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STEVEN A. ALTMAN AND PHILLIP BASTIAN

DHL GLOBAL CONNECTEDNESS INDEX 2020

Key Highlights

ABOUT THE DHL GLOBAL CONNECTEDNESS INDEX

Globalization is often equated with international trade. The DHL Global Connectedness Index takes a broader view. Aside from global trade, we also look at cross-border flows of capital, information, and people around the world.

The index goes beyond just tracking metrics such as the quantity of traded goods, the amount of international investment or the number of

migrants – because these absolute numbers alone say little about the actual extent of globalization. For example, could we say that globalization has progressed just because trade has grown by 2%? And should we be afraid of hyper-globalization if the world's exports reach \$30 trillion? To answer questions like these, we need to put these numbers in perspective. We do this in two ways:



1. We measure the *depth* of international flows: We look at each cross-border flow in relation to relevant domestic activities. For trade, for example, we compare exports to total economic output. This and other ratios help us evaluate the significance of the respective international flow. In other words, depth measures indicate how international the world really is with respect to each type of activity.

2. We measure the *breadth* of international flows: We evaluate to what extent flows are distributed broadly around the globe rather than concentrated between specific origins and destinations. After all, in a truly globalized world, one would expect countries to trade not just with a few neighbors, but with a wide variety of nations.

The 2020 edition of the DHL Global Connectedness Index measures the depth and breadth of international flows of trade, capital, information, and people from 2001 to 2019. It draws on more than 3.5 million data points across the 13 measures of country-to-country flows listed here. It also extends the analysis to include early data and forecasts that track the evolution of these flows in 2020.



* Country Level Only

ABOUT THIS BOOKLET

DEAR READER,

Each year, the DHL Global Connectedness Index (GCI) provides a grounded perspective on the state of globalization to help inform business and public policy decisions around the world. This booklet provides a snapshot of the key findings of the GCI 2020, the seventh edition of this report series.

The GCI 2020 presents the first comprehensive assessment of globalization during the Covid-19 pandemic. It shows that while the virus has severely disrupted business and life around the world, 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 offers the best prospects to restore health and prosperity.

The following pages will give you a high-level overview of the state of globalization in 2020 and place that tumultuous year in historical context. For more detailed analyses of the flows that connect the world, as well as additional resources, we invite you to visit the GCI website at dhl.com/gci.

Enjoy the read!



John Pearson
CEO of DHL Express



Steven A. Altman
Senior Research Scholar and
Director of the DHL Initiative
on Globalization, NYU Stern



10 KEY TAKE-AWAYS

1

After holding steady in 2019, the world's level of global connectedness is set to decline in 2020 due to the Covid-19 pandemic. However, it is unlikely to fall below levels seen during the 2008–09 global financial crisis.



2

People flows suffered an unprecedented decline in 2020 as nations closed borders to curb the spread of the virus. International travel is on track to fall all the way back to its 1990 level.



3

International trade rebounded strongly after a sharp plunge at the onset of the pandemic. The proportion of global output crossing national borders will decline modestly in 2020.



4

Capital flows were hit harder than trade by the Covid-19 recession, but these flows have also started to recover. Strong policy responses by governments and central banks have helped to stabilize markets.



5

After signs of a slowdown in the globalization of information flows before the pandemic, international data flows and telephone calls spiked as Covid-19 forced in-person interactions to go digital.



6 The Netherlands is the world's most globally connected country. Singapore ranks second overall and earned top marks in terms of the size of international flows relative to domestic activity. And no country boasts a more global distribution of flows than the United Kingdom.



7 Europe claims the top spot as the world's most globalized region, with 8 of the 10 most globally connected countries located there. Europe leads on trade and people flows, while North America is the top region for information and capital flows.



8 The list of economies that are seen to punch well above their weight in terms of international flows is led by Cambodia, Singapore, Viet Nam, Malaysia, and the Netherlands, with regional supply chains a key factor in the performance of Southeast Asian nations.



9 Geopolitical tensions pose a significant threat to globalization, but for now there is no strong evidence of the world economy fracturing along regional lines. US-China decoupling, however, has continued to advance.



