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The Pandemic of COVID-19.

A Glance at the World.

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The Pandemic of COVID-19. A Glance at the World.

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THE PANDEMIC OF COVID-19

COVID-19 has put the world on fire. Since the first cases has been identified in China in December 2019, the COVID-19 virus has spread across the world with devastating impacts on the well-being of the population and on the economic situation of the countries. Hardly no country was able to protect itself from the virus. Some countries, however, were better prepared than others.

The newspaper and other media are full of numbers these days: the number of confirmed, recovered and death cases are basic daily information citied mostly from the webpage of the John Hopkins University.[1] These numbers are absolute numbers. They are only partly useful in judging to which extent a country is affected by the virus. Further information should be combined in order to give a better understanding of the impact of the virus on each country.

Three indicators (confirmed intensity, death penetration, economic resilience) are introduced in the following. The indicators are calculated for 80 countries and briefly discussed on the next pages.
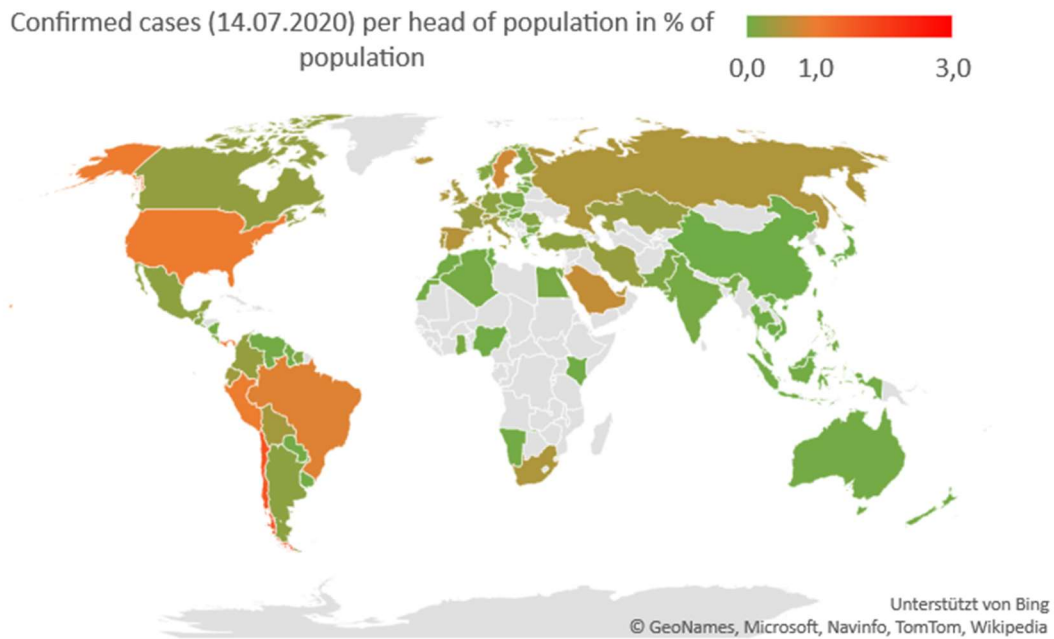
CONFIRMED INTENSITY

Large countries are likely to have a large number of COVID-19 cases. It is not surprising that the USA, Brazil and India are in lead of the ranking of confirmed cases nowadays. The number of confirmed cases is capped with a country's population size. Thus, the intensity to which a country is affected by COVID-19 is better described by relating the number of confirmed cases to the population size.

Map 1 relates the number of confirmed cases as of July 14, 2020 to the population of 2020 as projected by the United Nations[2]. Among the 80 observed countries, the three countries with the highest COVID-19-intensity is slightly different. Whereas the USA remains among the three highest penetrated countries, it is Chile and Panama that are stronger affected. Brazil and India fall behind as the number of confirmed cases are relative to their population size not that large. Especially India falls back. It can be argued that the Indian case is only the result of fewer tests performed there. But given the available data, India is relatively less affected by the Coronavirus.

