

# 2 The Trajectory of Globalization During the Covid-19 Pandemic

Steven ALTMANN  
Phillip BASTIAN

New York University Stern School of Business, USA<sup>4</sup>

The Coronavirus pandemic that swept the world in 2020 has put greater distance between nations, firms, and individuals. Social distancing has been essential for public health. But we have also witnessed how a pandemic can exacerbate geopolitical and societal fault lines, compounding the challenges of controlling the virus and keeping economies functioning.

The passage of time creates another kind of distance, enabling us to start putting this tumultuous year into perspective. As this report shows, globalization did not collapse in 2020, but the pandemic did transform—at least temporarily—how countries connect. Travel plummeted, but digital flows surged. International trade and investment took strong hits at the beginning of the pandemic and then started to recover.

Our hope is that the Covid-19 jolt to globalization will, with due reflection, focus minds on how to strengthen our connections to foster a healthier, more prosperous, and more resilient future. The pandemic has demonstrated both the danger of a world where critical linkages break down and the urgent need for more effective cooperation in the face of global challenges.

The world is in crisis again, with geopolitical tensions compounding the toll of the worst pandemic in a century. Borders have been closed to curb the spread of Covid-19, hitting the pause button on global travel and disrupting global supply chains. Some have questioned whether globalization will survive the crisis. The evidence in this report shows that globalization is far from dead, with most international flows proving more resilient in 2020 than many expected.

The DHL Global Connectedness Index measures globalization based on international flows of trade, capital, information, and people. Predictably, people flows have suffered an unprecedented collapse in 2020. All other types of flows have held up surprisingly well, though. Trade and capital flows plunged at the onset of the pandemic but have already started to recover. And digital information flows have surged as people and companies have rushed to stay connected online.

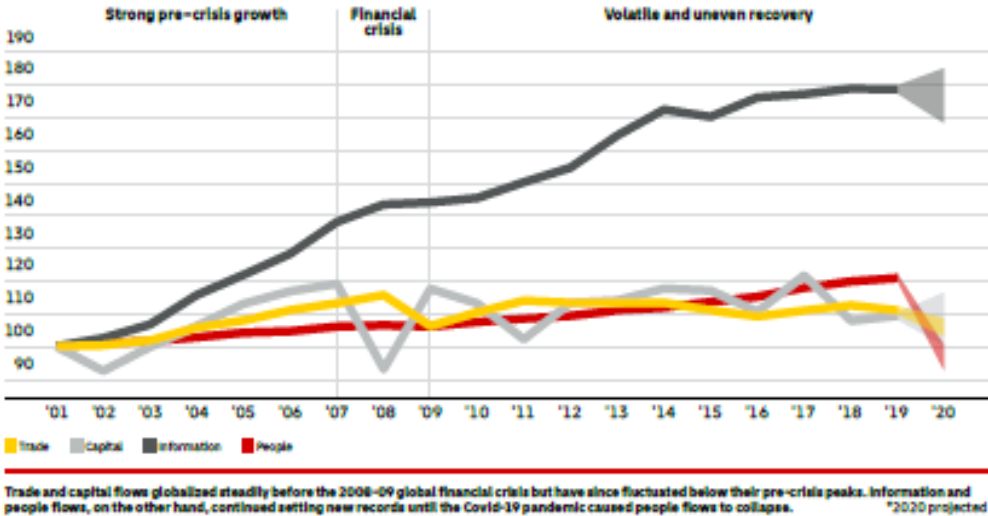


Figure 1: Four pillars of global connectedness, 2001 – 2020

<sup>4</sup> Excerpted from Steven A. Altman and Phillip Bastian, “DHL Global Connectedness Index 2020: The State of Globalization in a Distancing World,” Deutsche Post DHL Group, 2020.

