |   | Quality of Life                          |                    |                 |                    |  |                                      | Democracy                                    |                                    |  | Governance  |   |
| Weight                                     | 90%  | 10%   | 15%                                      | 10%                | 10%             | 10%                | 10%                                      | 45%                                  | 40%  | 40%                                | 20%  | 35%   | 65%   |
| Country                                    | GDP per capita, PPP (current international \$), World Bank | HighTech Exports as Share of Global Exports, World Bank, UN | Gini Index (inequality) in %, World Bank | PISA Science, OECD | PISA math, OECD | PISA reading, OECD | Tertiary Education enrolment, World Bank | Life Expectancy at birth, years, WHO | Democracy Index, Economist Intelligence Unit | Global Freedom Score Freedom House | World Press Freedom Index, Reporters without Borders | Corruption Perception Index, Transparency International | World Governance Indicators (recalculated average) World Bank |
| Albania                                    | 14224.1  | 0.045   | 33.2                                     | 405                | 437             | 417                | 57.81                                    | 78.6                                 | 6.08   | 66                                 | 30.59  | 36  | 49  |
| Armenia                                    | 14231.2  | 9.795   | 34.4                                     | 389                | 420             | 398                | 50.82                                    | 75.1                                 | 5.35   | 55                                 | 28.83  | 49  | 48  |
| Australia                                  | 52203.1  | 21.525  | 34.4                                     | 503                | 491             | 503                | 115.95                                   | 82.9                                 | 8.96   | 97                                 | 19.79  | 77  | 93  |
| Austria                                    | 58649.7  | 11.499  | 30.8                                     | 484                | 499             | 490                | 86.48                                    | 81.8                                 | 8.16   | 93                                 | 16.34  | 76  | 91  |
| Azerbaijan                                 | 15010.4  | 4.956   | 26.6                                     | 389                | 420             | 398                | 35.25                                    | 73.0                                 | 2.68   | 10                                 | 58.77  | 30  | 28  |
| Belarus                                    | 19683.8  | 4.252   | 25.2                                     | 474                | 472             | 471                | 86.60                                    | 74.2                                 | 2.59   | 11                                 | 50.82  | 47  | 37  |
| Belgium                                    | 54693.4  | 12.021  | 27.2                                     | 493                | 508             | 499                | 80.14                                    | 81.7                                 | 7.51   | 96                                 | 11.69  | 76  | 84  |
| BiH  | 15817.1  | 5.271   | 33                                       | 403                | 406             | 398                | 37.92                                    | 77.4                                 | 4.84   | 53                                 | 28.34  | 35  | 37  |
| Bulgaria                                   | 24579.2  | 10.852  | 41.3                                     | 420                | 436             | 424                | 73.38                                    | 74.9                                 | 6.71   | 78                                 | 37.29  | 44  | 61  |
| Canada                                     | 50510.7  | 16.513  | 33.3                                     | 520                | 512             | 518                | 75.70                                    | 82.0                                 | 9.24   | 98                                 | 15.25  | 77  | 93  |
| China                                      | 16846.8  | 30.785  | 38.5                                     | 555                | 591             | 590                | 58.42                                    | 76.9                                 | 2.27   | 9                                  | 78.72  | 42  | 41  |
| Croatia                                    | 30246.0  | 8.304   | 29.7                                     | 479                | 464             | 472                | 67.72                                    | 78.4                                 | 6.5  | 85                                 | 27.95  | 47  | 67  |
| Cyprus                                     | 41514.5  | 19.874  | 32.7                                     | 424                | 448             | 439                | 88.49                                    | 81.0                                 | 7.56   | 94                                 | 19.85  | 57  | 76  |
| Czech Republic                             | 43004.5  | 20.805  | 25                                       | 490                | 499             | 497                | 65.59                                    | 79.1                                 | 7.67   | 91                                 | 23.38  | 54  | 79  |
| Denmark                                    | 60334.8  | 12.044  | 28.2                                     | 501                | 509             | 493                | 81.84                                    | 81.2                                 | 9.15   | 97                                 | 8.57   | 88  | 95  |
| Estonia                                    | 38819.3  | 5.773   | 30.3                                     | 523                | 523             | 530                | 74.23                                    | 78.5                                 | 7.84   | 94                                 | 15.25  | 75  | 85  |
| Finland                                    | 51619.8  | 9.215   | 27.3                                     | 520                | 507             | 522                | 92.96                                    | 81.8                                 | 9.2  | 100                                | 6.99   | 85  | 96  |
| France                                     | 49377.1  | 26.992  | 32.4                                     | 493                | 495             | 493                | 68.36                                    | 82.6                                 | 7.99   | 90                                 | 22.6   | 69  | 84  |
| Georgia                                    | 15623.2  | 2.568   | 36.4                                     | 380                | 398             | 383                | 66.69                                    | 73.8                                 | 5.31   | 60                                 | 28.64  | 56  | 63  |
| Germany                                    | 55891.2  | 16.426  | 38.5                                     | 498                | 500             | 503                | 73.52                                    | 80.9                                 | 8.67   | 94                                 | 15.24  | 80  | 90  |
| Greece                                     | 30869.2  | 12.515  | 32.9                                     | 457                | 451             | 452                | 148.53                                   | 81.9                                 | 7.39   | 87                                 | 29.01  | 50  | 65  |
| Hungary                                    | 33949.6  | 17.458  | 29.6                                     | 476                | 481             | 481                | 52.44                                    | 76.0                                 | 6.56   | 69                                 | 31.76  | 44  | 66  |
| Iceland                                    | 58512.7  | 38.079  | 26.1                                     | 474                | 495             | 475                | 77.59                                    | 82.6                                 | 9.37   | 94                                 | 15.37  | 75  | 94  |
| Ireland                                    | 87212.0  | 25.973  | 31.4                                     | 518                | 500             | 496                | 75.18                                    | 82.3                                 | 9.05   | 97                                 | 11.91  | 72  | 89  |
| Israel                                     | 41947.6  | 23.092  | 39                                       | 470                | 463             | 462                | 60.33                                    | 82.8                                 | 7.84   | 76                                 | 30.9   | 60  | 71  |
| Italy                                      | 44821.0  | 7.833   | 26.1                                     | 476                | 487             | 468                | 66.05                                    | 83.2                                 | 7.74   | 90                                 | 23.39  | 53  | 68  |
| Japan                                      | 42338.0  | 17.023  | 32.9                                     | 504                | 527             | 529                | 64.10                                    | 84.4                                 | 8.13   | 96                                 | 28.88  | 74  | 88  |