10 Stronger global connectedness could accelerate the world's recovery from the Covid-19 pandemic, as countries that connect more to international flows tend to enjoy faster economic growth.



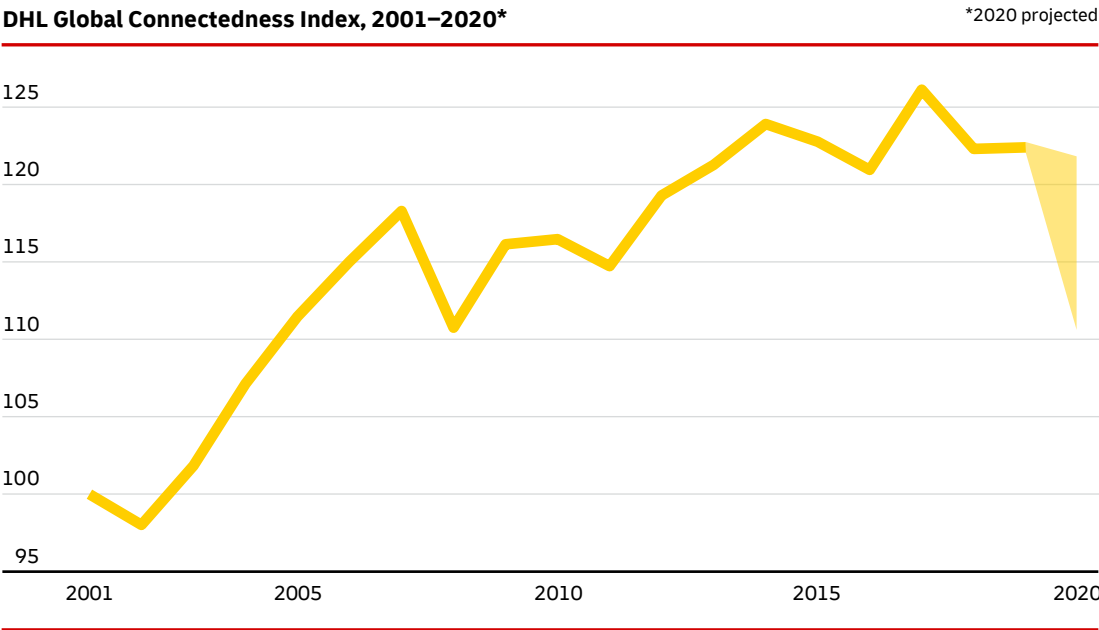
COVID-19 AND GLOBALIZATION

In 2020, a world already rife with geopolitical tension and marked by a rise of economic nationalism and protectionism was hit by the worst pandemic in a century. As borders were closed to curb the spread of Covid-19, halting global travel and disrupting global supply chains, some questioned whether globalization would survive the crisis. The 2020 GCI Report, however, indicates 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. **People flows** suffered an unprecedented collapse in 2020. All other types of flows, however, held up surprisingly well. **Trade and capital flows** plunged at the onset of the pandemic but have already started to recover. Meanwhile, social distancing has supercharged **digital information flows**.



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.

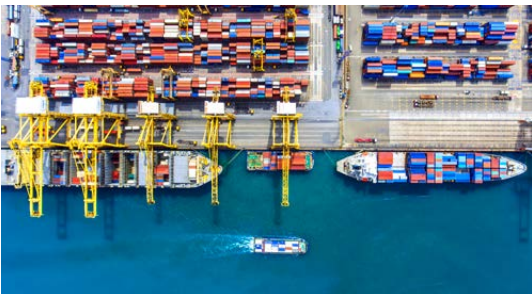


The DHL Global Connectedness Index held steady in 2019 but is set to decline in 2020 due to the Covid-19 pandemic. However, it is unlikely to fall below where it stood during the 2008–09 global financial crisis.