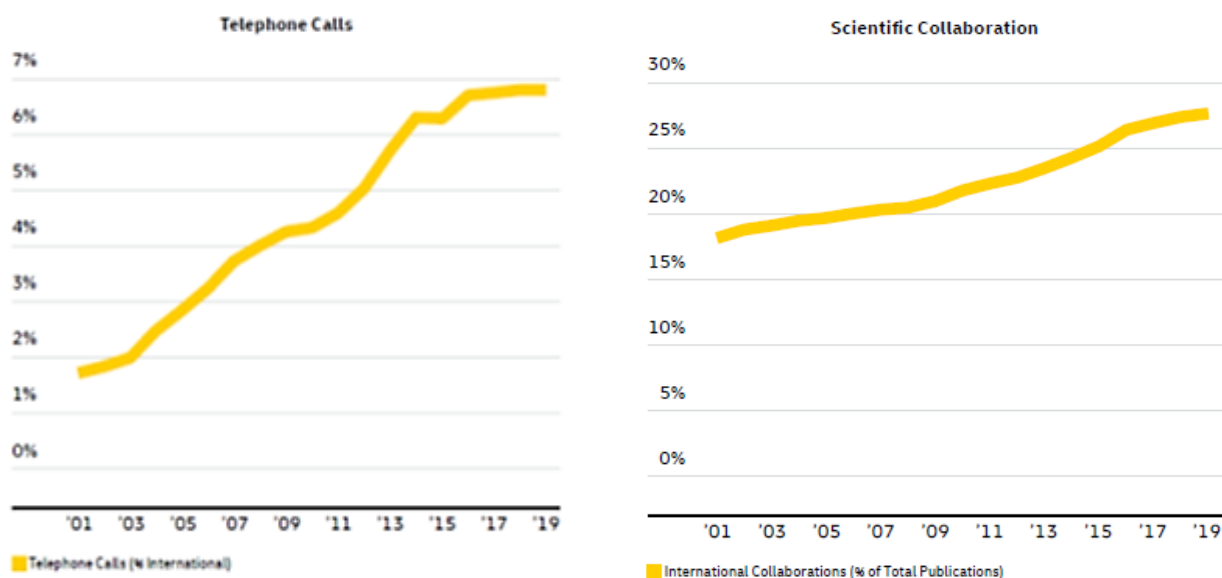


Figure 2: International telephone calls and collaborations, 2001 – 2019

All in all, the DHL Global Connectedness Index is set to decline in 2020, but it is unlikely to fall below where it stood during the 2008-09 global financial crisis, based on our analysis of preliminary data and forecasts. Covid-19 has disrupted business and life around the world, but it has not severed the fundamental links that connect us across national borders. Our report shows a world of people, companies, and countries still prepared to join up and do business with each other. That’s good news because a more connected world still offers the best prospects to restore health and prosperity.

The rebound of world trade after a sharp contraction in March and April has been particularly striking. By August, trade in goods had already recovered more than three-quarters of its drop and stood just 3-4% below its pre-pandemic level.<sup>5</sup> As a result, the proportion of real global output crossing national borders will only decline modestly in 2020.

Moreover, despite export bans implemented at the height of the pandemic, trade provided a vital lifeline for economies and healthcare systems. Global exports of personal protective equipment (PPE), for example, soared 92% during the second quarter of 2020<sup>6</sup>.

Capital flows have been hit harder than trade. Foreign direct investment (FDI) flows, which reflect companies buying, building, or reinvesting in operations abroad, could fall 30 – 40% in 2020.<sup>7</sup> However, such a decline would not be unprecedented. FDI fell 43% in 2001 and 35% from 2007 to 2009. Moreover, as FDI flows are set to remain positive, they continue to add to rather than subtract from global business activity. And while the crisis prompted record withdrawals of portfolio equity from emerging markets, those flows stabilized after governments and central banks stepped in to support economies and financial markets.