| Kazakhstan                                 | 27466.2  | 29.775  | 27.8                                     | 387                | 423             | 397                | 70.68                                    | 73.2                                 | 3.14   | 23                                 | 50.28  | 38  | 43  |
| Kosovo                                     | 11931.0  | 6.768   | 29                                       | 353                | 366             | 365                | 75.70                                    | 72.5                                 | 5.35   | 54                                 | 30.32  | 36  | 37  |
| Kyrgyzstan                                 | 5223.5   | 0.725   | 27.7                                     | 359                | 368             | 377                | 46.45                                    | 71.6                                 | 4.21   | 28                                 | 30.37  | 31  | 27  |
| Latvia                                     | 32047.3  | 17.242  | 35.1                                     | 479                | 486             | 487                | 94.86                                    | 75.2                                 | 7.24   | 89                                 | 19.26  | 57  | 75  |
| Lithuania                                  | 38756.1  | 12.030  | 35.7                                     | 476                | 481             | 482                | 72.01                                    | 76.1                                 | 7.13   | 90                                 | 20.15  | 60  | 80  |
| Luxembourg                                 | 120962.2   | 6.561   | 35.4                                     | 470                | 483             | 477                | 18.43                                    | 82.4                                 | 8.68   | 97                                 | 17.56  | 80  | 96  |
| Malta                                      | 46071.2  | 29.782  | 28.7                                     | 448                | 472             | 457                | 64.87                                    | 82.6                                 | 7.68   | 90                                 |  | 53  | 78  |
| Moldova                                    | 13572.7  | 2.964   | 25.7                                     | 424                | 421             | 428                | 57.98                                    | 71.9                                 | 5.78   | 61                                 | 31.61  | 34  | 40  |
| Montenegro                                 | 23343.9  | 3.154   | 38.5                                     | 421                | 430             | 415                | 55.53                                    | 76.9                                 | 5.77   | 63                                 | 34.33  | 45  | 55  |
| Netherlands                                | 59469.1  | 23.065  | 28.1                                     | 485                | 519             | 503                | 87.10                                    | 82.0                                 | 8.96   | 98                                 | 9.67   | 82  | 93  |
| North Macedonia                            | 17583.4  | 4.223   | 33                                       | 393                | 394             | 413                | 43.12                                    | 75.8                                 | 5.89   | 66                                 | 31.67  | 35  | 50  |
| Norway                                     | 67978.7  | 22.618  | 27.6                                     | 499                | 501             | 490                | 83.23                                    | 82.9                                 | 9.81   | 100                                | 6.72   | 84  | 97  |
| Poland                                     | 34151.8  | 10.113  | 30.2                                     | 512                | 516             | 511                | 69.18                                    | 77.9                                 | 6.85   | 83                                 | 28.84  | 56  | 71  |
| Portugal                                   | 36760.1  | 6.942   | 33.5                                     | 492                | 492             | 492                | 67.93                                    | 80.7                                 | 7.9  | 96                                 | 10.11  | 61  | 84  |
| Romania                                    | 32349.2  | 11.073  | 35.8                                     | 428                | 430             | 426                | 51.35                                    | 75.5                                 | 6.4  | 83                                 | 24.91  | 44  | 58  |
| Russia                                     | 29188.9  | 13.003  | 37.5                                     | 479                | 488             | 478                | 86.40                                    | 73.1                                 | 3.31   | 20                                 | 48.71  | 30  | 31  |
| Serbia                                     | 18929.9  | 3.632   | 38.5                                     | 439                | 448             | 440                | 68.14                                    | 75.7                                 | 6.22   | 64                                 | 32.03  | 38  | 49  |
| Slovakia                                   | 32545.0  | 9.913   | 25                                       | 458                | 486             | 464                | 46.43                                    | 77.5                                 | 6.97   | 90                                 | 23.02  | 49  | 73  |
| Slovenia                                   | 41193.8  | 7.354   | 24.6                                     | 495                | 509             | 507                | 77.88                                    | 81.3                                 | 7.54   | 95                                 | 23.1   | 60  | 80  |
| South Korea                                | 42728.0  | 32.407  | 26.1                                     | 514                | 526             | 519                | 98.45                                    | 83.2                                 | 8.01   | 83                                 | 23.43  | 61  | 78  |
| Spain                                      | 42185.6  | 6.861   | 34.7                                     | 496                | 481             | 483                | 92.88                                    | 83.5                                 | 8.12   | 90                                 | 20.44  | 62  | 76  |
| Sweden                                     | 55027.4  | 14.613  | 30                                       | 506                | 502             | 499                | 77.33                                    | 83.0                                 | 9.26   | 100                                | 7.24   | 85  | 96  |
| Switzerland                                | 70276.6  | 12.914  | 33.1                                     | 505                | 515             | 495                | 63.31                                    | 83.7                                 | 8.83   | 96                                 | 10.55  | 85  | 97  |
| Tajikistan                                 | 3650.1   | 0.36262403  | 34                                       | 359                | 368             | 377                | 31.26                                    | 71.1                                 | 1.94   | 8                                  | 55.52  | 25  | 12  |
| Turkey                                     | 27318.4  | 3.044   | 41.9                                     | 466                | 454             | 468                | 115.04                                   | 77.7                                 | 4.48   | 32                                 | 49.79  | 40  | 39  |
| Turkmenistan                               | 15200.2  | 0.725   | 40.8                                     | 340                | 353             | 357                | 15.61                                    | 68.2                                 | 1.72   | 2                                  | 80.03  | 19  | 12  |
| UK   | 48438.6  | 23.468  | 38.5                                     | 504                | 502             | 505                | 65.77                                    | 81.2                                 | 8.54   | 93                                 | 21.59  | 77  | 87  |
| Ukraine                                    | 13350.5  | 5.579   | 26.1                                     | 466                | 453             | 469                | 82.67                                    | 71.8                                 | 5.81   | 60                                 | 32.96  | 33  | 32  |
| USA  | 65279.5  | 18.934  | 41.4                                     | 505                | 478             | 502                | 87.89                                    | 78.8                                 | 7.92   | 83                                 | 23.93  | 67  | 82  |
| Uzbekistan                                 | 7335.6   | 0.725   | 35.3                                     | 340                | 353             | 357                | 15.92                                    | 71.7                                 | 2.12   | 11                                 | 50.74  | 26  | 20  |

