

UCD Covid Compared (UCD CoCo) – Displaying Restrictions across the Globe

Robert Cazaciuc, University College Dublin¹

Dr. Stephan Köppe, University College Dublin²

Key points

- UCD CoCo displays Covid-19 related restrictions globally.
- It is aimed at the general public and journalists.
- Benefits are simple and regularly updated graphs to initiate policy debates.
- Limitations are lack of nuance and inadequate display of policy interdependencies.

Introduction

The UCD CoCo Dashboard is aimed at the general public to understand current coronavirus restrictions in the global context. With plain graphics and cross-country comparison tables citizens shall get a better sense how strict or lenient their government is responding to the global pandemic that has kept humanity in check during the last year.

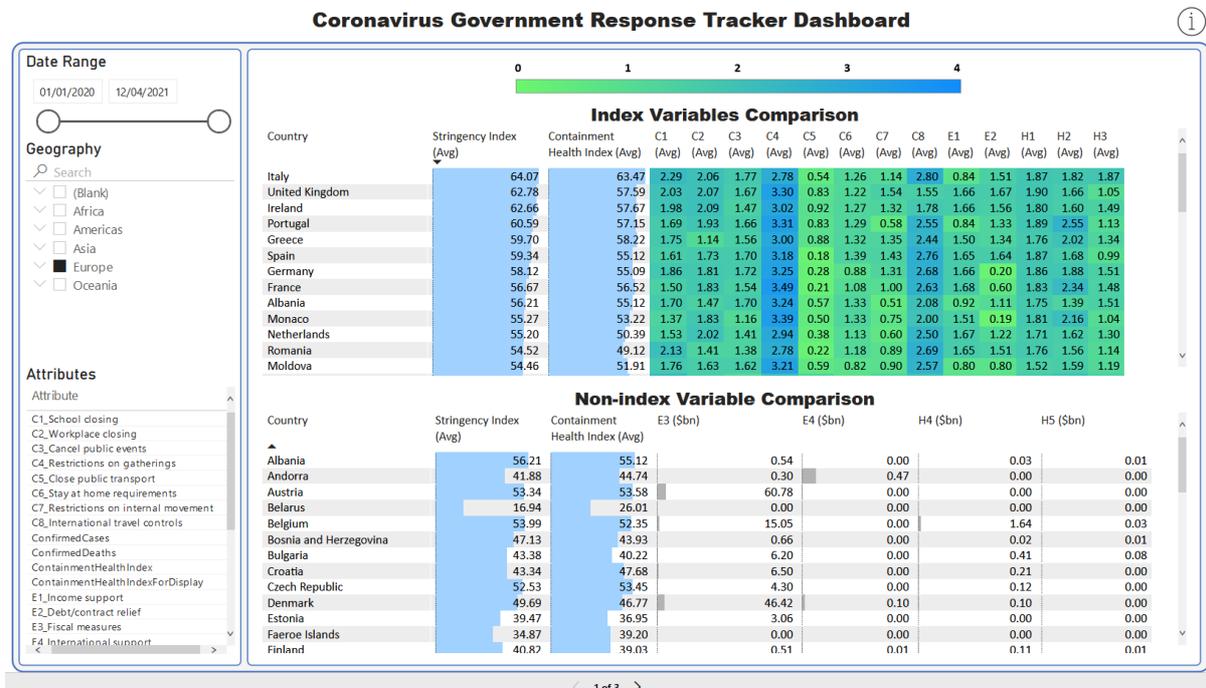
The UCD CoCo dashboard is based on the [Oxford Covid-19 Government Response Tracker](#) (Hale *et al.*, 2021). While the Oxford tracker is openly accessible, it requires at least some basic data analytic skills and software to retrieve relevant information. The UCD CoCo dashboard reduces this barrier by providing key summary metrics and graphs through an easy to navigate online tool. Moreover, we want to stress that UCD CoCo would not be possible without the academics and volunteers who have curated the Oxford tracker data and shared their efforts as open-access tools.