// Most international flows proved more resilient in 2020 than many expected. //



FOUR FLOWS THAT CONNECT THE WORLD



// Strong recovery //

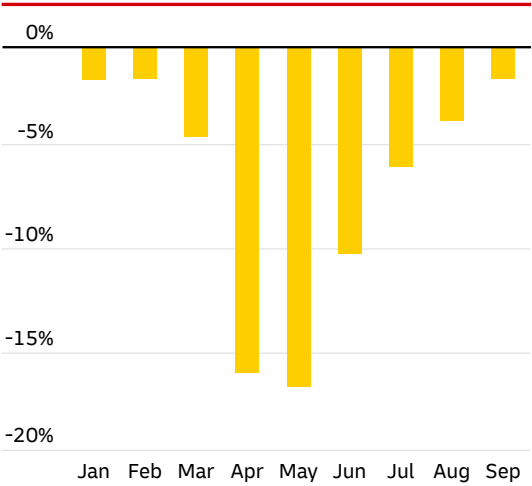


// Signs of recovery //

TRADE

World trade shrunk more steeply at the onset of the pandemic than in the global financial crisis. But, starting in June 2020, trade flows roared back much faster than during prior crises. By September, global trade in goods had recovered to within 2% of its pre-pandemic level – a remarkable turnaround that was fueled by stimulus measures and supply chains that bounced back quickly from earlier disruptions. In the end, trade proved to be a surprisingly powerful lifeline for economies and healthcare systems during this very difficult year.

Goods Trade Volume (vs. Dec. 2019)

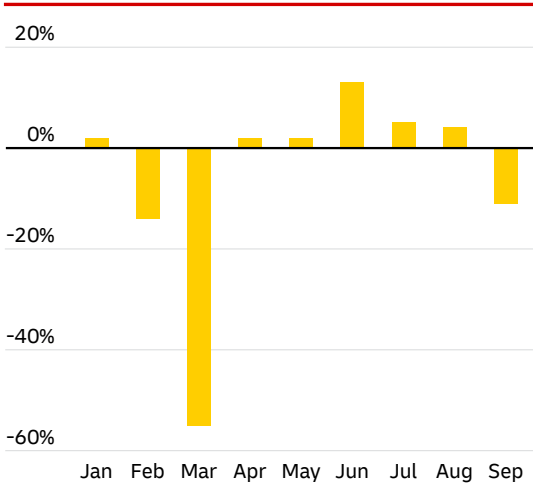


Note: Percent change versus December 2019, seasonally adjusted.
Source: CPB World Trade Monitor

CAPITAL

Investment flows also plummeted at the onset of the pandemic. For example, investors withdrew record amounts of portfolio equity capital from emerging markets in March 2020. But these flows quickly stabilized after governments and central banks responded to the developing crisis. Foreign direct investment flows were also hit hard. These flows fell an estimated 42% in 2020, according to the United Nations Conference on Trade and Development, and they may not return to growth until 2022. Advanced economies suffered larger drops in foreign direct investment inflows than emerging economies.

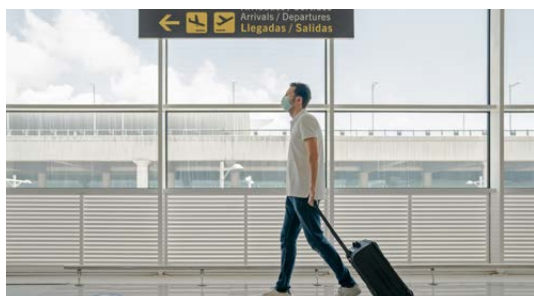
Emerging Market Portfolio Equity Flows (\$bn)



Note: Billions of US dollars. Source: Jonathan Fortuin, IIF Capital Flows Tracker © 2020 Institute of International Finance, Inc. All rights reserved



// Digital boom //

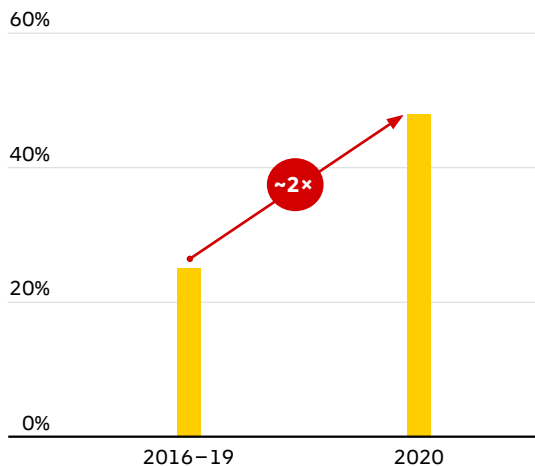


// Unprecedented collapse //

(I) INFORMATION

In stark contrast to other flows, digital information flows surged in 2020. The growth rate of international internet traffic roughly doubled in 2020, reaching 48% according to data from TeleGeography. International voice calls and cross-border e-commerce sales also boomed as in-person interactions went online. However, the available data do not permit us to say whether the proportion of data flows crossing national borders actually rose or fell in 2020, because domestic digital flows also surged during the pandemic. Moreover, the 2020 surge in digital flows probably represents a one-off event rather than a sustained acceleration.

