Appendix A
Databases used in this Report

Country-specific and firm-level databases are used in some chapters.

China Customs Statistics
China Customs Statistics cover the merchandise passing through its customs, including goods from abroad entering customs warehouses, bonded areas, or special economic zones and goods leaving these areas for shipment abroad; goods for inward or outward processing or assembling and subsequent reexportation or reimportation; goods on lease for one year or more; goods imported or exported by foreign-invested enterprises; and international aid or donations. Since 2014, duty-free goods have been included in China Customs Statistics. Since 2016, the countertrade of border residents has been included as "other" in Customs Statistics.
http://english.customs.gov.cn/Statistics/Statistics?ColumnId=7

Deep Trade Agreements
This World Bank database on the content of preferential trade agreements (PTAs) covers 189 countries and maps 52 provisions in 279 PTAs notified to the World Trade Organization and signed between 1958 and 2015. It also includes information on the legal enforceability of each provision.
https://datacatalog.worldbank.org/dataset/content-deep-trade-agreements

Developing Countries' Trade and Market Access in the European Union and the United States
Compiled by the World Bank, this database builds on existing national data sources for imports and tariffs covering the period 1997–2017: Eurostat's COMEXT and the European Commission's TARIC data sources for the European Union and the U.S. Census and U.S. International Trade Commission (USITC) data sources for the United States.
https://datacatalog.worldbank.org/dataset/developing-countries%E2%80%99-trade-and-market-access-european -union-and-united-states-introducing

Doing Business
The World Bank's Doing Business database provides objective measures of business regulations and their enforcement across 190 economies covering the period 2004–18. Economies are ranked on their ease of doing business from 1 to 190.
https://datacatalog.worldbank.org/dataset/doing-business

Economic Census (Mexico)
The Economic Census includes all establishments producing goods, sellers of goods, and service providers to generate Mexico's economic indicators at a high level of geographic, sectoral, and thematic detail. The Economic Census is conducted every five years by Mexico's National Institute of Statistics and Geography (INEGI). Data are for 1993–2013. The data are proprietary, and access requires permission from the issuing agency.
https://en.www.inegi.org.mx/programas/ce/2014

ENAPROCE (Mexico)

The National Survey on Productivity and Competitiveness of Micro, Small and Medium Enterprises (ENAPROCE) 2015 is conducted by Mexico's National Institute of Statistics and Geography (INEGI). The data are proprietary, and access requires permission from the issuing agency.

https://www.inegi.org.mx/programas/enaproce/2015/

Enterprise Surveys (Vietnam)

Since 2001, Vietnam's General Statistics Office (GSO) has conducted an annual census of enterprises operating in Vietnam. It covers all enterprises with more than 10 workers, and firms with fewer than 10 workers are surveyed. The data are proprietary, and access requires permission from the issuing agency.

https://www.gso.gov.vn/Default_en.aspx?tabid=491

Enterprise Surveys (World Bank)

The World Bank's Enterprise Surveys offer an expansive array of economic data on 140,000 firms in 141 countries covering the period 2002–18.

https://www.enterprisesurveys.org/

Eora

The Eora global supply chain database consists of a multiregion input–output (MRIO) table model that provides high-resolution input–output tables with matching environmental and social satellite accounts for 190 countries for the period 1990–2015. Eora26 is a complete global MRIO table, plus environmental satellite accounts, in a harmonized 26-sector classification. Eora is free for academic use at degree-granting academic institutions. All other users must license the data.

https://worldmrio.com/

EU-KLEMS

This database, a project of the European Union (EU), measures economic growth, productivity, employment creation, capital formation, and technological change at the industry level for all EU member states covering the period 1995–2015.

http://www.euklems.net

Exiobase

Exiobase is a global detailed multiregional environmental extended supply-use table (MR-SUT) and input–output table (MR-IOT) covering 44 countries and five rest-of-world regions over the period 1995–2011 (version 3). The data are proprietary, and access requires a license from the issuing agency.

