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**DEVELOPMENT CO-OPERATION DIRECTORATE  
DEVELOPMENT ASSISTANCE COMMITTEE**

## **COVID-19: Understanding Health Risks in Small Island Developing States (SIDS)**

Further to the written procedure launched on 16 July 2020, no comments have been received from Delegations by the 24 July 2020 deadline. This summary record is now considered approved, issued as FINAL and declassified.

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## Key findings:

- **Some HIC and late UMIC-SIDS may be subject to greater short-term health needs relative to their less wealthy peers in the current Covid-19 crisis. This is mainly due to the high prevalence rates of chronic disease conditions in their populations.**
- **All other factors being equal, the health sector in LDC-SIDS is not at greater risk than in other SIDS. However it is highly recommended in their case to follow closely the evolution of the crisis as they may see higher infection rates (e.g. if they suffer from high prevalence).**
- **As a long-term strategy, the DAC should target its interventions in the health sector on (i) fighting non-communicable diseases (NCDs), and (ii) continuing to combat inequalities and promote poverty reduction as key factors to build resilient health systems.**

This note attempts to map the health risks associated with the Covid-19 crisis in SIDS. The present analyses can be summarised as an ex-ante snapshot of the health situation as SIDS confront the crisis. It builds on a risk indicator based on an examination of underlining rates of chronic conditions believed to be key health risk factors in the case of Covid-19<sup>1</sup> and their general economic situation (or economic vulnerability), crossed with an index evaluating the current performance of the local health systems. The evidence collected from this analysis helps identify, *ceteris paribus*<sup>2</sup>, those SIDS presenting an ex-ante health situation probably more vulnerable to the Covid-19 crisis relative to those with lower risks. In this sense, it could help inform DAC members as they adjust their interventions to different SIDS' needs.

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<sup>1</sup> Certain groups are more vulnerable to COVID-19, notably older people, and those with diabetes, high blood pressure, obesity, heart disease and chronic lung disease (also known as non-communicable diseases). (World Health Organisation, 2020<sup>[5]</sup>)

<sup>2</sup> Ceteris paribus: mainly refers to the underlying prevalence rate.

### Box 1. Methodology

This note studies thirty-one SIDS countries: thirty as currently included in the DAC List of ODA Recipients<sup>3</sup> (these are: Antigua and Barbuda, Belize, Cabo Verde, Comoros, Dominica, Dominican Republic, Fiji, Grenada, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montserrat, Nauru, Palau, Papua New Guinea, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Solomon Islands, Suriname, Timor-Leste, Tonga, Tuvalu and Vanuatu) and additionally the Seychelles, recently graduated from the List (2018)<sup>4</sup>.

Two indicators are used and combined to have an overall picture. The first one, hereafter called the 'Covid-19 health risk indicator', ranks the population's current health well-being, compiling a score that takes into account the underlining rates of chronic conditions believed to be key risk factors for health in the case of Covid-19. Equally weighted, they are, 1) the smoking rate (share of the population aged > 15 years old who smoke), 2) the share of the population aged 65 or more, 3) the hypertension prevalence, 4) the obesity prevalence, 5) the diabetes prevalence of the total population<sup>5</sup> and (6) the vulnerability of the country's general economic situation as measured by the indicator underlying the LDC<sup>6</sup> definition. Each of the six components are scored from 0 (lowest risk) to 5 (highest risk) and weighted equally. A second indicator refers to the current performance of the local health systems, as computed by the health component of the Global Health Security Index (Nuclear Threat Initiative, Johns Hopkins Center for Health Security and the Economist Intelligence Unit, 2019<sup>[1]</sup>).

**High prevalence rates of chronic diseases position five Pacific SIDS out of nine as susceptible, ex-ante, of having the highest health risks in light of the Covid-19 crisis.**

**Although they do not have the lowest levels of income per capita (four out of five countries are classified as upper middle income), Pacific SIDS could suffer more than their peers from the Covid-19 crisis.** This is the case for Fiji, Marshall Islands, Samoa, Tonga and Kiribati (the first four being UMIC and the last LMIC). This is mainly due to a high prevalence of chronic diseases in their populations combined with relatively lower performance levels in their health systems.

