STEVEN A. ALTMAN AND CAROLINE R. BASTIAN

DHLTRADE GROWTH ATLAS 2022



ABOUT THE DHL TRADE GROWTH ATLAS



The DHL Trade Growth Atlas is a special report that features a wealth of data-based insights and analysis on global trade growth trends and prospects. Countries covered comprise more than 99% of world trade, GDP, and population.

Maps, charts, and other data visualizations bring the facts to life, making the report not only a unique resource for pinpointing promising trade opportunities but also a convenient reference for a broad variety of audiences.

A collection of 173 one-page country profiles provide concise summaries of individual countries' trade patterns.

On the following pages, this Key Highlights booklet presents a brief overview of the full report that can be downloaded at **dhl.com/tradegrowth**

ABOUT THIS BOOKLET

DEAR READER,

Global trade is in the spotlight today more than ever. The past two years have been a stark reminder of how crucial trade and supply chains are for our quality of life and cost of living. Trade can play a part in responding to inflation and supply constraints, and it continues to be a powerful driver of economic growth.

In recent years, international trade has experienced a host of challenges: from COVID-19 and new protectionist policies to the shocking war in Ukraine. It's no surprise that trade and supply chain issues have become top priority in board rooms, for politicians, at universities, and in the media.

So, is trade still an attractive source of growth? How are trade patterns shifting? And which countries could achieve the strongest trade growth in the future? The DHL Trade Growth Atlas provides answers to these questions – based on extensive data – to help cut through the rhetoric and speculation. Many takeaways are highly encouraging and point to large opportunities to grow trade in both advanced and emerging economies.

This brochure will provide you with key highlights of the DHL Trade Growth Atlas 2022 in a concise overview. For the full report with many more analyses and visualizations, as well as source citations and additional resources, we invite you to visit the DHL Trade Growth Atlas website at dhl.com/tradegrowth.

Frank Appel CEO, Deutsche Post DHL Group Steven A. Altman
Senior Research Scholar and
Director of the DHL Initiative
on Globalization, NYU Stern

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10 KEY TAKE-AWAYS

International trade has proved surprisingly resilient through the Covid-19 pandemic, expanding to well above pre-pandemic levels, even as supply bottlenecks constrained further growth.

Trade is still expected to grow slightly faster in 2022 and 2023 than it did over the previous decade, despite forecast downgrades due to the war in Ukraine and slowing global economic growth.

E-commerce sales boomed during the pandemic, expanding opportunities for sellers to access new markets abroad. Forecasts call for strong cross-border e-commerce growth to continue.

Trade growth is especially important in the present environment because of the power of trade to accelerate economic growth, reduce inflation, and enable countries to access multiple sources of key inputs.

Emerging economies grew their share of world trade from 24% in 2000 to 40% in 2012, with China alone driving about half of this increase. But over the past decade, the emerging economies' share of world trade has changed very little.

Trade growth is spreading out across a wider variety of countries. From 2016 to 2021, China generated one-quarter of the world's trade growth. Based on the latest IMF forecast, China will still achieve the most trade growth from 2021 to 2026, but its share of global growth will fall by half to 13%.

New poles of trade growth are emerging in Southeast and South Asia, and trade growth is forecast to accelerate dramatically in Sub-Saharan Africa. After decades of shifts to the east, the center of gravity of world trade is poised for a turn to the south.

While trade is growing faster in emerging economies, advanced economies continue to generate the largest amount of trade growth. Looking forward, IMF forecasts imply that 55% of trade growth through 2026 will be in advanced economies, while 45% will take place in emerging economies.

The mix of products traded by advanced versus emerging economies has shifted. Emerging economies are increasingly important importers of raw materials and exporters of sophisticated capital, intermediate, and consumer goods.

Emerging economies continue to race forward on measures of connectivity, innovation, and leading companies. Future shifts in trade patterns could reflect more the quality rather than the quantity of goods produced in these countries.

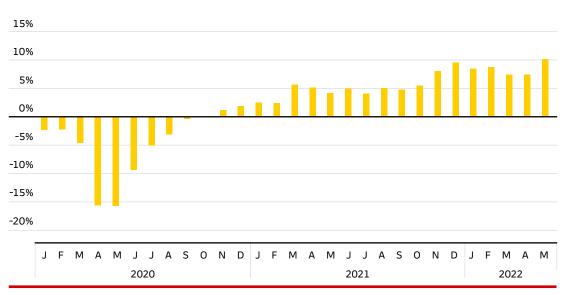
TRADE GROWTH: SURPRISINGLY STRONG DESPITE GLOBAL SHOCKS

Covid-19

The pandemic has not been the major setback for global trade that many anticipated: International trade in goods has surged to as high as 10% above pre-pandemic levels, even in the face of significant supply bottlenecks that constrained further growth. Thus, trade has defied predictions that the Covid-19 pandemic would trigger the "end of globalization."