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[1] https://coronavirus.jhu.edu/map.html

[2] United Nations (2019): World Population Prospects 2019. United Nations, Department of Economic and Social Affairs, Population Division. Online Edition.
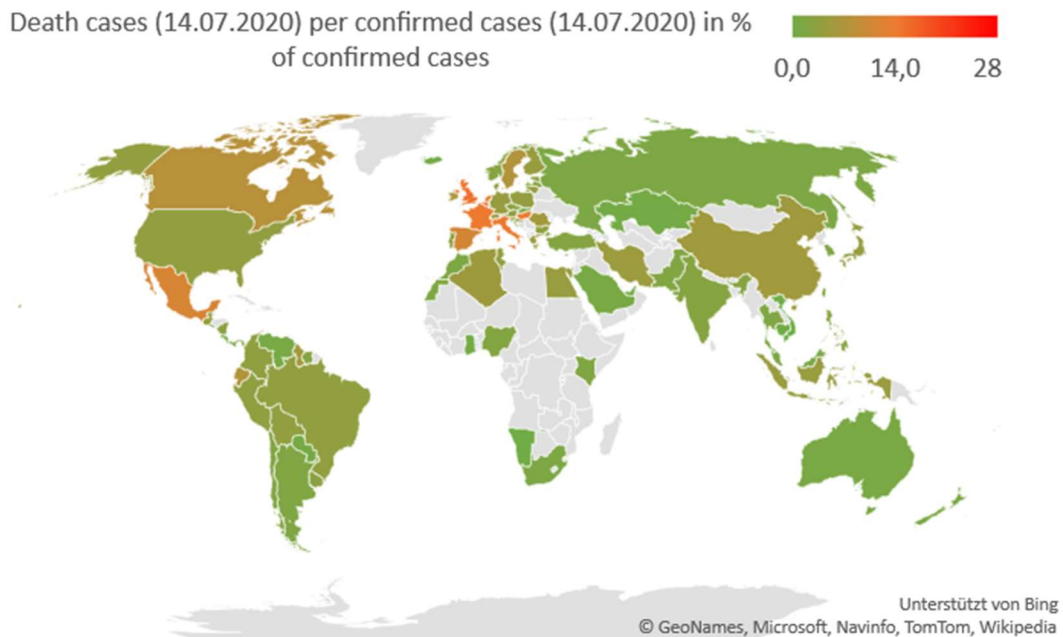
Map 1: **Confirmed cases per head of population, in % of population**

Confirmed cases (14.07.2020) per head of population in % of population

0,0   1,0   3,0

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Source: https://coronavirus.jhu.edu/map.html (14.07.2020); UN 2019; grey countries with not data.

DEATH PENETRATION

The death cases are – in absolute numbers – the highest in USA, Brazil and United Kingdom. Relative to the number of confirmed cases, the perspective changes, again. The hot spot of death penetration can be clearly linked to Europe – as can be seen in Map 2. United Kingdom, Italy and Belgium are the three countries among the 80 observed economies with the highest number of death cases per confirmed case. Among the ten largest death penetrated countries there are only three non-European countries: Canada, Mexico and Ecuador. USA and Brazil are not listed as countries with a strong death penetration.

Map 2: **Death cases per confirmed cases, in % of confirmed cases**

Death cases (14.07.2020) per confirmed cases (14.07.2020) in % of confirmed cases

0,0   14,0   28

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Source: https://coronavirus.jhu.edu/map.html (14.07.2020); grey countries with not data.