Growth of International Internet Traffic

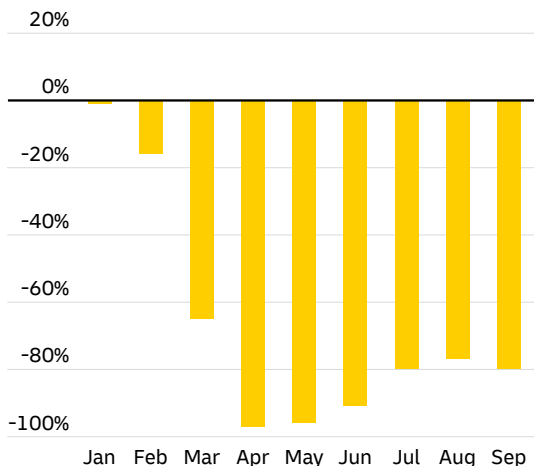


Source: Average International Internet Traffic Growth, as reported in Paul Brodsky, "Internet Traffic and Capacity in Covid-Adjusted Terms," TeleGeography Blog, August 27, 2020.

PEOPLE

Our fourth category of globalization, people flows, really did experience an unprecedented collapse in 2020. The number of international travelers likely fell all the way back to where it stood in 1990, temporarily turning the clock back on three decades of growth. Almost half of all global destinations were completely closed to tourism in late 2020. Millions of migrant workers have been forced to return to their origin countries, and students have canceled or postponed plans to study abroad. Forecasts call for a slow recovery of people flows, with international travel unlikely to reach its pre-pandemic level before 2023.

International Tourist Arrivals (vs. 2019)



Note: Percent change versus same month in 2019. Source: UNWTO

A LITTLE BIT OF HISTORY

Despite setbacks, globalization remains close to record levels, based on measures of international trade, investment, and migration. While it has not advanced as swiftly or steadily over the past 10 years as during preceding decades, we are nowhere near a return to fundamentally disconnected national markets.

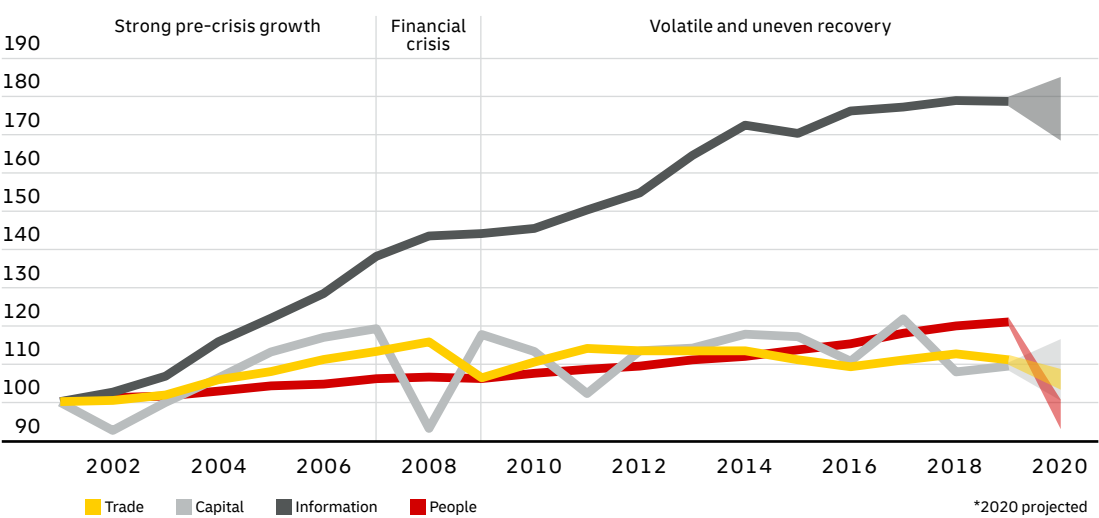
THE LAST TWO DECADES

Trade and capital flows became steadily more global before the 2008–09 global financial crisis but have since fluctuated below their pre-crisis peaks. Information and people flows, on the other hand, continued setting new records until the Covid-19 pandemic caused people flows to collapse.