https://www.exiobase.eu/

Exporter Dynamics Database

This World Bank database includes indicators on exporter dynamics and concentration for 70 countries based on exporter-level customs data, most commonly covering the period 2005–12 and in some cases up to 2014.

https://www.worldbank.org/en/research/brief/exporter-dynamics-database

Global Trade Alert

Global Trade Alert provides information on more than 10,000 state interventions since November 2008 that are likely to affect foreign commerce. It includes those affecting trade in goods and services, foreign investment, and labor force migration.

https://www.globaltradealert.org

GSMA Intelligence

GSMA publishes mobile operator data, analysis, and forecasts covering the performance of all 1,400-plus operators and 1,200-plus mobile virtual network operators across 4,400 networks, 65 groups, and 237 countries and territories worldwide. Full unrestricted access to all data sets, tools, and research is available by subscription.

https://www.gsmaintelligence.com

International Federation of Robotics

The International Federation of Robotics provides worldwide market data on robotics surveys, studies, and statistics. Robotics data are based on annual surveys of robot suppliers and currently cover 75 countries (about 90 percent of the industrial robots market). The data are available for purchase.
https://ifr.org/

IPUMS USA

IPUMS USA collects, preserves, and harmonizes U.S. Census microdata and provides access to this data with enhanced documentation. Data include decennial censuses from 1790 to 2010 and American Community Surveys since 2000.
https://usa.ipums.org/usa/

Large and Medium Manufacturing Industry Survey (Ethiopia)

This census of large and medium manufacturing industries is conducted by the Ethiopian Central Statistical Agency and includes establishments with at least 10 employees. It covers the period 1996–2017. The data are proprietary, and access requires permission from the issuing agency.
http://www.csa.gov.et/survey-report/category/17-large-and-medium-manufacturing-industry-survey

Penn World Table

The Penn World Table (PWT) contains information on the relative levels of income, output, input, and productivity worldwide. To date, 10 releases are available, differing in their country and period coverage. The most recent, the PWT 9.1 version, covers 182 countries over the period 1950–2017.
https://www.rug.nl/ggdc/productivity/pwt/

Pew Research Center

The Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes, and trends shaping the world. It conducts public opinion polling, demographic research, media content analysis, and other empirical social science research. The center does not take policy positions. It is a subsidiary of the Pew Charitable Trusts.
https://www.pewresearch.org/

Producer and Consumer Support Estimates

Agricultural policies address a wide range of issues, including providing sufficient food at reasonable prices for consumers, ensuring food safety, and improving environmental quality. The Organisation for Economic Co-operation and Development (OECD) has developed agricultural support indicators that, despite this diversity, express policy measures with numbers in a comparable way across OECD and other countries covering the period 1986–2017.
https://www.oecd.org/countries/ukraine/producerandconsumersupportestimatesdatabase.htm

Regional Trade Agreements

The Regional Trade Agreements (RTAs) database was launched in 2009 as part of the Transparency Mechanism for RTAs of the World Trade Organization (WTO). It was developed and is maintained by the RTA Section of the WTO Trade Policies Review Division. The database is a repository of the legal texts and annexes of all RTAs notified to the WTO, preferential tariff and trade data provided by RTA parties, and other related documents. It currently covers 219 countries/territories over the period 1948–2019.
https://rtais.wto.org/UI/PublicMaintainRTAHome.aspx

Services Trade Restrictions Database

This World Bank database provides comparable information on services trade policy measures for 103 countries, five sectors (telecommunications, finance, transportation, retail, and professional services), and key modes of delivery (modes 1, 3, and 4). The data are based on surveys that were mostly conducted in 2008.
https://datacatalog.worldbank.org/dataset/services-trade-restrictions-database

TiVA

The Trade in Value Added (TiVA) database, compiled by the Organisation for Economic Co-operation and Development (OECD), considers the value added by each country in the production of goods and services that are consumed worldwide. The latest (2018) release covers 64 economies over the period 2005–15 for 36 industries at the International Standard Industrial Classification Revision 4 (ISIC Rev. 4) level.
https://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm

UN Comtrade

UN Comtrade is a repository of official international trade statistics and relevant analytical tables. All data are available through the API portal.
https://comtrade.un.org

UN Trade Statistics

This United Nations database covers international merchandise trade statistics, trade in services, and tourism statistics.
https://unstats.un.org/unsd/tradekb/default.aspx/

UNCTAD-WB Nontariff Barriers

This joint United Nations Conference on Trade and Development–World Bank database includes ad valorem equivalents (AVEs) of nontariff measures (NTMs), defined as the uniform tariffs that have the same trade impacts on the import of a product because of the presence of the NTMs. AVEs are available for 40 import-ing countries, as well as for the European Union and 200 exporting countries at the cross-sectional level. The AVE estimation is based on data in the World Bank's World Integrated Trade Solution and World Development Indicators databases.
https://datacatalog.worldbank.org/dataset/ad-valorem-equivalent-non-tariff-measures

U.S. Census

The mission of the U.S. Census Bureau is to serve as the United States' leading provider of quality data about its people and economy.
http://census.gov

WDI

World Development Indicators (WDI) is the primary World Bank collection of development indicators, compiled from officially recognized international sources. It presents the most current and most accurate global development data available and includes national, regional, and global estimates for 216 economies over the period 1960–2018.
https://datacatalog.worldbank.org/dataset/world-development-indicators

WIOD

In the 2013 World Input–Output Database (WIOD), the World Input–Output Tables and underlying data cover 40 countries and a model for the rest of the world for the period 1995–2011. Data for 35 sectors are classified according to the International Standard Industrial Classification Revision 3 (ISIC Rev. 3). The tables adhere to the 1993 version of the System of National Accounts. In the 2016 WIOD database, the World Input–Output Tables and underlying data cover 43 countries and a model for the rest of the world for the period 2000–2014. Data for 56 sectors are classified according to the International Standard Industrial Classification Revision 4 (ISIC Rev. 4). The tables adhere to the 2008 version of the System of National Accounts. This is a collaborative project led by researchers at the University of Groningen.
http://www.wiod.org/home

WITS

The World Bank's World Integrated Trade Solution (WITS) database provides access to international merchandise trade, tariff, and nontariff measure data.
https://wits.worldbank.org/about_wits.html

Women, Business, and the Law

Women, Business, and the Law is a World Bank Group project collecting unique data on the laws and regulations that restrict women's economic opportunities. The data offer objective and measurable benchmarks for global progress toward gender equality and cover 187 economies over the period 2009–18.

https://datacatalog.worldbank.org/dataset/women-business-and-law

World Bank Group–LinkedIn Digital Data for Development, Jobs, Skills, and Migration

These data sets cover four categories of metrics: (1) industry employment shifts, (2) talent migration, (3) industry skills needs, and (4) skill penetration. LinkedIn and the World Bank Group plan to refresh the data annually at a minimum. The data sets cover 140 economies and the period 2015–18.

https://datacatalog.worldbank.org/dataset/world-bank-group-linkedin-dashboard-dataset

World Economic Outlook

The World Economic Outlook (WEO) database of the International Monetary Fund (IMF) contains selected macroeconomic data series from the statistical appendix of the *World Economic Outlook* report, which presents the IMF staff's analysis and projections of economic developments at the global level, in major country groups, and in many individual countries. The WEO is released in April and September/October each year, is available for the period 1980 to the present for 194 economies, and also includes forecasts.

https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/index.aspx

World Telecommunication/ICT Indicators

Sponsored by the International Telecommunication Union (ITU), the United Nations specialized agency for information and communication technologies (ICTs), the World Telecommunication/ICT Indicators database contains time series data for the years 1960, 1965, 1970, and annually from 1975 to 2018 for more than 200 economies and 180 telecommunication/ICT statistics.