The table shows the raw data (or recalculated in some cases as indicated) used for the indicators of this category of the index. Data no later than 30 November 2021. Missing data were replaced using the imputation procedures as explained in the annex of the Catch-Up Index report. More information on the used sources and methodology in the report.

## Supplement III: About the Catch Up Index. How is the “Catching-Up” Measured?

The Catch-Up Index is a composite index, using a specifically designed model developed by EuPI of OSI-Sofia. The Catch-Up Index includes 35 countries selected on a political criteria as it covers the 28 EU member states, the candidate and potential candidate countries. The only exception is Kosovo, as there is not enough comparable statistical data available about it and despite the efforts, the lack of data left Kosovo outside of the Index.

The metric is based on rescaling the raw data on a scale from 0 to 100 (lowest to highest) to establish each country's score, and ranking each country from 1 to 35 (highest to lowest). The standardized scores make possible different rankings, comparisons, benchmarking, monitoring of performance for countries and groups of countries across categories and indicators and contribute to policy analysis and recommendations.

The Catch-Up Index contains four categories - Economy, Quality of Life, Democracy and Governance for the 35 countries included in the Index. There are scores for each category: Economy Score, Quality of Life Score, Democracy Score and Governance Score and each category has an equal weight with the other categories. There is an Overall Score, composed of the scores for the four categories.

Each category is measured through selected indicators and sub-indicators. The various data for the indicators is converted into scores, weighted on the basis of the Index methodology. The indicator scores make up the scores for the four different categories. The weights have been attributed to the indicators or sub-indicators by the expert team, based on the importance assigned to them.

The Catch-Up Index was initially designed to capture the progress of the EU10 countries in matching the rest of the EU in the categories of Economy, Quality of Life, Democracy and Governance.

But the Index allows for much broader observations and findings to be made by examining the performance of the 35 countries, comparing them across the four categories and 47 indicators and sub-indicators, and eliciting conclusions from the interdependence between the factors that define the performance. The Index allows for what is essentially multi-dimensional mapping of present-day Europe by superimposing the four fundamental categories. The index data do not only indicate a country's progress or degree of similarity relative to its peers, but also how far it is from the desired goals.

### Benchmarking the EU11

In addition to the ranking of countries according to their score, there are also several benchmarks to help measure the catch up index - the average, maximum and minimum scores by groups. There are four main and one additional such benchmarks. First, there is the EU14+2 Average Score, calculated as the compare means scores of the 15 "old" EU member states plus Cyprus and Malta, which are considered as part of this group too ("Western" countries vs post-communist countries). Second, there is the EU14+2 Max (maximum) score of the highest ranking country in this group. Third, there is the



EU14+2 Min (minimum) score of the lowest ranking country in this group. Fourth, there is the EU11 Average Score, calculated as the compare means scores of the 11 "new" EU member states scores. Fifth, there is the EU28 Average Score, calculated as the compare means of the scores of all 28 EU member states.

Being aware of the limitations of Catch Up Index model and in order to provide readers with the opportunity to take advantage of the Catch-Up Index data, a special online platform has been created at [www.TheCatchUpIndex.eu](http://www.TheCatchUpIndex.eu) , where users can both view and work interactively with the data. The users of the platform can create their own “catching up” models and comparisons across countries and indicators, and visualize the outcomes in different ways.

## The Economy category explained: Methodology notes

The Economy category measures the economic performance and potential of the countries in the index. Each of the four categories in the Catch Up Index are ascribed equal importance in terms of calculating a country's overall score.

The Economy category is measured through a set of nine indicators, each of which captures a different aspect of economic performance. Some indicators gauge more than one aspect of economic performance. The metrics of the indicators are based on 14 sub-indicators, of varying weightings. The specific indicators and the weightings assigned to the sub-indicators reflect the unique model of the Catch Up Index.

The raw data used for the indicators (e.g. GDP per capita or other composite indicator scores or coefficients) are converted into a Catch-Up Index score on a scale of 0 to 100 (lowest to highest) to allow for a standardized score that can be compared across countries or categories and indicators. Each of the indicators has different weight assigned to it, according to its importance in the Catch Up Index model.

| Economy Indicators         | Sub-indicators                           | Weight*            |
|----------------------------|--|--------------------|
| <b>GDP per capita</b>      | GDP per capita in PPS, EU28=100          | <b>25% (0,25)</b>  |
| <b>Government debt</b>     | General government debt (% of GDP)       | <b>13% (0,125)</b> |
| <b>Credit ratings</b>      | Sovereign credit ratings                 | <b>13% (0,125)</b> |
| <b>Employment</b>          | Employment rate %                        | <b>8% (0,083)</b>  |
| <b>Energy Intensity</b>    | Energy intensity of the economy          | <b>8% (0,083)</b>  |
| <b>Information Society</b> | Information and Communication Technology | <b>8% (0,083)</b>  |

|                                 |  |                   |
|---------------------------------|--|-------------------|
| <b>Research and Development</b> | Patents granted by USPTO per capita            | <b>4% (0,042)</b> |
|                                 | High-tech exports as % of manufactured exports | <b>4% (0,042)</b> |
| <b>Market development</b>       | Doing Business rank                            | <b>4% (0,042)</b> |
|                                 | Economic Freedom score                         | <b>4% (0,042)</b> |
| <b>Transport infrastructure</b> | Motorways per area 1000 km <sup>2</sup>        | <b>2% (0,021)</b> |
|                                 | Motorways per 100,000 inhabitants              | <b>2% (0,021)</b> |
|                                 | Other roads per 1000 km <sup>2</sup>           | <b>2% (0,021)</b> |
|                                 | Other roads per 100,000 inhabitants            | <b>2% (0,021)</b> |

\*\*\*The weight in percentages is an approximation, and the weight is also provided in fractions (the total sum is 100% or 1).

**GDP per Capita** (PPS with EU28=100 basis, Eurostat) remains the most important indicator of economic activity and is assigned 25% (0.25) weight in the total Economy category.

**Government Debt**, measured as a % of GDP, is second in importance with 12.5%. The global economic calamities of recent years, and especially the ongoing debt crisis in Europe, have clearly demonstrated the critical importance of government debt as a factor for the economic vitality of a country.

The **Sovereign Credit Ratings** – or creditworthiness and level of investment risk - of a country are also attributed high importance in the index, with a 12.5% (0,125) weight. The index uses a composite, rescaled score of the ratings of the three major agencies (Fitch, Moody's and Standard & Poors).

**Employment**, with a weight of 8% (0,083) is a measure of an economy's potential to generate jobs and integrate as much as possible of the labor force in the labor market; this is measured through the share of working-age people in employment.

**Energy Intensity**, also ascribed an 8% weighting, is a measure of an economy's energy efficiency, calculating energy consumption divided by GDP as kilogram of oil equivalent per €1000. Energy intensity is also an important measure of an economy's competitiveness, because high energy inefficiency incurs more costs in production and services.

**Research and Development**, again with a weight of 8% (0,083) is a measure of the level of development and the “quality” of contemporary economies, including their competitiveness. The index uses two sub-indicators. The first is the number of patents registered from a country with the United States Patent and Trademark Office (USPTO) annually on a per capita basis. The second indicator is the share of high-tech exports in a country’s manufactured exports.

The **Market Development** indicator (also 8% (0,083)) is the composite score of two sub-indicators – the World Bank’s Ease of Doing Business ranking and the Heritage Foundation/Wall Street Journal Index of Economic Freedom. The latter defines the highest form of economic freedom as “an absolute right of property ownership, fully realized freedoms of movement for labor, capital, and goods, and an absolute absence of coercion or constraint of economic liberty beyond the extent necessary for citizens to protect and maintain liberty itself.”