// Despite setbacks, globalization remains close to record levels. //

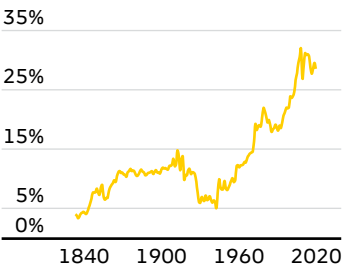
Four Pillars of Global Connectedness, 2001–2020*



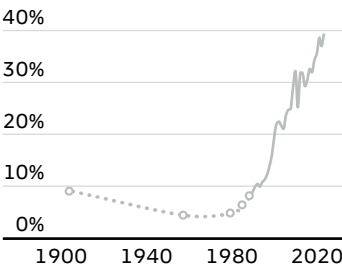
THE LAST CENTURY

Although the DHL GCI extends back only to 2001, we can gain additional perspective by looking at trade, foreign direct investment, and migration patterns spanning more than a century. These indicators highlight the tremendous increase in globalization over the last few decades.

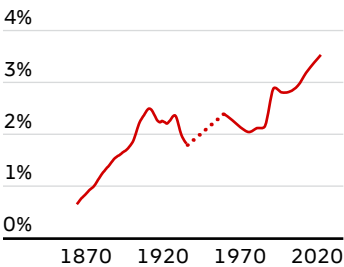
Exports (% of GDP)



FDI Stocks (% of GDP)



Migrants (% of Population)



Sources: See full report at dhl.com/gci (note 20 on p. 87).

THE REAL EXTENT OF GLOBALIZATION

Despite the enormous increase in market integration in recent decades, the world's absolute level of globalization remains rather limited. Most flows are still domestic rather than international.

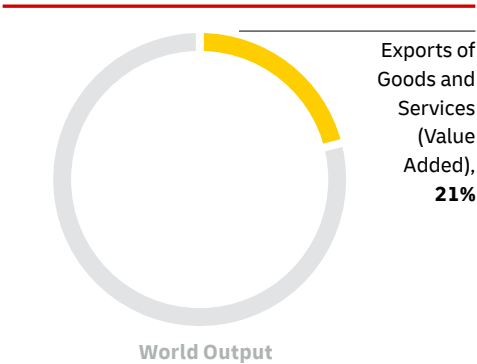
- For example, just about 21% of global economic output ends up in a different country from where it was produced.
- Foreign direct investment, which reflects companies buying, building, or reinvesting in foreign operations, amounted to just 7% of gross fixed capital formation last year.
- Roughly 7% of voice call minutes were international (including calls over the internet).
- And a mere 3.5% of people live outside of the countries where they were born.



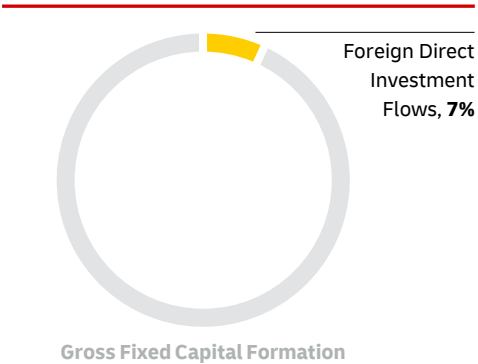
// Even after tremendous increases over past decades, the world's absolute level of globalization is still limited. //

In surveys, people typically overestimate every one of these measures by a wide margin. Such misperceptions can distort business and public policy decision-making in important ways.

