

PRESS RELEASE

Deep Knowledge Group Releases New Big Data Analytical Special Case Study: COVID-19 Safety Assessment of 200 Regions

New 250-Page Analytical Report Utilizes Big Data and Quantifiable Metrics (11,400 Data Points) to Rank the COVID-19 Safety and Risk Assessment of 200 Countries, Regions and Territories



4th of June 2020, Thursday, London, UK - <u>Deep Knowledge Group</u> announced today a major extension of its ongoing COVID-19 Analytics activities through the release of its new 250-page <u>COVID-19 Regional Safety</u> <u>Assessment: Big Data Analysis of 200 Countries and Regions COVID-19 Safety Ranking and Risk Assessment</u> special analytical case study that classifies, analyzes and ranks the economic, societal and health stability of 200 regions, countries and territories globally. The study identifies a new set of regions (Switzerland, Germany, Israel, Singapore and Japan) as the top-5 safest regions in comparison to the first edition of the report, and includes in-depth infographic profiles highlighting the specific strengths, weaknesses, opportunities and threats faced by each of the 200 regions.

Link to COVID-19 Regional Safety Assessment: www.dkv.global/covid-safety-assesment-200-regions

The analysis utilizes 130 quantitative and qualitative parameters, grouped into 30 indicators and 6 top-level categories (Quarantine Efficiency, Government Efficiency of Risk Management, Monitoring and Detection, Health Readiness, Regional Resilience and Emergency Preparedness), applied to 200 regions and utilizing 11.400 data points in total to create a composite index capable of comprehensively analyzing the health, societal and economic status of each region in terms of their absolute and relative stability, safety and risk. Its aim is to enable responsible governments to learn from the strengths and weaknesses of their neighbours, and derive action-based answers and insights to key questions relevant for the national strategic decision-making process to optimize outcomes in the wake of the current global COVID-19 pandemic and decrease the impact of future negative aftermath.

Notably, the list of the top-5 safest regions has changed since the release of the first edition of the analytical report, signifying how fast the global dynamic of the COVID-19 pandemic is transforming, and how quickly the levels of regional vulnerability and resilience of specific regions and territories can develop. Specifically,

Switzerland, Germany and Israel now occupying #1, #2 and #3 positions, due to having both faced and surpassed significant early challenges in an optimal manner.

Both Switzerland and Germany were very close to major epicenters of initial COVID-19 spread in Europe, and experienced quite significant volumes of infection spread and mortality early within the overall pandemic timeline. However, as the rates of mortality and new cases continue to decline in these territories, and as they begin to relax lockdown measures and reinitiate economic activity, it is clear that they survived and surpassed a very critical stress-test, succeeding to apply quick and efficient quarantine efforts, monitoring and detection, economic freezing and effective treatment, recovery and release of COVID-19 patients to prevent an overburdening of their healthcare systems. And, indeed, their recent activities in relaxing lockdowns and reinitiating economic and social activity is tangible evidence of this success. It is for these reasons that Switzerland and Germany now occupy the top two positions in this new edition of Deep Knowledge Group's COVID-19 Regional Safety Assessment.

Moreover, these changes in the list of top-scoring regions reflect not only recent transformations in the situation of particular regions, but also of the fundamental nature of the pandemic itself, and what regional safety and stability means in practice in light of COVID-19. In our previous safety and risk assessment, regions which had very high levels of emergency preparedness and a capacity to efficiently manage national crises achieved the highest score because they had the greatest likelihood of managing the early stages of the pandemic (in other words, regions' core capacity to survive the critical stress test of COVID-19's first wave). However, now that it has become clear who did and did not succeed to face that first wave optimally, and as regions begin to prepare for relaxing lockdown conditions and economic freezing mandates, it is the factors which impact their capacity to withstand the *future* of COVID-19, and to prevent economic fallout without sacrificing public health and safety and the risk of second waves of infection, that take on the greatest levels of importance moving forward.

The special case study uses an expanded variant of the analytical framework and methodology previously developed for Deep Knowledge Group's first <u>COVID-19 Regional Safety Assessment</u> in order to group different subsets of the 200 regions and territories into 4 distinct Tiers, and then to rank them amongst each other using different subsets of parameters, chosen in accordance with the levels of data availability and reliability associated with each group.