https://www.itu.int/en/ITU-D/Pages/About.aspx

Worldscope

Worldscope, under the auspices of the University of British Columbia, offers fundamental data on the world's leading public and private companies, including annual and interim/quarterly data, detailed historical financial statement content, per share data, calculated ratios, and pricing and textual information. It covers over 80,000 companies across more than 120 countries and the period 1980 to the present. The data are proprietary, and access requires permission from the issuing agency.

http://resources.library.ubc.ca/page.php?id=2165

WTO I-TIP

The World Trade Organization's Integrated Trade Intelligence Portal (I-TIP) provides a single entry point for information compiled by the WTO on over 25,000 trade policy measures. I-TIP Goods provides comprehensive information on nontariff measures applied by WTO members to the merchandise trade. I-TIP Services, a joint initiative of the WTO and the World Bank, is a set of linked databases that provide information on members' commitments under the WTO's General Agreement on Trade in Services (GATS), services commitments in regional trade agreements, applied measures in services, and services statistics.

https://www.wto.org/english/res_e/statis_e/itip_e.htm

Appendix B
Glossary

advanced manufacturing and services GVC. A country is part of an advanced manufacturing and services global value chain if it exports a high share of manufacturing and business services and has high backward GVC integration (see box 1.3).

agribusiness or agrifood. The business of agricultural production and food processing.

backward GVC participation. Importing inputs to produce goods or services that are exported.

commodities GVCs. A country is part of a commodities global value chain if it predominantly exports commodities produced by agriculture and mining and has a small share of manufacturing exports and limited backward GVC integration (see box 1.3).

co-movement. The common movement of two or more entities.

deep integration agreement. Trade agreement that not only contains rules on tariffs and nontariff trade restrictions, but also regulates the business environment in other ways. Issues of deep integration include competition policy, investor rights, product standards, public procurement, and intellectual property rights.

exchange rate elasticity of exports. The percentage increase in exports associated with a 1 percent change in the exchange rate. It is a measure of the responsiveness of exports to changes in currency value.

forward GVC participation. Exporting domestically produced inputs to partners for the production of goods or services that they export.

global production network. An organizational arrangement comprising interconnected actors coordinated by a global lead firm and producing goods or services across different countries and regions.

global value chain (GVC). The series of stages required to produce a good or service that is sold to consumers, with each stage adding value and with at least two stages conducted in different countries.

GVC activities (or stages). The activities required to produce a good or service in the context of a global value chain. Spread across several locations, these activities span the conception of the good or service to its end use and include research, design, production, marketing, and distribution.

GVC intensification. An increase in the participation of a country, sector, or firm in a global value chain.

GVC participation (or integration). The engagement of a country, sector, or firm in at least one stage of a global value chain. Overall participation may take the form of two broad types: backward or forward participation.

innovative activities GVC. A country is part of an innovative activities global value chain if it has high backward GVC integration, spends a large share of its GDP on research and development, and receives a large share of GDP from intellectual property (see box 1.3).

lead firm. A firm that is the hierarchically dominant actor within a global value chain.

limited manufacturing GVC. A country is part of a limited manufacturing global value chain if it exports a limited set of manufacturing products, often alongside commodities exports, and has medium backward GVC integration (see box 1.3).

production fragmentation. The distribution of the production process across different countries and regions.

relational GVC. A global value chain in which actors are engaged in long-term firm-to-firm relationships rather than anonymous spot market transactions.

sticky or rigid GVC relationship. A business relationship within a global value chain that is not easily changed. For example, it can correspond to a trade flow involving a supplier trading a product that is precisely customized for the buyer and for which the buyer cannot easily find another supplier.

trade diversion. The process of diverting trade from a more efficient exporter to a less efficient one by means of a free trade agreement or a customs union. For example, when two countries sign a trade agreement, they could reduce their imports from the rest of the world and source their imports from each other. To the extent that this strategy of import reallocation has been triggered by the trade agreement, it can be considered a trade diversion.