**Additionally, and even if candidate for ODA graduation in the coming years, a HIC SIDS is also in this highest risk group in health terms.** The high income country (Antigua and Barbuda) also figures among this group of nine countries. (Figure 1, left high quadrant: red dots; and Table 1, column a).

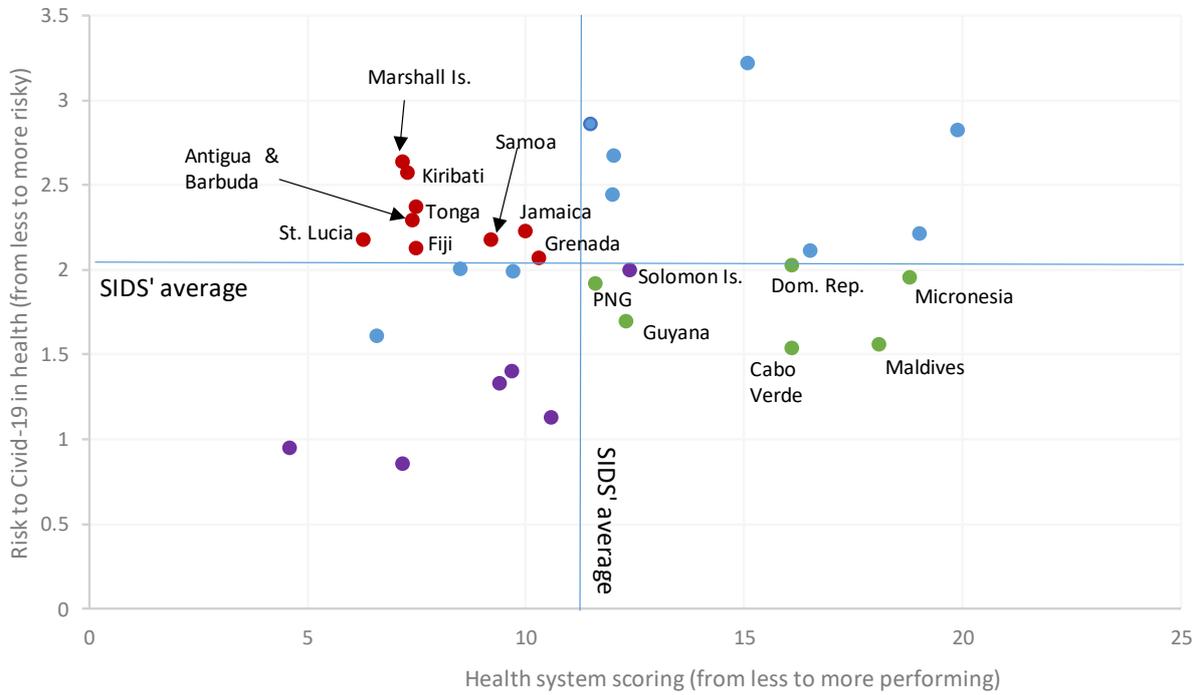
<sup>3</sup> Due to lack of data, it was not possible to compute figures for Cuba or Niue, despite their inclusion on the DAC list of ODA Recipients.

<sup>4</sup> Added to the present analysis in order to take advantage of the wealth of data available and as a learning exercise for upcoming graduates. Cook Islands also recently graduated (2019) but was not included in the study because of lack of data.

<sup>5</sup> These five first indicators, even if slightly different, were inspired by the Gallup exercise made for the USA concerning the different situation of its states as described in (Gallup, 2020<sup>[3]</sup>). Unlike the Gallup exercise, a sixth indicator is included in this analysis to reflect economic vulnerability as a result of their different levels of development (and as a proxy to their access to hygiene, sanitation, given vulnerability due to their poverty levels, etc.).

<sup>6</sup> The LDC status is defined by three indicators: HAI, GNI per capita and EVI, the three equally weighted. This indicator was used here as a proxy to the countries' "general economic situation" and equally weighted with the other five health condition components.

**Figure 1. High income levels do not necessarily correlate with high performance health systems nor lower risks to the Covid-19 crisis in SIDS.**



Note: Red dots represent SIDS with above average health risks and below average health system performance; green dots represent SIDS with lower health risks than the average and health systems performing above average for SIDS; purple dots represent LDC-SIDS. Source: Author’s calculations. See Box 1 on Methodology.