The figure on this page shows how global trade in goods plummeted in early 2020, only to bounce back to above its pre-pandemic level before the end of the year. By early 2021, more goods were being delivered across national borders than ever before. The pandemic produced the steepest decline in international trade on record, but it was followed by the fastest recovery.

MERCHANDISE TRADE VOLUME (VS. DECEMBER 2019)



Data Source: CPB World Trade Monitor May 2022 (data released July 2022)

The pandemic caused an unprecedented shift in consumption from services (many of which, like restaurant meals and tourism, were restricted to reduce in-person contact) to physical goods, which were already traded much more intensively than services. At the same time, the pandemic also accelerated the growth of cross-border e-commerce (see p. 10).

At the beginning of the pandemic, there was a surge of interest in shortening supply chains and producing goods closer to customers. But as trade rebounded and global supply chains delivered a record amount of goods, many companies backed away from reshoring and nearshoring plans.

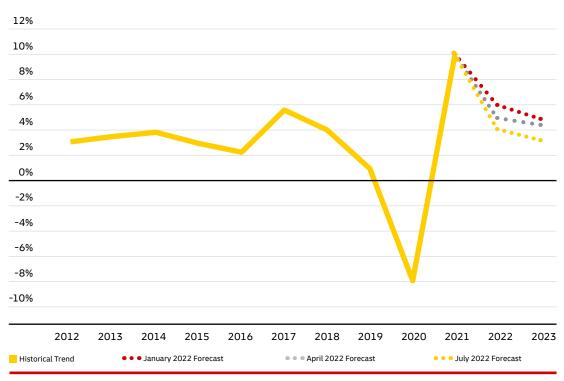


War in Ukraine

Prospects for future trade growth – despite worsening macroeconomic conditions in most of the world – are surprisingly positive. Trade growth forecasts have been downgraded due to the war in Ukraine, but recent forecasts still call for trade to grow slightly faster in 2022 and 2023 than it did

over the preceding decade. And forecasters expect trade growth to modestly outpace GDP growth, sustaining or even expanding the role of international trade in the world economy.

ANNUAL GROWTH OF TRADE IN GOODS AND SERVICES, HISTORICAL TREND AND IMF FORECASTS



Data Source: IMF World Economic Outlook, January, April, and July, 2022

The solid yellow line on this figure depicts actual trade volume growth through 2021. The red dotted line shows the IMF's forecast before the start of the war in Ukraine (as of January 2022). The gray dotted line reflects the IMF's first forecast downgrade after the start of the war (issued in April 2022). The yellow dotted line depicts the second downgrade issued in the IMF's most recent (July 2022) forecast.

So the war in Ukraine has confronted globalization with yet another shock, but the evidence thus far points to a much smaller impact on global trade growth as compared to the pandemic.

NEW POLES OF TRADE GROWTH EMERGING

The latest IMF forecasts imply that Asia's share of world trade will continue expanding over the next five years. However, as the figure below shows, there are new poles of trade growth emerging within the region:

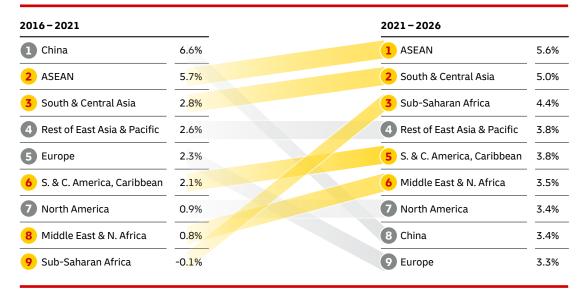
- The Association of Southeast Asian Nations (ASEAN) is forecast to lead the world in terms of export growth over the next five years. (The ASEAN member states are: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.)
- South & Central Asia is predicted to follow in second place. (This region encompasses: Afghanistan, Armenia, Azerbaijan, Bangladesh, Georgia, India, Iran, Kazakhstan, Kyrgyzstan, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkey,

Uzbekistan.)

Sub-Saharan Africa is projected to achieve third place. Trade growth is forecast to accelerate dramatically here.

(This region comprises: Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe.)

EXPORT VOLUME GROWTH RATE BY REGION, NEXT FIVE YEARS (IMF FORECAST) VS. LAST FIVE YEARS



Data Source: IMF World Economic Outlook April 2022

All in all, there are large growth opportunities available around the world: By level of economic development, advanced economies are forecast to

generate 55% of the absolute amount of global trade growth – and emerging economies 45% – between 2021 and 2026.