The **Transport Infrastructure Indicator** (8% (0,083)) is a measure of a country’s economic development and its potential for economic activity. The index uses four sub-indicators, based on calculating coefficients of motorways and other roads on a per capita and country area basis.

## The ingredients of democracy: Methodology notes

Catching up in Democracy is essential for the post-communist member states of the EU, particularly given that the Copenhagen accession criteria for EU membership primarily focused on democracy. But although EU membership has often been perceived as a watershed in the political transition of the EU11 group, or even the end of that transition, it now appears that the newer members may not have achieved parity with more developed European nations in their progress in building democratic institutions and societies.

The Catch-Up Index was designed to analyse several aspects of democracy that are of particular significance for the newer member states, and those that are aspiring to be.

The Democracy category has equal weighting with the other three categories in the Catch-Up Index (Economy, Quality of Life and Governance). This category is measured through a set of seven indicators, which use nine sub-indicators. The raw data drawn from opinion polls and other composite indicator scores are converted into the Catch-Up Index score on a scale of 0 to 100 (lowest to highest) to give a standardized score that allows for comparison across countries, categories and indicators. Each of the indicators has a different weight assigned to it according to its importance in the index model.

| Democracy Indicators   | Sub-indicators                                | Weight             |
|--|---|--------------------|
| <b>Democracy Indices</b>   | Freedom House score Freedom in the World      | <b>20% (0,195)</b> |
|  | Economist Intelligence Unit Democracy Index   | <b>20% (0,195)</b> |
| <b>Media Freedom</b>   | Freedom House Freedom of the Press score      | <b>10% (0,98)</b>  |
|  | Reporters without Borders Press Freedom Index | <b>10% (0,98)</b>  |
| <b>Satisfaction with democracy</b>   | Satisfaction with democracy %                 | <b>10% (0,98)</b>  |
| <b>Trust in People</b>   | Trust in people                               | <b>10% (0,98)</b>  |
| <b>Voice and Accountability</b>  | Voice and Accountability - WGI                | <b>10% (0,98)</b>  |
| <b>Human Rights</b>  | Political terror by Global Peace Index        | <b>10% (0,98)</b>  |
| <b>E-participation</b>   | E-participation index                         | <b>2% (0,024)</b>  |
| ***The weight in percentages is an approximation, and the weight is also provided in fractions (the total sum is 100% or 1). |   |                    |

The first indicator used to measure democracy is composed of two established **composite democracy indexes** – those of **Freedom House** and the **Economist Intelligence Unit (EIU)**. Each was attributed very high importance in the Democracy category with 20% (0,195) weight (or 40% for both) because they assess the overall democracy in a country. The Freedom of the World index was used from Freedom House, rather than the specialized post-communist states' Nations in Transit index, because it does not encompass the Western European states. The EIU Democracy Index was used because its scores are more nuanced than the Freedom of the World scores, which allows for better distinction between the quality of democracies in the European states.

**Media Freedom** was attributed special attention in the Catch-Up Index because the media is essential to the democratic process – especially in the post-communist states. The Catch-Up Index relies again on two established media freedom indexes – of Freedom House and of Reporters without Borders. Each is assigned 10% (0,98) weight, giving the Media Freedom indicator a 20% overall weight.

**Satisfaction with Democracy** measures the attitude of citizens towards the democratic systems of governance in their countries. This is one of the only two indicators (along with Trust in People) that relies on public opinion surveys (in this case the main source is Eurobarometer), and the scores are based on the proportion of citizens who approve their countries' democratic systems.

**Trust in People** measures the level of people's trust of those who are outside of their immediate family or close friends. Literature abounds on the importance of trust for democracy - above all Francis Fukuyama's "Trust", – or economy and the successful organization of society. In this case, the Catch-Up Index employs the measure of Trust in People as a proxy for civil society development, given the limitations of available data on similar indicators for all the countries in the index.

**Voice and Accountability**, with a weight of 10% (0,98) , is a composite indicator of the World Bank's World Governance Indicators (WGI). This includes perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. The WGI scores also use World Bank assessments and reports that are not publicly available.

Absence of **Political terror** is also deemed essential for a functioning democracy and carries a weight of 10%. The scores are based on Global Peace Index "Political terror" indicator, e.g. identifying state terror, or violations of physical and personal integrity rights carried out by the state.

**E-participation** (2% (0,024)) measures the level of participation in decision-making, governance or similar activities that is enabled by Information and Communication Technologies. For example, the facilitation of citizens' political participation through internet or cellular technologies within the broader "e-democracy" concept. Facebook advocacy or the "twitter revolutions" offer specific examples of similar phenomena.

## Quality of Life: Methodology notes

Quality of Life is the category most influenced by the "bottom-up" approach in constructing the index. The metrics of the category have been designed to establish how wealthy people are and to what degree social issues affect them, such as income inequality, risk of poverty and long-term unemployment. The indicators also aim to assess levels of access to higher education and the quality of education available, as well as whether people are living longer, healthier lives with access to good quality healthcare services.

These criteria are prerequisites for individuals to have good quality of life and for the "health" and successful development of society at large. It does not come as a surprise that the majority of the citizens of the newer member states (and the candidates) associate EU membership above all with improved quality of life, at least closer to that of their more established EU counterparts.

The raw data used for the indicators (e.g. life expectancy in years, and other composite indicator scores or coefficients) are converted into the standardized Catch-Up Index score, on a scale from 0 to 100 (lowest to highest), to allow for comparison across countries' categories and indicators. As was the case in the other categories, each of the indicators has a different weight assigned to it, reflecting its importance in the Catch-Up Index model.

| Quality of Life Indicators | Sub-indicators                              | Weight     |
|----------------------------|---|------------|
| Welfare of consumers       | Actual individual consumption with EU28=100 | 20% (0,2)  |
| Social issues              | Inequality - Gini coefficient               | 7% (0,067) |

|   |  |            |
|---|--|------------|
|   | Relative median at-risk-of-poverty gap (%)     | 7% (0,067) |
|   | Long-term unemployment rate (%)                | 7% (0,067) |
| Education   | Share (%) of early school leavers              | 5% (0,05)  |
|   | Share of population (%) with university degree | 5%(0,05)   |
|   | PISA* score in reading literacy                | 3% (0,033) |
|   | PISA score mathematical literacy               | 3% (0,033) |
|   | PISA score in scientific literacy              | 3% (0,033) |
| Health  | Healthy life expectancy at birth in years      | 5% (0,05)  |
|   | Life expectancy in years                       | 5% (0,05)  |
|   | Infant mortality by age of 5                   | 5% (0,05)  |
|   | EuroHealth Consumer Index                      | 5% (0,05)  |
| Human Development   | Human Development Index (UN)                   | 20% (0,2)  |
| <p>* Programme for International Student Assessment (OECD).</p> <p><i>**The weight in percentages is an approximation, and the weight is also provided in fractions (the total sum is 100% or 1).</i></p> |  |            |

**Welfare of Consumers** is attributed 20% (0,2) weight in the category. It is based on data from Eurostat's Actual Individual Consumption dataset, which is calculated on EU28=100 basis (rescaling each country's data as a fraction of the EU mean).