Before the pandemic, there were signs of a slowdown in the globalization of information flows. But their growth accelerated as the pandemic sent work, play, and education online. International internet traffic soared 48% from mid-2019 to mid-2020,<sup>8</sup> and international telephone call minutes rose 20% in March versus the same month last year.<sup>9</sup> However, as

<sup>5</sup> CPB World Trade Monitor, October 2020

<sup>6</sup> World Trade Organization (WTO) Press Release, “Trade shows signs of rebound from COVID-19, recovery still uncertain,” October 6, 2020.

<sup>7</sup> UNCTAD, World Investment Report 2020.

<sup>8</sup> Paul Brodsky, “Internet Traffic and Capacity in Covid-Adjusted Terms,” Telegeography Blog, August 27, 2020.

<sup>9</sup> “Lockdowns and quarantines cause a 20% spike in international voice traffic, according to I3Forum Insights,” i3 Forum, May 28, 2020.

domestic data and calls also increased, we cannot say yet whether these types of activity have become more—or less—global. Meanwhile, global collaboration in scientific research—as measured by international co-authorship of articles in scholarly journals—continued a steady upward trend in 2020. While trade, capital, and information flows all had positive roles to play in the pandemic response, personal mobility was restricted to curb transmission of the virus, causing this year’s unprecedented decline in people flows. The number of people traveling to foreign countries is on track to fall 70% in 2020. International tourism is not likely to return to its prepandemic level before 2023.<sup>10</sup> Additionally, millions of migrant workers have returned to their origin countries, and many students have deferred or cancelled plans to study abroad.

Looking beyond the turbulence of the closing year, the measures in this report indicate that the world is less globalized in absolute terms than many presume. Surveys consistently show that people believe international flows are larger than they really are, and that such misperceptions exacerbate fears about globalization.<sup>11</sup> In fact, only a small share of global flows crosses borders. Roughly 21%<sup>12</sup> of global economic output is exported, foreign direct investment flows equal 7% of global gross fixed capital formation, about 7% of phone call minutes (including calls over the internet) are international, and only 3.5% of people live outside the countries where they were born.

Distance and cross-country differences continue to constrain international flows. Most flows take place within rather than between major world regions, and an increasingly multipolar world with fraying relations between the world’s largest economies could lead to even more regionalization.

For now, though, actual data do not show strong evidence of the world economy fracturing along regional lines. While US-China decoupling has accelerated over the past year, the world’s two largest economies are still deeply intertwined. Similarly, the share of the UK’s trade taking place with the European Union has remained fairly steady since the Brexit referendum.<sup>13</sup>

This edition of the DHL Global Connectedness Index has employed more than 3.5 million data points to track the globalization of 169 countries over the period from 2001 to 2019. The most recent data show that the Netherlands, Singapore, Belgium, the United Arab Emirates, Ireland, Switzerland, Luxembourg, the United Kingdom, Denmark, and Malta lead the ranking of the world’s most globally connected countries. Eight of the top 10 countries are in Europe, the world’s most globally connected region. Europe tops the index for trade and people flows, while North America ranks second overall and leads in terms of capital and information flows.

The DHL Global Connectedness Index measures each country’s global connectedness based both on the size of its international flows relative to the size of its domestic economy (what we call ‘depth’) and the extent to which its international flows are distributed globally or more narrowly focused (what we call ‘breadth’). The depth leaders, i.e. the economies with the highest proportions of flows crossing national borders, are Singapore, Hong Kong SAR (China), Belgium, the Netherlands, and Estonia. The breadth champions, i.e. the countries with the most global flow patterns, are the United Kingdom, the United States, the Netherlands, Israel, and the Republic of Korea.

Three country characteristics—GDP per capita, population, and distance from foreign markets—explain 73% of the variation across countries’ levels of global connectedness.

Since policymakers cannot directly control these factors, we also rank countries according to how much they “punch above their weight” in terms of their global linkages. In other words, we

---

<sup>10</sup> United Nations World *Tourism Organization*, *World Tourism Barometer*, October 2020.

<sup>11</sup> Pankaj Ghemawat, *The New Global Road Map: Enduring Strategies for Turbulent Times*, Harvard Business Review Press, 2018.