Before we outline the functions, capabilities and limitations of the UCD CoCo Dashboard, we want to briefly portray the development of it. As part of the [Master of Public Policy](#) programme at UCD, Dr. Stephan Köppe teaches data analysis and methods for comparative public policy. This academic year the MPP students were asked to explore different databases that track Covid-related policy changes and apply their analytical skills to gain a better understanding of the challenges when comparing policies across the globe. While other policy trackers like the OECD Country Policy Tracker (OECD, 2020) and the Eurofound Covid-19 EU PolicyWatch (Eurofound, 2020) mainly contain detailed qualitative data, the curated Oxford tracker contains quantifiable data entries that can be displayed in more accessible graphics. With his expertise in data analytics and visualisation, Robert Cazaciuc took on the challenge posed in the classroom seriously and designed the interactive UCD CoCo dashboard. When we discussed the results and potential improvements in class, we both agreed that this should be shared with the world to understand policy differences, learn from effective restrictions and keep governments accountable.

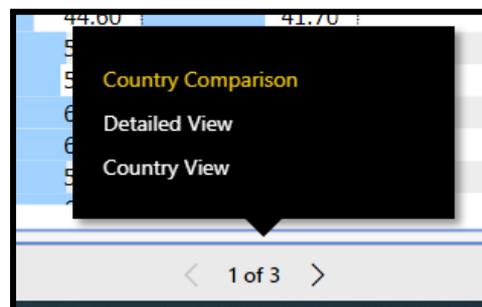
Functions

The UCD CoCo Dashboard is accessible via the following link:

<https://app.powerbi.com/view?r=eyJrIjoizmlxZDc1MjMtMjk2Ni00NjViLWVfNzEtOWVmM2NjZDdlY2NlIiwidCI6IjQyMGVjNTg5LWE4NjYtNGFkMCO5YTU3LWU2MDQ5ZTBkM2JmJmCisImMiOiJh9>



The data for the dashboard is refreshed daily at 9am. The UCD CoCo Dashboard consists of three separate pages. Page 1 shows all indicators in tabular format and enables country comparisons. Page 2 shows each indicator for one country in a graph. Page 3 also focusses on one country, but enables to compare specific indicators. These pages can be accessed by clicking on the button at the bottom of the page.



The legend on the bottom left provides a short title for each indicator and a full description of the underlying methodology for each indicator and index is available from the data providers.³

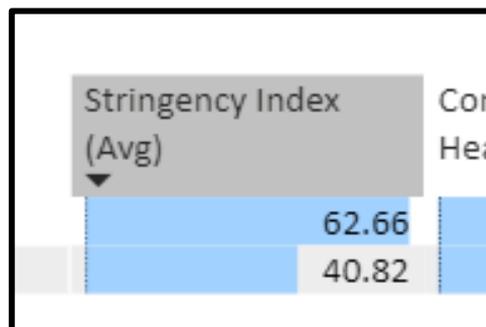
Key points about using the dashboard.

- No box selected is equivalent to all boxes selected.

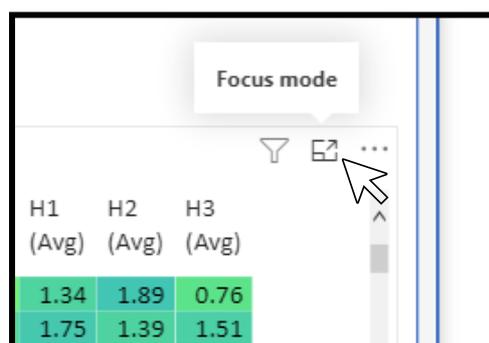
- To select multiple countries or indicators please hold down the CTRL button and select each item individually.



- Each column in the table can be sorted individually to create country rankings. Click on the title of the column and this will update automatically. The small black triangles indicate the sorting order.



- Each page can be maximized using the top right Focus Mode button.



Although all indicators can be combined on page 3, this is not recommended. Only indicators with a similar scale (e.g. C1-C8 or H1-H8) should be combined to yield meaningful results.

Capabilities and Benefits

The main advantage of UCD CoCo is that it provides a quick and dynamic overview about past and current Covid-19 restrictions. With a few clicks users can get a broad overview how their country of interest compares to other countries on different metrics related to pandemic policy responses.

While Our World in Data also provides comparative graphs⁴, the advantage of UCD CoCo is to provide a tabular comparison which allows to rank countries by their numerical values and colour codes the stringency of government responses. Moreover, UCD CoCo enables the comparison of specific restrictions (e.g. school closures) across countries or compare the compound indices that summarise the cumulative restrictions. Since UCD CoCo is updated daily, it provides a live and dynamic tool to track policy changes. It also demonstrates how open data initiatives facilitate innovation, government transparency and a global understanding of policy challenges (inter alia Bertot *et al.*, 2014; Zuiderwijk & Janssen, 2014).