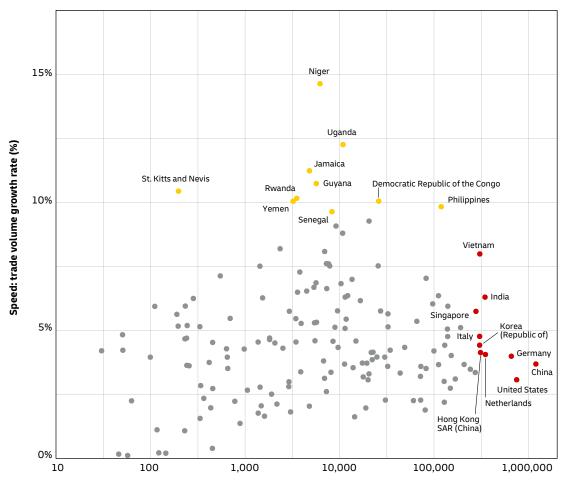
FUTURE TRADE GROWTH: WHICH COUNTRIES COULD BE THE LEADERS?

In this section, we focus on two dimensions of future trade growth: speed and scale.

- The speed dimension captures how fast a country's trade volume is expanding (annualized trade volume growth rate).
- The scale dimension tracks the absolute change in the amount of goods traded by a country.

The figure on this page plots speed and scale predictions for the period 2021 – 2026 based on IMF trade forecasts. While no countries feature in the top 10 for both speed and scale, the three countries that come closest are all in Southeast and South Asia: India, the Philippines, and Vietnam. These three countries all stand to benefit from efforts by many companies to diversify Chinacentric production and sourcing strategies.

FORECAST TRADE GROWTH SPEED AND SCALE, 2021 - 2026



Scale: absolute change in trade volume, millions of U.S. dollars (log scale)

Speed Top 10 Scale Top 10

Data sources: IMF World Economic Outlook April 2022, IMF Direction of Trade Statistics. Note: Countries with negative growth are omitted from this figure.

Of the ten countries with the fastest projected trade growth through 2026, five are in Africa: Democratic Republic of the Congo, Niger, Rwanda,

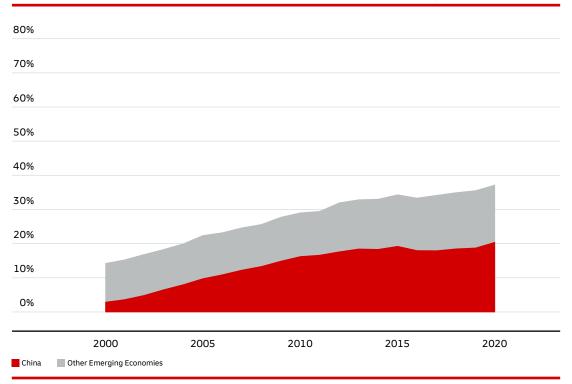
Senegal, Uganda; Three are in the Caribbean region: Guyana, Jamaica, St. Kitts and Nevis.

EMERGING ECONOMIES: INCREASINGLY COMPETING ON SOPHISTICATED GOODS

Emerging markets have traditionally been producers of raw materials, while sophisticated products were the domain of advanced economies. This has changed considerably: The figure on this page shows that emerging economies are also

becoming increasingly important exporters of sophisticated capital goods – such as industrial equipment and engines. (Given China's large role in this trend, it is shown separately from other emerging economies here.)

EMERGING ECONOMIES' SHARES OF WORLD EXPORTS OF CAPITAL GOODS, 2000 - 2020



Data Source: UN Comtrade database. Note: Measured in value terms using current U.S. dollars

These results underscore the extent to which emerging economies have become more technologically sophisticated, especially with regard to manufacturing.

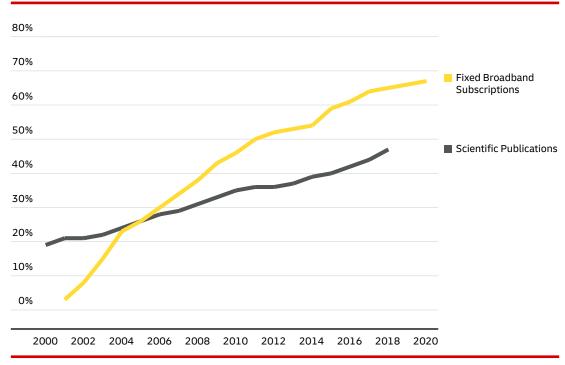
As a consequence, the rise of emerging economies is no longer as much a story about their low costs and the quantities of goods they are trading – but increasingly also about the quality of those goods and their innovative content.



