



Institute of World Economics and Politics, CASS

Research Center for Hongqiao International Economic Forum



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World Openness Report 2021

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Let the Light of Opening-up Shine the Way Forward of Mankind

The history of human development has unequivocally shown that **opening-up is the only way for a country to achieve prosperity and development, a key step to its solution of contemporary problems, and also the fundamental driving force for the progress of human civilizations**. Since 2020, however, the global spread of the novel coronavirus pandemic has increased the anti-globalization momentum that had appeared since 2008, featuring higher anti-globalization voices and more frequent actions against opening-up. The world is at a crossroads. Should we move forward or backward? Should we open up or close our doors? Should we stay together to go through hard times or adopt a *beggar thy neighbor* policy? How to solve these questions is ralated to the real interest of each country, the common well-being of the world, and the future of the mankind.

I. History as a Mirror

Seen from the long history of the world economy, although all countries have experienced ups and downs in their development, opening-up has remained the driving force for human societies to move forward and the fundamental source for their progress.

Economic prosperity comes from opening-up to the outside world. As economic historian Angus Maddison argues in his book *The World Economy: A Millennial Perspective*, trade and capital flow are an important factor behind the social and economic growth of mankind. From Antwerp in the 16th century to Amsterdam in the 17th century, then London in the 19th century and ultimately New York in the 20th

century — foreign trade that has arisen as a result of the tapping of new trade routes had been closely related to the prosperity of these regions.

Interchange of ideas benefits greatly from opening-up to the outside world. On the ancient Silk Road, there were monks reciting scriptures and missionaries holding *Bibles*. Without learning from each other between the East and the West, China's ancient Four Great Inventions would not have found its way through the Eurasia to arrive in the West and Europe would not have started using movable type printing in 1456 to print the first book, *Gutenberg Bible*, and give rise to Western modern civilization. In the same vein, such Western ideas as science and democracy have helped accelerate the process of modernization in China and the East.

The mega-trend of peace benefits from opening-up to the outside world. As French economist Frederic Bastiat has said, when goods don't cross borders, soldiers will. The three Anglo-Dutch wars in the 17th century and the American Revolutionary War in the 18th century were all related to trade. The frequent wars between Ming Dynasty and the Northern Yuan Dynasty had gradually come to an end in North China once the border trade market, called *Quechang*, started operation, which brought about peace in the border areas. The establishment of the European Common Market has played a crucial role in putting an end to the internal divisions and conflicts in the continent that had last for centuries. And in the post-World War II era, the continually increasing flow of goods has become the ballast stone of world peace.

As they search for the law of historical evolution, economists have always taken openness as a major topic to study. In *Wealth of Nations*, which is the *magnum opus* of classical economics, Adam Smith argued that division of labor is the cause of greater increase in production than any other factor and described the relationship between absolute advantage and free trade. Later, David Ricardo put forward the theory of comparative advantage, which serves as the foundational principle in the theory of international trade. After that, modern economists continue to improve the theories of economics, hence came the Heckscher-Ohlin Theory, which emphasizes the importance of factor endowments for international division of labor. Meanwhile, Stephan Hymer developed the monopolistic advantage theory and came to be known as the father of foreign direct investment theory. On the basis of learning from other theories, John H. Dunning explained the eclectic theory of international production and investment development path theory and expounded the law of globalized production development. Economists in different times have successively elaborated on the global trends of division of labor, market, goods and factors, which are valuable as they reflect the different features of their times.

Some other disciplines have also provided strong support for the openness theory. For example, the law of entropy in physics states that an open system can continually exchange energy with the outside world, causing decrease in entropy and leading to health and order; on the contrary, a closed system causes entropy increase and evolves toward disorder and dying out. Therefore, openness leads to free flow of goods, capital, personnel, knowledge and information around the world. The result is naturally that openness brings progress while closedness is set to make a country lag behind.

In terms of both theory and practice, the market economy, in essence, is an open economy and the global market economy is an open system, which is both an irrefutable fact and good expectations for the future. With great foresight, Karl Marx and Friedrich Engels said that "the bourgeoisie has through its exploitation of the world market given a cosmopolitan character to production and consumption in every country", and "by creating the world market, big industry has already brought all the people of the Earth, and especially the civilized people, into such close relation with one another that none is independent of what happens to the others". In modern world, not only production and consumption are open in nature; spirituality and culture are also open. Even the all-round development of human being is also a product of an open world.

II. Questions of the Times

Sunlight and shadow always co-exist. When a pushing force occurs, there is always a resisting force. Economic globalization is an irreversible historical trend, but it is also accompanied by anti-globalization forces. It is because, on the one hand, the fast scientific and technological development and the deepening of market division of labor have accelerated development of production, leading to stronger momentum for acceleration of globalization; on the other hand, the global development imbalance and widening wealth gap, coupled with a lack of an effective global economic governance mechanism, have led to increasing resistance to globalization. Meanwhile, some countries have benefited from globalization. However, due to their ignorance of wealth gap and inefficient domestic policy adjustments, their reform of of production relations has lagged beind the development of productivity and their "superstructure" has failed to accommodate their new "base", thus leading to the resurgence of nationalism and populism, which has strengthened the anti-globalization tide.