The **Social Issues** indicator, with a total weight of 21%, comprises three sub-indicators that measure different aspects of social problems in a society. The first assesses social inequality using the Gini coefficient – the greater the inequality, the lower a country's score in the index. The second sub-indicator is based on Eurostat's relative median at-risk-of-poverty gap indicator. The third sub-indicator measures long-term unemployment in society, which signals the existence of more deep-seated social problems than the basic unemployment rate.

The **Education** indicator has been designed to reflect primarily the quality of education, rather than the quantity, given that the GDP share of education or the number of teachers or students do not always correspond to good outcomes. This is especially valid with regard to the new member states, where often inefficient and unreformed systems produce poor results, notwithstanding the funds or manpower channelled into them.

As is the case with many of the index indicators, their data can also be useful in assessing other aspects of the same category or, in this case, other categories. For example, as well as being a key indicator for

Quality of life, education is relevant in assessing economic potential, democracy and good governance. The sub-indicator on early school-leavers assesses the share of young people giving up education and training prematurely; this may also help to gauge broader social problems. The second sub-indicator is the share of the population that hold university degrees. The next three education-related sub-indicators are based on the results of the Organisation for Economic Co-operation and Development's *Programme for International Student Assessment (PISA)*. The PISA scores go beyond the performance of high-school students and survey the broader state of a country's education sector, for example qualification levels of teachers and the quality of universities.

The **Health** indicator is likewise designed to focus more on the outcomes than on less indicative criteria such as share of GDP or the number of medical workers. One sub-indicator is life expectancy, measuring how many years a person is expected to live, while another is healthy life expectancy, specifically taking into account life without major illness. The indicator for infant mortality is also indicative of the broader state of health services or social services in a country (or even the state of society more broadly) because it assesses the likelihood of children surviving to the age to 5. The fourth sub-indicator is a composite of the EuroHealth Consumer Index by the Health Consumer Powerhouse, which measures the quality of healthcare systems in a country (including by outcome).

The United Nations' **Human Development Index** is a composite index measuring life expectancy, literacy, education and standards of living for countries worldwide. It has similar dimensions to the Catch-Up Index, but includes additional data and methodology, which complements the other indicators but does not overlap with them.

## Governance category explained: Methodology notes

The newer and aspiring members typically perceive established EU member states to be well-governed, politically stable, have low levels of corruption, effective governance, a successful rule of law, and an absence of substantial tensions, conflicts and crime. Indeed, from a wider perspective this impression is accurate. The EU is truly an oasis of stable and well-governed states by comparison with some of the more unstable or failing states in other parts of the world. The EU is very much geared toward instilling "good governance" through its common institutions and the *acquis communautaire*.

But comparisons between EU members and aspiring candidates reveal differences even among relatively homogenous groups. Some of these differences are made strongly apparent, as in the case of the EU's monitoring of the progress of members Bulgaria and Romania in fighting corruption, organized crime and judicial reform, and the conditionality imposed on candidates.

The Catch-Up Index measures the quality of governance in a country through seven indicators based on ten sub-indicators.

| Governance Indicators   | Sub-indicators   | Weight     |
|---|--|------------|
| <b>Corruption</b>   | Corruption Perceptions Index - Transparency International                      | 8% (0,08)  |
|   | Control of Corruption - World Governance Indicators                            | 8% (0,08)  |
| <b>Political stability</b>  | Political instability by Economist Intelligence Unit                           | 8% (0,08)  |
|   | Political Stability and Absence of Violence - World Governance Indicators      | 8%(0,08)   |
| <b>Government effectiveness</b>   | Government effectiveness - World Governance Indicators                         | 16% (0,16) |
| <b>Regulatory quality</b>   | Regulatory quality - World Governance Indicators                               | 16% (0,16) |
| <b>Rule of law</b>  | Rule of Law – World Governance Indicators                                      | 16% (0,16) |
| <b>Conflict, tensions and crime</b>   | Conflicts and tensions in the country - selected Global Peace Index indicators | 8% (0,08)  |
|   | Homicide rates per 100,000 population  | 8% (0,08)  |
| <b>E-government</b>   | E-government development index   | 4% (0,04)  |
| *The weight in percentages is an approximation, and the weight is also provided in fractions (the total sum is 100% or 1) |  |            |

The **Corruption** indicator is essential for gauging the quality of governance because corruption affects all aspects of the decision-making and implementation process. The Corruption indicator has a weighting of 16% in the Governance category, divided between two sub-indicators – Transparency International’s Corruption Perceptions Index and the Control of Corruption dimension of the World Bank’s World Governance Indicators. The first indicator measures public perceptions of the level of corruption in a country. The second indicator as defined by its authors “captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests.”

The second indicator measures a country’s level of **Political stability**, as in the threat of government destabilization through social unrest or unconstitutional or violent means through two sub-indicators. These are the Economist Intelligence Unit’s Political Instability Index and the Political Stability and Absence of Violence dimension of the World Bank’s World Governance Indicators. The EIU scores “show the level of threat posed to governments by social protest.” The World Bank indicator measures “the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism.” The level of political stability indicates any flaws in governance. Although this indicator also relates to democracy – in terms of the channelling of discontent through the process of representation and problem solving – political



stability is more of a measure of governance. The indicator's weight is 16% divided between the two sub-indicators.

**Government effectiveness** is an indicator of whether governance is being conducted well; the World Bank states that it “captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.” Government effectiveness also has a weighting of 16% in the Governance category.

**Regulatory quality** is another World Governance Indicators that “captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.” This indicator too has a 16% weighting.

**Rule of law** is essential for good governance, as the newest EU members and candidates have found out the hard way. The indicator is again based on the World Governance Indicators, which state that it “captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.”

**Conflict, tensions and crime** is a composite indicator, based on two sub-indicators relating to a country's crime levels and conflicts and tensions. The conflicts and tensions sub-indicator is based on selected data from the Global Peace Index (Institute for Economics and Peace/Economist Intelligence Unit). The homicide rate on a per capita basis serves as a proxy for measuring the crime levels in a country, because data pertaining to other reported crimes is less easily comparable (different definitions or practices for registering crimes) or country data is unavailable. The indicator's weight of 16% is divided between the two sub-indicators.