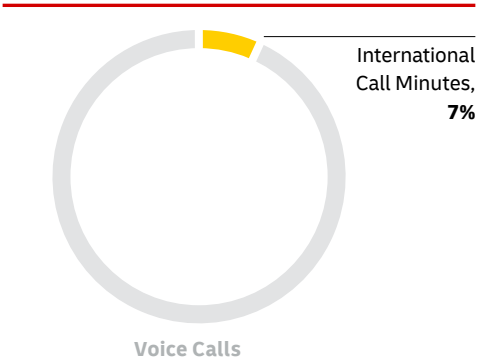
Trade



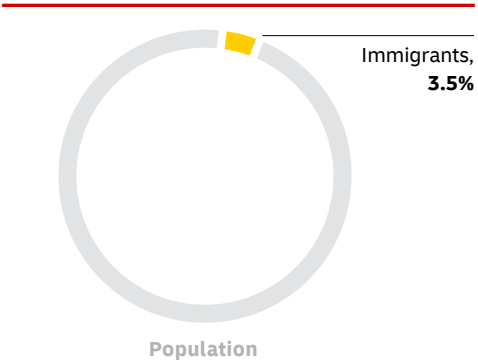
Investment



Telephone Calls



Migration

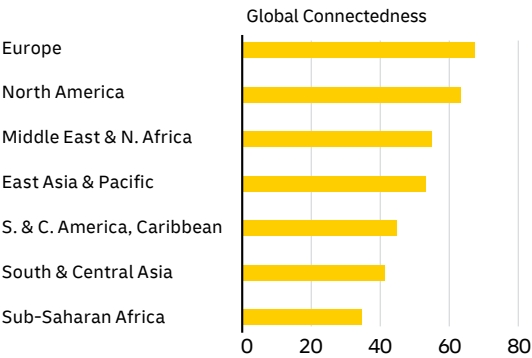


LEADERS AND LAGGARDS OF GLOBALIZATION

MOST CONNECTED COUNTRIES

This edition of the DHL Global Connectedness Index employed more than 3.5 million data points to track the globalization of 169 countries from 2001 to 2019 (see ranking on the right). Eight of the top 10 countries are in Europe, the world’s most globally connected region. Europe’s largest economy, Germany, was ranked 13th this year, far ahead of the world’s biggest economy, the United States, at No. 37, as well as Japan, ranked 44th, and China, ranked 70th. Large economies like the U.S. tend to be less globalized because more of their flows take place inside their vast internal markets.

Most Connected Regions



Largest Gains (2017–2019)

Gains	Score Change
Uzbekistan	+10
Sudan	+10
Trinidad & Tobago	+8
Niger	+7
Mongolia	+6
Venezuela (Bolivarian Republic of)	+5
Tanzania (United Republic of)	+5
Gambia	+5
Hungary	+4
Turkey	+4

Largest Losses (2017–2019)

Losses	Score Change
Angola	-10
Panama	-8
Malawi	-6
Iran (Islamic Republic of)	-6
Guinea	-5
Timor-Leste	-5
Madagascar	-5
Oman	-4
Bolivia (Plurinational State of)	-4
Seychelles	-4

// Eight of the top 10 countries are in Europe, the world’s most globally connected region. //