Tier 1 (20 regions, analyzed by 130 parameters per region) consists of regions that score exceptionally well in terms of regional safety, while Tier 2 (20 regions, analyzed 60 parameters per region) comprises territories that scored on the higher end of average, as expected by the general quality of their healthcare system, emergency preparedness and government management. Meanwhile, Tier 3 is made up of regions which *should* have scored well given their raw healthcare, governmental and crisis management resources, but which in practice ranked much lower than expected (i.e., territories which failed the critical stress test, but who had the theoretical capacity to surpass it), and Tier 4 consists of regions that scored the least optimally during the first-phase analysis (i.e., that failed the stress test *due to* a lack of raw resources to surpass it), and which suffer from the highest levels of data unavailability or unreliability.



Overall, the analysis revealed a significant degree of variance in terms of the regional safety ranking of the 200 regions and countries analyzed, and identified a large number of territories (many of them technological and economic superpowers) that scored substantially lower than expected by any basic logic, and despite their overall level of healthcare sophistication and government management efficiency, suffering some of the highest infection spread and mortality rates (e.g. the USA, UK and France), which is a surprising result that requires further analysis and assessment of the specific causes of these anomalies.

This finding strongly suggests that one of the most critical factors impacting regional safety is not just the general level of different territories' *theoretical* capacity to withstand and neutralize national emergency situations, but rather the specific policies and crisis management strategies and tactics they employ *in practice*. Regions which began closing borders, lockdown mandates and economic freezing measures comparatively late in the overall pandemic timeline, which continue to prioritize economic recovery over public health and safety, which do not utilize sufficiently widespread testing, and which do not proactively build bridges across government departments and between the private and public sectors in order to strengthen surplus healthcare resources against the threat of current and future outbreaks consistently score lower than one would expect considering their raw resources, capacity and potential to maintain and optimize regional safety amid the current pandemic.

Interestingly, Tier 1 consists overwhelmingly of regions from Asia Pacific (and of that, the majority are in Asia) and Europe, with just 15% from Middle East and North Africa, and just 5% from North America. Thus, on average Asia and Europe appear to be maintaining regional safety more efficiently than the rest of the world, although the actual distribution of Asian and European regions that fall within and outside of Tier 1 considers substantially as well, with a larger proportion of European countries being located outside of Tier 1.

The majority of top-ranking Asia Pacific regions fall into Tier 1 (25%), whereas the majority of highest-scoring European countries are located in Tier 2 (32%). Meanwhile, the majority of the lowest-ranking Asia Pacific regions are overwhelmingly located in Tier 4 (45% of all Asian territories), whereas most European countries that score most poorly fall within Tier 3 (47% of all European countries). Therefore, we see that on average Asia Pacific regions' rankings either exceptionally high or low, whereas the overall distributional gap for European countries is smaller, with roughly half falling within Tiers 1 and 2 (and a select handful of regions comprising the very top of the list), and with approximately half being grouped into Tier 3 and very few (5%) in Tier 4.

From this we can gather several interesting observations, including the fact that while the highest-scoring regions in the analysis are European countries, Asia has the largest *total* number of territories that score exceptionally well, but also a wider variation among individual scores (large number falling within the highest and lowest Tiers), whereas Europe has a lower total number of individual countries that score exceptionally well, but also a smaller number that score exceptionally poorly, with a generally narrower gap between its highest and lowest-ranking territories.

Meanwhile, as in Deep Knowledge Group's previous COVID-19 Regional Safety Assessment, we continue to see a large number of regions prioritizing economic recovery over public health and safety. Now that the nature of the pandemic is shifting, the task of identifying the most optimal balance between short term economic recovery and longer-term preparation for a second wave of COVID-19 deserves a thorough and focused analysis.

It is for this reason the future editions of Deep Knowledge Group's Regional Safety Assessment special case studies will take these factors in account to a greater extent, and that larger scope of our ongoing <u>COVID-19</u> <u>Analytics</u> will include a specific and dedicated follow-up study that ranks various regions' existing strategies for easing lockdowns, jumpstarting economic activity, and preparing for a potential second wave of COVID-19 - a special case study focused on *preparatory* tactics for future risks, rather than current levels of regional safety.

Whereas our previous regional safety assessments placed greater emphasis on parameters relating to quarantine, lockdown and preparatory efficiency, these follow-up editions and special case studies will increase the weighting and importance factors allocated to parameters that quantify regions' success in facing this first critical stress test and surpassing the first wave of the COVID-19 pandemic, and to parameters that assess the two main pillars of longer-term COVID-19 safety: optimally relaxing quarantine measures and normalizing economic and social activity in a way that does not compromise risk to the public, and the proactive preparation and prevention of a second wave of COVID-19 protection against similar, future potential pandemics and critical biodefense risks.