<sup>12</sup> Gross exports of goods and services equaled 29% of world GDP in 2019, but adjusting for exports that cross national borders more than once in multicountry supply chains brings the proportion of value-added that is exported down to about 21%.

<sup>13</sup> Matthew Ward, “Statistics on UK-EU Trade,” House of Commons Library Briefing Paper Number 7581, June 17, 2020.

analyze the extent to which countries' connectedness exceeds or falls short of expectations based on their economic strength, size and location. The top scorers in this respect are Cambodia, Singapore, Viet Nam, Malaysia, and the Netherlands. Regional supply chains help explain why four of the top five outperformers are in Southeast Asia.

In these uncertain times, policymakers and business leaders can use the measures in this report to navigate a very turbulent global environment. Depth measures help identify which countries are most exposed to threats to specific types of flows, and breadth data can help determine whether that exposure is global or more narrowly focused. This year, with the world economy in its deepest recession in decades, research on the relationship between globalization and growth is especially salient. Most studies indicate that economies that are more open to international flows tend to grow faster.<sup>14</sup> Populist backlashes against globalization in many countries, however, mean that calls for deeper global connectedness to accelerate the world's recovery from Covid-19 are bound to encounter opposition. Nonetheless, recent public opinion polls suggest that the pandemic has not, at least thus far, prompted a new wave of opposition to globalization. Instead, there are signs of a yearning in various countries for more effective international cooperation.<sup>15</sup> Moreover, major new trade agreements, including the Regional Comprehensive Economic Partnership (RCEP) in Asia-Pacific, signal continued government support for market integration in much of the world.

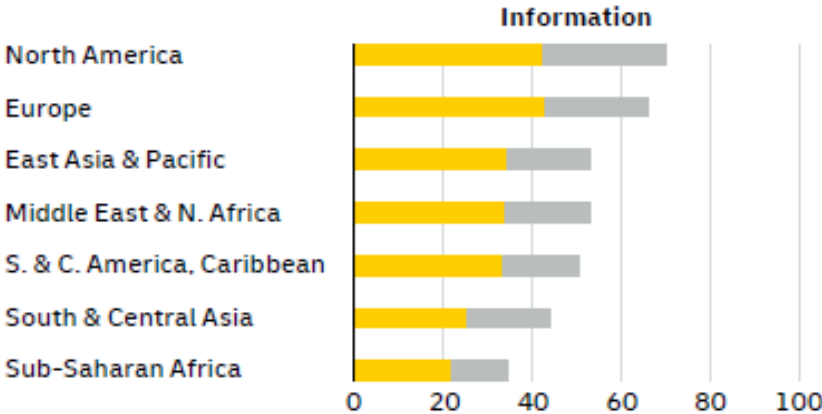


Figure 3: Average information pillar by region, 2019

The Covid-19 pandemic has not ended globalization. But rising geopolitical tensions pose a real threat to a connected world. All four categories of flows covered in our report face strong resistance. Trade conflicts continue to fester, barriers to foreign corporate takeovers are rising, data localization laws have proliferated, and immigration is still a divisive issue in many countries.

As debates about the merits of international openness continue, sound business and public policy decisions depend on accurate measures of globalization. The DHL Global Connectedness Index aims to be a go-to resource for this purpose. This report tracks global trends and ranks countries and regions on their levels of global connectedness.

The full report can be downloaded here: <https://www.dhl.com/gci>

<sup>14</sup> For discussion of the relationship between scores on the DHL Global Connectedness Index and economic growth, refer to Chapter 4 of the DHL Global Connectedness Index 2012 report. Additional evidence using other measures of globalization is reviewed in Niklas Potrafke, "The Evidence on Globalisation," *The World Economy*, 2015.

<sup>15</sup> See, for example, James Bell, Jacob Poushter, Moira Fagan, Nicholas Kent, and J.J. Moncus, "International Cooperation Welcomed Across 14 Advanced Economies," Pew Research Center, September 21, 2020.