DHL Global Connectedness Index, Overall Ranking

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
1	Netherlands	91	59	Brunei Darussalam	56	117	Sierra Leone	39
2	Singapore	89	60	Brazil	56	118	Solomon Islands	39
3	Belgium	83	61	Jordan	55	119	El Salvador	39
4	United Arab Emirates	82	62	Morocco	55	120	Cameroon	39
5	Ireland	82	63	Kazakhstan	55	121	St. Kitts and Nevis	38
6	Switzerland	81	64	Philippines	55	122	Liberia	38
7	Luxembourg	80	65	Mexico	54	123	Senegal	38
8	United Kingdom	79	66	Azerbaijan	54	124	St. Vincent and the Grenadines	38
9	Denmark	77	67	Peru	54	125	Myanmar	37
10	Malta	77	68	Mongolia	54	126	Pakistan	36
11	Norway	77	69	North Macedonia	53	127	Guatemala	36
12	Sweden	76	70	China	53	128	Zambia	35
13	Germany	76	71	Romania	53	129	Ethiopia	35
14	Czechia	76	72	Tunisia	53	130	Algeria	35
15	Hungary	76	73	Panama	52	131	Venezuela (Bolivarian Republic of)	34
16	Malaysia	73	74	Costa Rica	52	132	Mauritania	34
17	Finland	73	75	Croatia	52	133	Kenya	34
18	Austria	72	76	Barbados	51	134	Bolivia (Plurinational State of)	34
19	Taiwan (China)	72	77	Sri Lanka	50	135	Bangladesh	34
20	Estonia	72	78	Belize	50	136	Haiti	33
21	France	72	79	Oman	50	137	Dominica	33
22	Korea (Republic of)	72	80	Ghana	49	138	Kyrgyzstan	33
23	Slovenia	71	81	India	48	139	Samoa	33
24	Israel	71	82	Armenia	48	140	Uzbekistan	33
25	Hong Kong SAR (China)	71	83	Argentina	48	141	Cabo Verde	33
26	Italy	70	84	Trinidad and Tobago	48	142	Paraguay	32
27	Spain	70	85	Montenegro	48	143	Guinea	32
28	Iceland	69	86	Fiji	48	144	Iran (Islamic Republic of)	32
29	Cyprus	69	87	Colombia	47	145	Nepal	32
30	Thailand	68	88	Moldova	47	146	Lao People's Democratic Republic	31
31	Qatar	68	89	Jamaica	47	147	Gambia	31
32	Canada	68	90	Uruguay	46	148	Vanuatu	30
33	Bulgaria	68	91	Gabon	46	149	Niger	29
34	Australia	67	92	Ecuador	46	150	Tanzania (United Republic of)	28
35	Slovakia	67	93	Grenada	46	151	Eswatini	28
36	Portugal	67	94	Suriname	46	152	Burkina Faso	28
37	United States	66	95	Guyana	45	153	Angola	27
38	Viet Nam	66	96	Honduras	45	154	Botswana	27
39	Bahrain	66	97	Nicaragua	45	155	Malawi	27
40	New Zealand	65	98	Albania	45	156	Mali	27
41	Poland	64	99	St. Lucia	44	157	Tajikistan	26
42	Saudi Arabia	63	100	Macau SAR (China)	44	158	Rwanda	26
43	Latvia	63	101	Congo	43	159	Sudan	26
44	Japan	62	102	Bosnia and Herzegovina	43	160	Benin	26
45	Lithuania	61	103	Egypt	43	161	Timor-Leste	25
46	Cambodia	60	104	Antigua and Barbuda	42	162	Uganda	25
47	Chile	60	105	Côte d'Ivoire	41	163	Afghanistan	20
48	Mauritius	60	106	Indonesia	41	164	Kiribati	18
49	Greece	60	107	Dominican Republic	41	165	Democratic Republic of the Congo	18
50	Serbia	59	108	Namibia	41	166	Zimbabwe	18
51	Ukraine	59	109	Belarus	40	167	Yemen	18
52	Seychelles	58	110	Mozambique	40	168	Guinea-Bissau	18
53	Russian Federation	58	111	Togo	40	169	Burundi	16
54	Lebanon	58	112	Nigeria	40			
55	Turkey	58	113	Tonga	40			
56	Kuwait	57	114	Bahamas	40			
57	South Africa	57	115	Madagascar	39			
58	Georgia	56	116	Iraq	39			

IN SHORT

- Covid-19 does not spell the end of globalization. Trade, capital, and information flows are keeping us connected while most people flows are on hold.
- Globalization is still close to record highs, although the world is less globalized than many think.
- Geopolitical tensions pose a real threat, but globalization has not given way to regionalization.
- The Netherlands is the world's most globally connected country, followed by Singapore, Belgium, the United Arab Emirates, and Ireland.