We already see significant differences in the ways that different regions are addressing this challenge, and as the the diversity of strategies used by different regions continues to increase, the task of precisely identifying the overall scope of strategies being deployed, and analyzing which tactics appear to be working and which are not, will become one of Deep Knowledge Group's most pressing analytical priorities in the weeks and months to come.

We are still at an early stage of a multifaceted and global emerging problem - a scenario in which it is difficult to arrive at certainties. But instead of accepting the overwhelming complexity of the current pandemic, Deep Knowledge Group is seeking to utilize equally complex analytical frameworks to derive actionable insights and answers into how different aspects of the COVID-19 pandemic should be addressed: attending to all available data resources and using them to develop a systemic approach for finding insights among the different variables and dimensions that pre-determine it.

It is Deep Knowledge Group's aim that the present in-depth assessment will help to build a forecasting model and develop more precise quantifiable metrics and analytical framework that can be used by responsible governments to enhance the efficiency of their strategies for fighting the COVID-19 crisis and preventing the development and spread of future pandemics and associated threats, allowing decision-makers to influence critical causal factors behind COVID-19 success in practice and achieve the most positive outcomes in terms of reducing collateral damage and maximizing the likelihood of optimal performance of post-pandemic national healthcare systems and economies.

Analytical Precedents and Parallel Projects of Deep Knowledge Group

Deep Knowledge Group's analytical approach, developed over the last 6 years, is generally based on the use of multidimensional Big Data analysis and a quantifiable metrics system with the implementation of Data Science techniques, and its COVID-19 analytics in particular is built upon the synthesis, repurposing and extension of a number of key specific special case studies conducted by a variety of its analytical subsidiaries.

Aging Analytics Agency: One such analytical precedent and input was a special case study developed by Deep Knowledge Group's Longevity-focused analytical subsidiary, <u>Big Data Comparison Analysis of the National Healthcare Systems Progressiveness of 50 Countries</u>, which used 200 parameters and 10.000 Data Points to rank the levels of Advanced Healthcare and Longevity Policy and Governance Progressiveness of 50 countries globally.

Deep Knowledge Analytics GovTech Division: Another major input for Deep Knowledge Group's current scope of COVID-19 analytics are several reports conducted by its GovTech analytical subsidiary (focused on researching the trajectory of the GovTech industry by focusing on factors driving the ongoing transformation of a state, main sectors to be changed, barriers to this process and ways to overcome them), including in particular its "States, Regions, Territories at Risk" case study.

<u>Deep Knowledge Analytics</u>: Along with its recent COVID-19 regional safety rankings, Deep Knowledge Group is also in the process of analyzing the full scope of the global COVID-19 ecosystem's constituents and components, including its technological side, which was inaugurated with the recent release of the group's <u>COVID-19 MedTech Analytics IT-Platform</u>, developed by its DeepTech-focused analytical subsidiary, aiming to covering all major sectors and relevant activities in the global COVID-19 MedTech landscape from science to technology, R&D, treatment, diagnostic and vaccine development, and practical applications occurring globally, providing data on particular scientific and technological sectors and geographical regions.

Deep Knowledge Analytics has also been working in parallel on the development of a <u>UK COVID-19</u> <u>MedTech Analytics IT-Platform</u>, which will serve a comprehensive database of the most relevant entities, technologies, and developments in the UK COVID-19 MedTech ecosystem, aggregating, profiling and visualizing the companies, organizations, scientists and technologies at the forefront of neutralizing the COVID-19 pandemic and ensuring the health and safety of UK citizens during this time of unprecedented crisis. While Deep Knowledge Analytics is also actively working on the development of several other geography-specific COVID-19 MedTech Analytics IT-Platforms, the launch of the UK component has been prioritized given the higher severity of the pandemic within the region at the present time, and was developed in order to provide proactive government representatives, companies, labs and scientists with the full scope of information required to accelerate the neutralization of negative COVID-19 outcomes within the UK.

About Deep Knowledge Group

<u>Deep Knowledge Group</u> is an international consortium of commercial and non-profit organizations focused on the synergetic convergence of DeepTech and Frontier Technologies (AI, Longevity, MedTech, FinTech, GovTech), applying progressive data-driven Invest-Tech solutions with a long-term strategic focus on AI in Healthcare, Longevity and Precision Health, and aiming to achieve positive impact through the support of progressive technologies for the benefit of humanity via scientific research, investment, entrepreneurship, analytics and philanthropy.

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