UCD CoCo is targeted at the general public, journalists and interested citizens. In simple and accessible charts UCD CoCo enables an informed public to identify where they stand in a series of past lockdowns and how their government is gradually exiting restrictions in the foreseeable future. UCD CoCo is intended to start a policy debate in the context of fast evolving policy responses to a global pandemic by utilising existing data. Users are able to track restrictions as they are enacted across the globe and potentially recognise that all of humanity is facing a similar challenge. It might also facilitate to keep governments accountable for everyday people.

Limitations

Despite these benefits, UCD CoCo has obvious limitations and has to be used responsibly in public policy debates. As already mentioned UCD CoCo is useful to initiate a comparative policy debate but is certainly not the be-all and end-all of such a discussion. UCD CoCo can only provide an aggregate overview of some key restrictions. It lacks nuance and does not adequately summarise policy interdependencies. Furthermore, the enacted policy differences do not capture actual implementation and enforcement. For instance, Irish authorities lacked significant enforcement powers, which meant that despite strict rules implementation was rather lax during the first three quarters of the pandemic (Bowers *et al.*, 2020). If used as the sole source, it can lead to misinterpretation, exploitation by populist movements and short-sighted government responses. Therefore, the descriptive summary graphs and tables require further substantive and robust statistical analysis and qualitative nuance to understand policy differences and success in mitigating infection and death rates as well as balancing economic and social needs of a society.

Moreover, UCD CoCo depends on the data quality of the Oxford tracker and their regular updates. Numerous volunteers and critical observers are required to ensure the data entries are accurate. A collective citizen science approach (e.g. Brown, 1997) could be applied in this context to ensure potential flaws in the data are recognised and rectified. We can only encourage users to report errors and anomalies directly to the data hosts and contribute collectively to improved data quality. Despite efforts to improve data quality, the nature of the data base and construction of indices will always lack nuance and omit peculiar national policy restrictions.

Conclusion

The UCD CoCo Dashboard provides an innovative way to display Covid-19 related restrictions in a simple and dynamic online platform. It gives the public a simple tool to assess how countries across the globe fare between tight and loose restrictions since the Covid-19 pandemic. UCD CoCo initiates and encourages data-driven public policy debates. Rapid learning from other countries requires not only international data but also easy to use analytical tools. Yet, policy makers need more advanced

data analysis to make informed decisions that go beyond comparing two countries. The public should use the UCD Coco responsibly. Despite the benefits it is a blunt tool to display differences of Covid-19 related policy responses and require further in-depth and robust public policy analysis.

Recommended citation

Cazacuic, R.; Köppe, S. (2021) UCD Covid Compared (UCD CoCo) – Displaying Restrictions across the Globe. #URL#

References

Bertot, J. C., Gorham, U., Jaeger, P. T., Sarin, L. C. & Choi, H. (2014). Big data, open government and e-government: Issues, policies and recommendations. *Information Polity*, 19(1,2), 5-16.

Bowers, S., Horgan-Jones, J. & Gallagher, C. (2020, 10/09/2020). Travel guidelines not enforceable, committee told, *Irish Times*, p. 3. Retrieved from <https://www.irishtimes.com/news/crime-and-law/covid-19-experts-call-for-travel-advice-to-be-made-into-law-1.4350595>

Brown, P. (1997). Popular Epidemiology Revisited. *Current Sociology*, 45(3), 137-156.

Eurofound. (2020). Covid-19 EU PolicyWatch. Retrieved:<https://www.eurofound.europa.eu/data/covid-19-eu-policywatch>

Hale, T., Angrist, N., Goldszmidt, R., Kira, B., Petherick, A., Phillips, T., et al. (2021). A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker). *Nature Human Behaviour*.

OECD. (2020). Country Policy Tracker. <https://www.oecd.org/coronavirus/country-policy-tracker/>
Zuiderwijk, A. & Janssen, M. (2014). Open data policies, their implementation and impact: A framework for comparison. *Government Information Quarterly*, 31(1), 17-29.

¹ Master of Public Policy Student (robert.cazacuic@ucdconnect.ie)

² Assistant Professor of Social Policy (stephan.koeppe@ucd.ie)

³ See https://github.com/OxCGRT/covid-policy-tracker/blob/master/documentation/index_methodology.md, (Hale et al., 2021).

⁴ See <https://ourworldindata.org/covid-government-stringency-index>