The **E-government** indicator is based on the UN's E-government surveys and scores. It is included in the index because it is a measure of government efficiency and delivery of services to citizens, and because it facilitates transparency and accountability as the world grows more connected. Moreover, e-government indicates the level of development of contemporary societies. As the UN survey has identified, the scores comprise two basic aspects of e-government, ‘government to citizen’ (G to C) and ‘government to government’ (G to G), with a smaller element of ‘government to business’ interactions. Given that e-government is indicative of many aspects of good governance, but not indispensable, it is ascribed a weight of 4%.

## Note on data sources, timeframe and replacing missing data

The Catch-Up Index data collection relied on single sources for each of the indicators, but in case such data was missing, compatible data from other sources based on the same methodology was included. If country data for a specific year was missing, data from the closest period was included in the Index. In case there was no compatible data, the data imputation method was used as explained in the methodological notes. The missing data was replaced using either the statistical procedure, described in the annex or in a limited number of cases - expert-based imputations. In the case with the Index when

the data set is about multiple countries, missing data for a given country was replaced with data for a country with very similar characteristics.

Where a single sub-indicator included several sources or the data was not numerical (e.g. Credit Agencies Index; Doing Business ranking), the data was rescaled in advance by the project team before being recalculated into z-scores.

The data used was mainly released in 2020 and 2021 and it is the most recently available, but not later than 30 November 2021 so there is a necessarily a time lag in the index.

| Economy Indicators              | Sub-indicators  | Weight       | Sources   |
|---------------------------------|---|--------------|---|
| <b>GDP per capita</b>           | GDP per capita in PPS with EU28=100                     | <b>0,250</b> | Eurostat, European Central Bank, national statistics                              |
| <b>Government debt</b>          | General government debt (% of GDP)                      | <b>0,125</b> | Eurostat, national statistics   |
| <b>Credit ratings</b>           | Sovereigns credit ratings                               | <b>0,125</b> | Fitch, Moody's, Standard and Poor's (own calculations of rescaled credit ratings) |
| <b>Employment</b>               | Employment as percentage of population, age group 15-64 | <b>0,083</b> | Eurostat, national statistics   |
| <b>Energy Intensity</b>         | Energy intensity of the economy                         | <b>0,083</b> | Eurostat, national statistics   |
| <b>Information Society</b>      | Information and Communication Technology                | <b>0,083</b> | ICT Development Index, International Telecommunication Union                      |
| <b>Research and Development</b> | Patents granted by USPTO per capita                     | <b>0,042</b> | United States Patent and Trademark Office   |
|                                 | High-tech exports as % of manufactured exports          | <b>0,042</b> | World Bank  |
| <b>Market development</b>       | Doing Business rank                                     | <b>0,042</b> | Ease of Doing Business, World Bank (Rescaled ranking)                             |
|                                 | Economic Freedom score                                  | <b>0,042</b> | Index Economic Freedom, Heritage Foundation and Wall Street Journal               |
| <b>Transport infrastructure</b> | Motorways per area 1000 km <sup>2</sup>                 | <b>0,021</b> | Eurostat, national statistics   |
|                                 | Motorways per 100000 inhabitants                        | <b>0,021</b> | Eurostat, national statistics   |
|                                 | Other roads per 1000 km <sup>2</sup>                    | <b>0,021</b> | Eurostat, national statistics   |
|                                 | Other roads per 100000 inhabitants                      | <b>0,021</b> | Eurostat, national statistics   |

| Democracy Indicators               | Sub-indicators                                   | Weight       | Source   |
|------------------------------------|--|--------------|--|
| <b>Democracy Indices</b>           | Freedom House score Freedom in the World         | <b>0,195</b> | Freedom in the World, Freedom House  |
|                                    | Economist Intelligence Unit Democracy Index      | <b>0,195</b> | Democracy Index, Economist Intelligence Unit   |
| <b>Media Freedom</b>               | Freedom of the Press score by Freedom House      | <b>0,098</b> | Freedom of the Press, Freedom House  |
|                                    | Press Freedom Index by Reporters without Borders | <b>0,098</b> | Press Freedom Index by Reporters without Borders   |
| <b>Satisfaction with democracy</b> | Satisfaction with democracy %                    | <b>0,098</b> | Eurobarometer, European Values Study, World Values Survey                                |
| <b>Trust in People</b>             | Trust in people                                  | <b>0,098</b> | European Quality of Life Survey by Eurofound, European Values Study, World Values Survey |
| <b>Voice and Accountability</b>    | Voice and Accountability - WGI                   | <b>0,098</b> | Voice and Accountability of the World Governance Indicators, World Bank                  |
| <b>Political terror</b>            | Political terror by Global Peace Index           | <b>0,098</b> | Political terror indicator, Global Peace Index by the Institute for Economics and Peace  |
| <b>E-participation</b>             | E-participation index                            | <b>0,024</b> | E-government survey, United Nations Department of Economic and Social Affairs            |

| Quality of Life Indicators  | Sub-indicators                                 | Weight       | Sources  |
|-----------------------------|--|--------------|--|
| <b>Welfare of consumers</b> | Actual individual consumption with EU28=100    | <b>0,200</b> | Eurostat, national statistics                              |
| <b>Social issues</b>        | Inequality - Gini coefficient                  | <b>0,067</b> | Eurostat, national statistics                              |
|                             | Relative median at-risk-of-poverty gap (%)     | <b>0,067</b> | Eurostat, national statistics                              |
|                             | Long term unemployment rate (%)                | <b>0,067</b> | Eurostat, national statistics, UNDP                        |
| <b>Education</b>            | Share (%) of early school leavers              | <b>0,050</b> | Eurostat, national statistics, UNDP                        |
|                             | Share of population (%) with university degree | <b>0,050</b> | Eurostat, national statistics, UNDP                        |
|                             | PISA score in reading literacy                 | <b>0,033</b> | OECD Programme for International Student Assessment (PISA) |
|                             | PISA score mathematical literacy               | <b>0,033</b> | OECD Programme for International Student Assessment (PISA) |
|                             | PISA score in scientific literacy              | <b>0,033</b> | OECD Programme for International Student Assessment (PISA) |
| <b>Health</b>               | Healthy life expectancy at birth in years      | <b>0,050</b> | World Health Statistics, World Health Organization         |
|                             | Life expectancy in years                       | <b>0,050</b> | World Health Statistics, World Health Organization         |
|                             | Infant mortality by age of 5                   | <b>0,050</b> | World Health Statistics , World Health Organization        |
|                             | EuroHealth Consumer Index                      | <b>0,050</b> | EuroHealth Consumer Index, Health Consumer Powerhouse      |
| <b>Human Development</b>    | Human Development Index                        | <b>0,200</b> | Human Development Index, United Nations                    |