ADDITIONAL RESOURCES



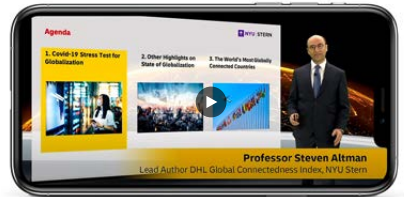
Statement by John Pearson,
CEO DHL Express
<https://youtu.be/UmQbppEvTRU>



Brief highlights from our
2020 GCI Report
<https://youtu.be/PDZI46G9fkY>



Panel discussion on
globalization and the GCI
<https://youtu.be/5fRKW7AlOrl>



Lead author Steven Altman
presents key findings
https://youtu.be/nB_GKou1-8A

FURTHER READING:



Globalization will speed our recovery,
by Frank Appel, CEO DPDHL Group
<https://bit.ly/3pDYHHB>



Why COVID-19 shows the future not
the end of globalization, by John
Pearson, CEO DHL Express
<https://bit.ly/3ti6ltp>



The full report can be downloaded at dhl.com/gci. That web page also contains many additional resources, including an interactive tool that can be used to customize results, videos, and infographics.

THE AUTHORS



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THE DHL INITIATIVE ON GLOBALIZATION

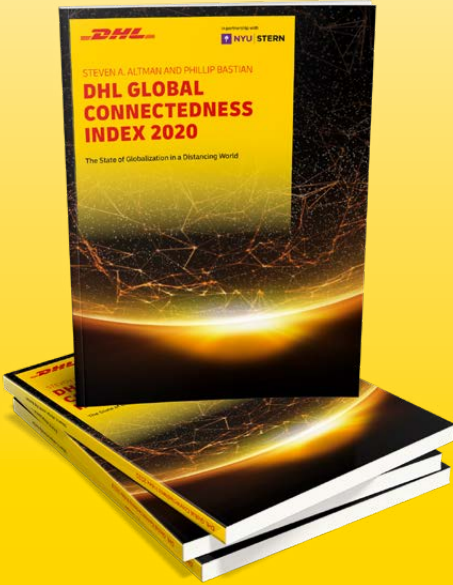
The DHL Initiative on Globalization at NYU Stern's Center for the Future of Management aims to develop and maintain the academic world's most comprehensive collection of data on the globalization of trade, capital, information, and people flows and to be a leading center of excellence for data-driven globalization research. Drawing upon this unique research base, the Initiative strives to provide business leaders, policymakers, and educators timely and useful insights into the state and trajectory of globalization, how globalization affects companies and countries, and best practices for connecting across borders. Find out more at: www.stern.nyu.edu/globalization



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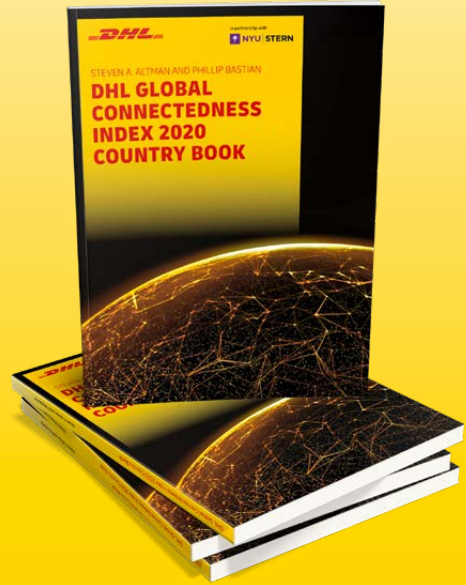


New York University Stern School of Business, located in the heart of Greenwich Village and deeply connected with the City for which it is named, is one of the United States' premier management education schools and research centers. NYU Stern offers a broad portfolio of transformational programs at the graduate, undergraduate and executive levels, all of them enriched by the dynamism and deep resources of one of the world's business capitals. NYU Stern is a community that fosters inclusion, belonging, diversity and equity, and inspires its members to embrace change in a globally changing world. Visit www.stern.nyu.edu.



DHL GLOBAL CONNECTEDNESS INDEX 2020

The DHL Global Connectedness Index 2020 Report analyzes the latest trends in the globalization of trade, capital, information, and people flows, along with discussions of country-level global connectedness patterns.



DHL GLOBAL CONNECTEDNESS INDEX 2020 COUNTRY BOOK

The DHL Global Connectedness Index 2020 Country Book contains detailed profiles of the latest data for all 169 countries and territories featured in the DHL Global Connectedness Index 2020. It also provides additional country rankings and more information about the data used to calculate the index.



Download both parts of the report at www.dhl.com/gci

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