This trend is also mirrored by data that show that emerging economies continue to race forward on measures of connectivity and innovation:



EMERGING ECONOMIES' SHARES OF FIXED BROADBAND SUBSCRIPTIONS AND SCIENTIFIC PUBLICATIONS, 2000 – 2020



Data Source: World Bank World Development Indicators

The chart on this page highlights two of the 50 indicators of shifts to emerging economies covered in the full report.

The Fixed Broadband Subscriptions indicator shows the proportion of worldwide fixed subscriptions for high-speed internet access that are in emerging economies.

The Scientific Publications indicator shows the proportion of scientific and technical journal articles that are produced in emerging economies.

The dramatic upgrading of the roles played by emerging economies in global trade networks – from raw material suppliers to assemblers of foreign components to manufacturers of increasingly sophisticated products – also highlights the substantial benefits countries can derive from active involvement in international trade. An influential recent study by economist James Feyrer suggests that a 10% increase in a country's trade flows raises its per capita income by more than 5%.

E-COMMERCE: SUPPORTING TRADE GROWTH

The Covid-19 pandemic caused an unprecedented surge in e-commerce sales as buyers purchased goods online, reducing in-person contact in retail stores. And forecasts suggest strong cross-border e-commerce growth will continue.

According to an UNCTAD analysis, global e-commerce sales rose from 16% of total retail sales in 2019 to 19% in 2020, and they held steady at that level in 2021. A McKinsey study pegs the global share of retail sales conducted via e-commerce at 17% in 2020.

Within the European Union, consumer adoption of cross-border e-commerce has been on the rise for more than a decade: The proportion of individuals in the EU who reported at least one online purchase from a seller in a different EU country during the last 12 months rose from 6% in 2008 to 21% in 2019. By 2021, nearly as high a proportion (18%) had ordered online from another EU country in just the past three months, and 12% had purchased from a country outside the EU.



The outlook for future cross-border e-commerce growth is strong: According to McKinsey, sales are likely to soar from \$300 billion in 2020 to roughly \$1 trillion in 2030. Under an even more optimistic scenario, cross-border e-commerce sales could reach \$2 trillion over the next decade and the cross-border share of e-commerce sales could double.



TRADE: A FORCE AGAINST INFLATION AND SUPPLY DISRUPTIONS



Trade can play an important part in responding to inflation and supply constraints. Therefore, trade growth is especially relevant in the present environment.

Several studies suggest that trade growth has contributed to lower inflation in the past, prompting warnings that a retreat from global supply chains would further increase price levels. In contrast, reductions in trade barriers could help to reduce inflation: According to one recent study, selected reductions in U.S. trade barriers could cause a one-time reduction of the country's consumer price inflation of 1.3 – 2 percentage points. Even at the low end of this range, the average U.S. household would save \$800 per year.

International trade is also a key ingredient for economic resilience: It enables countries to diversify their sources of key inputs – and the markets where they can sell their products. While trade can also transmit shocks between countries, multiple studies have shown that retreating from trade would reduce resilience.

With inflation at multi-decade highs and economies slowing down, trade's power to accelerate growth, lower prices, and diversify sources of key inputs is even more crucial for companies and countries than it was before the present wave of crises.



DHL TRADE GROWTH ATLAS & DHL GLOBAL CONNECTEDNESS INDEX

The DHL Trade Growth Atlas complements the established DHL Global Connectedness Index report series, which has been published regularly since 2011:



- The DHL Trade Growth Atlas provides a special focus on global trade in goods, with insights and analysis based on more than one million data points covering 173 countries.
- The DHL Global Connectedness Index analyzes the broader phenomenon of globalization – based on trade in goods and services, as well as worldwide flows of capital, people, and information.

Both reports provide a wealth of reliable insight, support a fact-based debate, and help separate fact from fiction about globalization.



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THE AUTHORS

Steven A. Altman is a Senior Research Scholar at the New York University Stern School of Business and an Adjunct Assistant Professor in NYU Stern's Department of Management and Organizations. Mr. Altman is also Director of the DHL Initiative on Globalization at NYU Stern's Center for the Future of Management. His research focuses on globalization and its implications for business strategy and public policy. Mr. Altman holds a PhD from the University of Reading, an MBA from the Harvard Business School, an MPA from Harvard's John F. Kennedy School of Government, and a BS in Economics from the Wharton School of Business at the University of Pennsylvania.

Caroline R. Bastian is a Research Scholar at the New York University Stern School of Business. Ms. Bastian is based in the school's DHL Initiative on Globalization at its Center for the Future of Management. Her research interests include international economic policy, data science, statistics, and data visualization. Ms. Bastian holds an MS in Applied Statistics for Social Science Research from New York University, a Master of International Affairs from Columbia University, and a BA from Pacific University.

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: **stern.nyu.edu/globalization.**



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