| Governance Indicators               | Sub-indicators   | Weight       | Sources   |
|-------------------------------------|--|--------------|---|
| <b>Corruption</b>                   | Corruption Perception Index  | <b>0,080</b> | Corruption Perception Index, Transparency International   |
|                                     | Control of Corruption - World Governance Indicators                            | <b>0,080</b> | Control of Corruption - World Governance Indicators, World Bank   |
| <b>Political Stability</b>          | Political instability by Economist Intelligence Unit                           | <b>0,080</b> | The Political Instability Index, Economist Intelligence Unit  |
|                                     | Political Stability and Absence of Violence - World Governance Indicators      | <b>0,080</b> | Political Stability and Absence of Violence - World Governance Indicator, World Bank  |
| <b>Government Effectiveness</b>     | Government Effectiveness - World Governance Indicators                         | <b>0,160</b> | Government Effectiveness - World Governance Indicators, World Bank  |
| <b>Regulatory Quality</b>           | Regulatory Quality - World Governance Indicators                               | <b>0,160</b> | Regulatory Quality - World Governance Indicators, World Bank  |
| <b>Rule of Law</b>                  | Rule of Law - World Governance Indicators                                      | <b>0,160</b> | Rule of Law - World Governance Indicators, World Bank   |
| <b>Conflict, tensions and crime</b> | Conflicts and tensions in the country - selected Global Peace Index indicators | <b>0,080</b> | Conflicts and tensions in the country, based on selected Global Peace Index (GPI) indicators, GPI is created by the Institute for Economics and Peace |
|                                     | Homicide rates per 100,000 population  | <b>0,080</b> | United Nations Office on Drugs and Crime  |
| <b>E-government</b>                 | E-government development index   | <b>0,040</b> | E-government Development Surveys, United Nations  |

## Supplement IV: Methodology of the Statistical Analysis for the Catch-Up Index

### 1. Basic Indicators. Sources of information

The Catch-Up Index uses 47 basic indicators for 35 European countries. The data is gathered from different sources. Supplement III: “About the Catch-Up Index. How is the “Catching-Up” Measured?” contains descriptions for each of the basic indicators as well as the time period of the data and their respective sources. The indicators are divided thematically into four categories:

- Economy – 14 indicators;
- Democracy – 9 indicators;
- Quality of Life – 14 indicators;
- Governance – 10 indicators.

### 2. Procedure for replacing missing data (*Data Imputation*)

The basic information represents a table (a matrix), size 35 x 47, i.e. 47 indicators for 35 countries, which contain 1,645 absolute values. About 0.5% of them are missing values either because there is no such information gathered or there is no up-to-date data. In these cases, the procedure for data imputation to replace missing data – values – was applied. The procedure was done separately for each of the four basic categories.

#### *Algorithm for data imputation*

- a. Any of the four categories that contain a basic indicator with a missing value is fixed. It represents a matrix with a size of 35 multiplied by the number of basic indicators, where the countries are in the rows and the indicators are in the columns.
- b. All indicators (rows) that contain at least one missing value are deleted, thus creating a new matrix with the same number of rows and a smaller number of columns (k).
- c. Each of the 35 countries included in the index is a point in the k-dimensional space. The Euclidian distances between the side with a missing value and all the other sides are then calculated.
- d. After the minimal Euclidian distance is calculated, the result is checked against the existing data for the remaining 34 countries and this value is taken to replace the missing value.
- e. The steps are then repeated until all missing values of the basic indicators in a given category are replaced.

### 3. Calculation of standardized value (z-scores)

The Catch Up Index uses basic indicators with different raw data (percentages, diverse index scores, years, etc.). This necessitates the standardization of the values according to a statistical procedure, which recalculates them in one and the same scale and at the same time preserves the order and proportions between them. The standardizing is done following the normalization method of z-scores, which uses mean weighed score and standard deviation.

***Algorithm for calculating the standardized values of the basic indicators (z-scores)***

4. The mean arithmetic values **mean<sub>j</sub>** for the countries **x<sub>ij</sub>** are calculated for each of the basic indicators, according to the formula:

$$\text{mean}_j = \Sigma (x_{ij}) / 35$$

where **j** varies from 1 to 47 (the total number of basic indicators), and **i** changes from 1 to 35 (the total number of countries).

5. The dispersions for the values on sides **x<sub>i</sub>** is calculated for each of the indicators:

$$\text{sigma}_j = \Sigma [(x_{ij} - \text{mean}_j)^2] / (N-1),$$

where **j** varies from 1 to 47, and **i** varies from 1 to 35.

*This quantity shows how diverse are, on average, the different cases from their mean value.*

6. The standardized values – so-called z-scores – are calculated:

$$z_{ij} = (x_{ij} - \text{mean}_j) / \sqrt{\text{sigma}_j}.$$

*Through this procedure the distribution of the values for the countries for each of the indicators is translated and the mean 0 and dispersion 1 are calculated, while the order and proportions between the values for the different countries are preserved.*

In order to transform the standardized values into scores on a scale from 0 to 100, one more transformation is necessary:



$$z_{ij} = z_{ij} * 20 + 50.$$

*The values smaller than 0 and bigger than 100 (“extreme values”), i.e. those different from the mean value of more than 2.5 standard deviation receive scores 0 and 100, respectively.*

The standardized values, achieved as a result of the calculations above, are suitable for further procedures. There is a simple correspondence between these scores and the absolute values (the raw data) of the basic indicators and the only exceptions are the “extreme values” or so-called outliers.

## 7. Weighting the standardized values. Formation of the four categories

Each of the four categories – Economy, Quality of Life, Democracy and Governance contain different numbers of basic indicators with different levels of importance. The level of importance is defined by the authors of the index. That is why the online platform of the Index ([www.TheCatchUpIndex.eu](http://www.TheCatchUpIndex.eu)) offers two options for its users.

- a. The standard index is calculated on the basis of the already defined weights of the basic indicators;
- b. The creation of custom index – My Index in the online platform – for which each individual user can define the weights for the indicators.

The weights for each indicator, ascribed by the research team, can be found in this section. For each of the four categories, the weights represent a column vector consisting of the respective number of basic indicators. When calculating the weighted standardized values, the formula for matrix multiplication is used. The matrix contains the non-weighted standardized values with rows representing the countries, the columns the basic indicators and the vector the weights. For each separate country, the procedure is to calculate the weighted sum.

## 8. Formation of the composite Catch Up Index and its Overall Score

The composite Catch Up Index is calculated as an un-weighted mean of the values of each of the four basic categories for each of the 35 European countries included in the index. In other words, each of the four basic categories is equal in importance in respect to the composite Catch Up Index.

$$\text{Overall\_score}_i = (\text{Economy\_score}_i + \text{Quality\_of\_life\_score}_i + \text{Democracy\_score}_i + \text{Governance\_score}_i) / 4,$$

where  $i$  varies from 1 to 35 (the total number of countries in the model).