ECONOMIC RESILIENCE

The two indicators before have shown, that the focus on absolute numbers may change when a relative perspective is chosen. Nevertheless, the question remains whether a country is economic powerful enough to handle the economic effects of a pandemic. In order to get an idea on the economic resilience towards the pandemic, the number of confirmed cases was put in relation to the price and US Dollar (USD) adjusted gross domestic product (GDP).[3] The more confirmed cases per bn GDP the less economic resilience can be – theoretically – expected. The indicator is challenging, however. It is not per se sure, that a low ratio means good economic resilience. Much depends on how strict the state regulations are or how bad the course of the disease is in the confirmed cases.
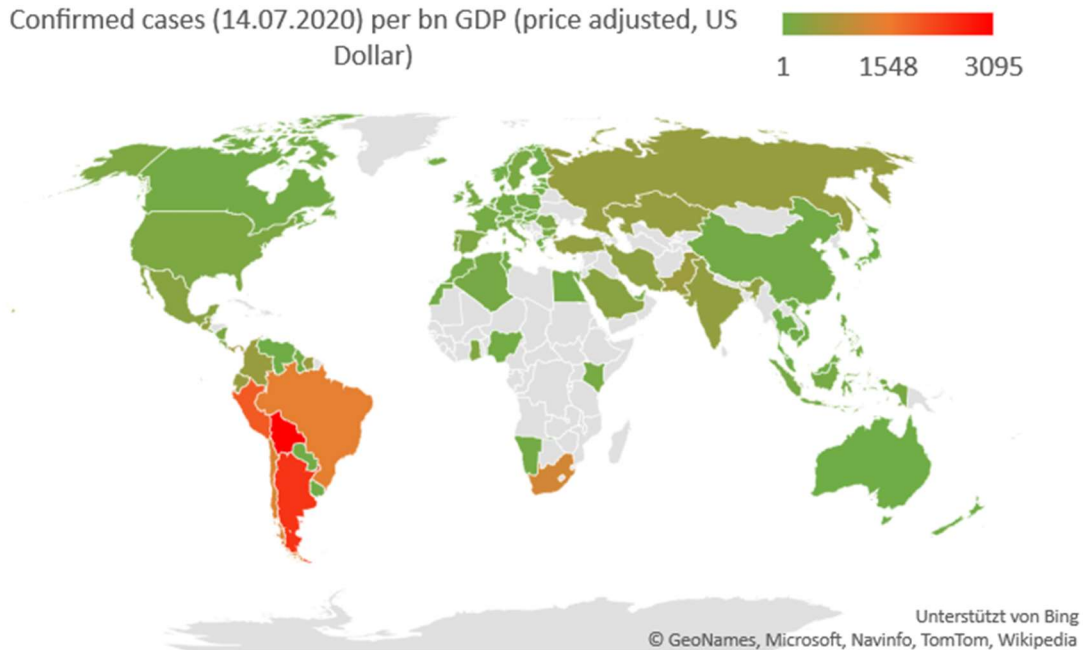
Map 3 shows where the strongest economic problems can be expected: among the 80 countries observed, the countries of Latin America are those countries with the less economic resilience. Nearly all countries there show a relative large number of confirmed cases relative to their domestic income. Argentina and Bolivia are the two countries especially negatively outstanding.

Only a view African countries are among the 80 observed countries. But so far, the economic resilience may be stronger there than expected. That may also be the case of the

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[3] GDP as reported for 2019.

relatively late arrival of the virus on this continent. However, South Africa – one of the economic most developed countries of Africa – also indicates a weak economic resilience.

Map 3:   **Confirmed cases per bn GDP**

Source: https://coronavirus.jhu.edu/map.html (14.07.2020); grey countries with not data.

A GLANCE AT THE WORLD

The glance at the world has shown, that the perspective changes when not absolute but relative measures are used to describe the pandemic of COVID-19 in the world.

While the confirmed intensity – confirmed cases relative to population – has confirmed the strong penetration of COVID-19 in the USA. It has also demonstrated that other countries than expected are relatively strong affected by the pandemic: not Brazil or India but Chile and Panama.

Europe was identified as a hot spot of death penetration. Relatively to the number of confirmed cases, the number of death cases are extraordinary high in this region of the world – despite the high number of tests performed there.

However, it is expected that especially Europa and North America can handle the economic impact of the virus better than other regions of the world. Especially Latin America can be considered as a high-risk region because high number of confirmed cases clashes with small domestic income.