**Table 1. SIDS sorted according to greatest and least health risks in light of the Covid-19 crisis.**

Most risky (a)	Least risky (b)
Antigua and Barbuda (HIC)	Cabo Verde (LMIC)
Fiji (UMIC)	Dominican Republic (UMIC)
Grenada (UMIC)	Guyana (UMIC)
Jamaica (UMIC)	Maldives (UMIC)
Kiribati (LMIC)	Micronesia (LMIC)
Marshall Islands (UMIC)	Papua New Guinea (LMIC)
Saint Lucia (UMIC)	Solomon Islands (LMIC/LDC)
Samoa (UMIC)	
Tonga (UMIC)	

Note: Most risky and least risky in terms of figuring above or below, respectively, the average of the ‘Risk to Covid-19 in health’ and ‘Health system scoring’ indicators. Source: Author’s design.

**Ex-ante, the majority of SIDS countries with the lowest health risk (four out of seven) are categorised under the lower and middle income category, while one is even an LDC.** This is the case for Cabo Verde, Micronesia, Papua New Guinea and Solomon Islands (the first three LMICs and the last

also LDC<sup>7</sup>). Additionally, three UMIC SIDS are categorised as less risky in terms of health issues: Dominican Republic, Guyana and Maldives. (Figure 1, right low quadrant: green dots<sup>8</sup>; and Table 1, column b).

**Most LDC-SIDS (five out of six) are not among the higher-risk countries in terms of health concerns, and even the sixth is among those with the lowest risk.**

**However this point should be taken with caution because the current exercise implicitly assumes the same rate of prevalence of the Covid-19 in all the countries analysed.** Recent experience in the developed world shows that different populations have been differently affected by the health crisis (e.g., African Americans and Hispanics in the United States<sup>9</sup>), and this mainly relates to income inequalities/poverty incidence. Indeed, the impossibility to 'lockdown' because of the need to work, inequalities in access to basic hygiene/water, multi-generations under a same roof, among others, are variables that can increase the rate of infectiousness and make the population more likely to be infected.<sup>10</sup>

**In light of the results obtained and other forthcoming research (OECD, Forthcoming<sup>[2]</sup>), it would be highly recommended for the DAC to increase its focus on fighting NCDs in order not only to combat these 'contemporary' diseases<sup>11</sup> but also to mitigate the Covid-19-related effects (or other similar infectious diseases that could emerge in the coming years).**

**Increasing efforts to strengthen health systems in particular in minimising the causes and consequences of NCDs could render health systems more resilient to newer infectious diseases such as Covid-19.** Indeed, more and more countries suffer from high prevalence rates of obesity, diabetes and hypertension, regardless of their level of wealth.

**Finally, the DAC should continue to combat inequalities and promote poverty reduction as key factors to establish resilient health systems.**

**The resilience of health systems depends not only on their capacity to combat disease, drawing on adequate health infrastructure and up-to-date research.** Factors typically beyond the system's responsibilities also exert a pernicious influence. The Covid-19 crisis has demonstrated that poverty and inequalities are considerable stress factors on a health system. For disadvantaged populations, lower levels of basic hygiene, limited access to reliable information on good health measures, and greater proximity of younger populations to older (more vulnerable) generations under the same roof have limited the feasibility and efficacy of confinement and increased the risk of infection.

<sup>7</sup> Solomon Islands is scheduled to graduate from the LDC category in 2024.

<sup>8</sup> Note that Solomon Islands is shown in purple (as are other LDCs).

<sup>9</sup> <https://www.economist.com/science-and-technology/2020/05/21/the-risk-of-severe-covid-19-is-not-uniform>

<sup>10</sup> An interesting analysis including environmental well-being variables such as size, construction and home location was recently produced by (Brown, Ravallion and Walle, 2020<sup>[4]</sup>). It concludes that 'poorer households will have less capacity to follow WHO recommendations' --like learning, isolating and washing. It would have been interesting to incorporate such variables (or proxies for them) in the preparation of our indicator, however, lack of data prevented this.

<sup>11</sup> (Shariful et al., 2014<sup>[6]</sup>); (World Health Organisation, 2016<sup>[7]</sup>); (Kostovaa et al., 2018<sup>[8]</sup>) (OECD, Forthcoming<sup>[2]</sup>)

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