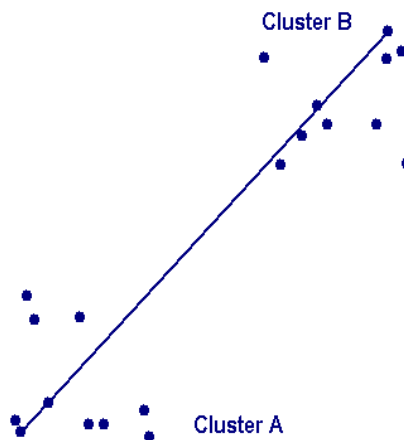
*The resulting index is at the basis of the overall ranking of the countries and is subjected to further statistical processing (cluster analysis, correlation analysis, tests for statistical significance, trend analysis).*

## 9. Cluster analysis

The research included hierarchical agglomerative cluster analysis of the Complete Linkage (Furthest Neighbor) with the help of the SPSS statistical package for analysis and processing of data. The metric system used is the standard Euclidian distance.

### *Algorithm of the cluster analysis*

- a. First, each country is defined as the only one in a single group – i.e. cluster.
- b. Second, the standard Euclidian distances (2-norm distance) are calculated between the values (the scores) of each pair of countries with the aim to group the countries with the most similarities in one group in relation to their values – the overall score of the Catch Up Index or the scores in any of the four categories.
- c. The agglomeration of the clusters continues with each other step until all the countries are included in one common group. This process is defined by the distance between two clusters. In the case of the Complete Linkage (Furthest Neighbor) clustering the distance is defined through the maximum standard Euclidian distance between elements from the two clusters.
- a.  $D(r,s) = \text{Max} \{d(i,j) : \text{where element } i \text{ belongs to cluster } r, \text{ and } j \text{ to cluster } s\}$



- d. The decision for the number of clusters is taken by the researcher, in accordance with the desired maximum distance between the elements in each cluster. The bigger the distance, the smaller the number of clusters.
- e. The cluster analysis is best represented in a dendrogram, which shows the distances between the different clusters as well the elements they are composed of.

#### 10. Tests for statistical significance of differences. The five point rule.

The data on the basis of which the Catch Up Index is calculated are bound to have certain errors. The reason is that some of the basic indicators are based on sociological surveys, others though objective (e.g. GDP per capita) also contain certain errors as a result of the method of their calculation. The procedure for missing data replacement also contributes to the size of the overall error. This necessitates the implementation of tests for statistical significance of differences (compare means) between the different standardized values (z-scores) of the Overall Score and the scores of countries in different categories. The results of these tests show that a difference of five or less standardized scores is not statistically significant with a significance level of  $\alpha = 0.05$ . This means that with a *confidence level*  $\gamma = 1 - \alpha = 0.95 = 95\%$  it can be claimed that the standardized values of the countries in the Catch Up Index and the four categories vary within  $\pm 5$  z-points. This conclusion should be taken into account when analyzing the results of the cluster analysis.

#### 11. Correlation analysis

The Pearson correlation coefficients are calculated for each of the pairs in the vectors: Overall Score, Economy Score, Quality of Life Score, Democracy Score and Governance Score. They demonstrate *that at a significant level*  $\alpha = 0.01$ , each of the two pair vectors have strong linear correlation, with each correlation coefficients are bigger than 0.9.

#### 12. Graphs, linear trends and their confidence intervals

The direct consequence of the correlation analysis is that between two of the five indices – i.e. *Overall Score, Economy Score, Quality of Life Score, Democracy Score and Governance Score* – there is a strong direct correlation, which is represented by a corresponding linear trend (straight line with a positive slope). The coefficients in the equations of these straight lines are calculated using the method of linear regression. Each of the straight lines should be observed and analyzed in the corresponding confidence interval, which is determined by the value of their determination coefficient (*R-square*), *which in this case is equal to the square of the respective Pearson correlation*.

## The European Catch-Up Index Project

### Catch-Up Index methodology

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### Project manager

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## About EuPI

The European Policy Initiative (EuPI) of Open Society Institute – Sofia Foundation aims to contribute to improving the ability of new member states to effectively impact common European policies through good quality research, policy recommendations, networking and advocacy. The initiative operates in the ten new member states from CEE through a network of experts and policy institutes.

**Web-site** [www.osis.bg](http://www.osis.bg)

**Web-site:** <http://www.TheCatchUpIndex.eu>

### Main research reports:

“Running on Fumes: Findings of the European Catch-Up Index 2019”

“How Hard Can It Be? Findings of the European Catch-Up Index 2018”

“The Media Literacy Index 2019: Just Think about It”

“Try harder. Findings of the European Catch-Up Index 2017”

“Common Sense Wanted: Resilience to ‘Post-Truth’ And Its Predictors In The New Media Literacy Index 2018”

“Can this be true? Predictors of media literacy and resilience to the post-truth phenomenon in Europe”

“Don’t Stop Now Findings of the European Catch-Up Index 2016” contains the findings of the Catch-Up Index 2016 edition.

“Don’t Panic: Findings of the European Catch-Up Index 2015” contains the findings of the Catch-Up Index 2015 edition.

“The Gravity Effect: Findings of the European Catch-Up Index 2014”, contains the findings of the Catch-Up Index 2014 edition.

“It’s a Process: Findings of the European Catch-Up Index 2013” contains the findings of the Catch-Up Index 2013 edition.

“Aftershocks: What Did the Crisis Do to Europe?” contains the findings of the Catch-Up Index 2012 edition.

“State of the Union: A Big Bang Theory of Europe” contains the findings of the first edition of the Catch-Up Index 2011.

“The Unfinished Business of the Fifth Enlargement Countries” analyzes the problems faced by the ten new member states after their accession to the EU in eleven policy areas including political development, the economy, the healthcare system and education.

A series of reports "The EU New Member States as Agenda Setters in the Enlarged European Union" look at the positions of the new Central and Eastern European EU Member States on a selected number of issues on the EU agenda in seven policy areas: economic issues, minority integration, energy and climate, common agriculture policy, foreign and security policy, justice and home affairs and institutional issues.

The publication "Economic and Political Challenges of Acceding to the Euro area in the post-Lehman Brothers' World" (Summary report and nine Country Reports) is developed within the project “Economic and Political Challenges of Acceding to the Euro area in the post-Lehman Brothers' World”.

### [www.TheCatchUpIndex.eu](http://www.TheCatchUpIndex.eu)

A special online platform was created at [www.TheCatchUpIndex.eu](http://www.TheCatchUpIndex.eu), where users can view and work interactively with the data of the index, make comparisons across countries and indicators and visualize the outcomes in different ways.

There are basically three modes of usage. There is the Catch-Up Index standard format, which is generated on the basis of EuPI's own model. Alternatively, users can produce their own custom catch-up index by selecting categories and indicators and changing their weights. The third usage mode allows for country by country comparison across selected indicators or benchmarks.