Since 2020, in particular, the novel coronavirus pandemic has spread all over the world, which has battered global production, weakened global demand, disrupted global supply, industrial and value chains, leading to rising systemic risks. A number of countries have shifted their focus inward and the localization, regionalization, securitization trends have become increasingly apparent; unilateralism and protectionism have intensified; isolationism and scapegoating have become a normality; all these have threatened free trade and the globalization process. Today's world is undergoing great changes that have not been seen in a century, in which countries have faced common challenges and lost direction. People of vision cannot help but ask: **Should globalization move forward or backward? Should countries join hands or give up cooperation? And should any individual country, or humanity as a whole, be given priority?**

All countries are searching for answers that they think are the best to those questions. Some think the answer lies in sharing, and others think it lies in exclusiveness. Some think Pareto optimality is the best answer, and others prefer self-optimality. Some think humanity as whole should have priority over any specific country, while others think just the opposite. China has also positively offered its solution. In 2013, China's President Xi Jinping proposed the China plan of building an *open world economy*. In 2017, Xi put forward the idea of charting the right course for economic globalization at the Davos World Economic Forum. In 2020, he proposed strengthening comprehensive international cooperation at the G20 Summit, which reflects China's broad-mindedness in advocating the idea of helping each other and taking the whole world as one family.

Torches can light each other. Facing the anti-glalization tide, only when all the countries make efforts to broaden consensus, strengthen confidence, and take positive actions can they meet each other halfway and weather the trying times. The international community needs to increase support for globalization while overcoming resistence to it. To that end, it should adopt a two-pronged approach. At the *international* level, openness cooperation should be strengthened among different countries to push forward equitable global economic governance and make it more development-oriented, putting emphasis on both development itself and distribution of development results. At the *national* level, countries should shoulder their own responsibilities and make efforts to solve their domestic problems; they should strengthen macroeconomic regulation and increase transfer payment to narrow domestic wealth gap and become more willing to and capable of participating in economic globalization.

All countries have the responsibility to contribute to historical progress of mankind and jointly promote the "double balance"—domestic development balance and global development balance. Those who take a wait-and-see attitude, those who scapegoat others, and those who adopt a beggar-thy-neighbour policy will lose the world and eventually lose themselves. Those who take actions, those who are brave in shouldering their due responsilities, and those who not only establish themselves but also help others grow and improve will achieve development and benefit the world.

III. Development Trends of the World

"Practice enriches knowledge. More knowledge leads to better practice." We are launching the *World Openness Report*, based on our special research, to review history, summarize what has happened, and look ahead to the future in an attempt to try to offer a panoramic view of the world's opening-up trend, weigh the global opening-up pace, analyze the difficulties of opening-up and development, and propose solutions to promoting open-up and sharing. It aims to help form a consensus on expanding global opening-up, gather positive energy of freedom and opeing-up globally, and give rise to a benign "self-fulfilling prophecy".

The World Openness Index is the basis and core component of this report. How to describe the level of openness of each economy and the world economy as whole, analyze their trends, explain their causes, and explore their influence has always been the focus of attention of the political, business, academic circles and the public. Based on the wisdom and achievements of colleagues from all over the world, we researched, compiled and released this index. **The purpose of compiling it is to measure the** openness of national economies, raise awareness of the expansion of openness of the world, provide forward-looking opening-up policy guidelines, jointly build an open world economy, promote the positive evolution of globalization, and commit to building a more open, more inclusive, joint governance-based, sharing-based, peaceful and prosperous world.

The innovation of the index lies in its methodology. It takes into account reasons and results of opening-up, and uses expert survey methods to give weights to opening-up up policy and performance. While at the same time, it also takes into account both domestic opening-up and opening-up to the outside world, and coordinates both entry and exit of factors, so that it can have high representativeness and broad application prospects. The measurement scope of the index: It has two dimensions; one is opening policy, and the other is opening results or performance. It has a total of 5 sub-indicators and 29 specific indicators, covering cross-border openness in the economic, social and cultural fields in 129 economies over the 2008-2019 period.

The results of this index give us some outstanding enlightenments. Economic growth is significantly positively correlated with development of openness. The higher the level of economic development, the higher the degree of openness. If appropriate policies are adoped, then the more open the economy is, the more developed it would be, and vice versa. This is a clear proof that openness can "unclog arteries" to allow the world economy to prosper. It is also a warning that isolation will cause "stagnation of vital energy and blood stasis", with the world economy stuck in difficulties.

— In terms of *level* of openness, the openness of a economy changes in accordance with its stage of economic development, especially in its high-income stage of development, where the openness index line closely matches the per capita income trend line, and the relationship between the two tends to be more stable. In 2019, the top 10 most open economies are all developed economies, with Singapore at the top of the list, followed by Germany, Hong Kong, SAR, Ireland, the United Kingdom, Switzerland, the Netherlands, France, Canada, and Malta.

— In terms of *trend* of openness, the openness index has largely begun to decline since the end of the 2008 financial crisis before rising in 2013, and then it fell again significantly. The openness index of most economies has risen, while that of some economies, especially some advanced economies, has fallen sharply. From 2008 to

2019, 102 out of 129 economies, or 79.1%, had achieved a higher level of openness. However, some of the other economies, especially some advanced economies witnessed big decreases in their openness. For example, the openness of the United States decreased by 17.8 percent.

— In terms of *regional* openness, Europe and Central Asia have the highest level of openness, followed by North America, East Asia and the Pacific Region, Latin America and the Caribbean (LAC), the Middle East and North Africa, South Asia, and Sub-Saharan Africa. From 2008 to 2019, The Americas fell back in term of openness, of which the openness index of North America decreased by 16.3 percent. However, the openness of other regions had been expanding, offsetting the decline in Americas.

— In terms of openness *appropriateness*, the optimal openness is reflected in balanced openness, that is, the degree of openness of a country should match its basic national conditions and development stages. For example, the openness index of developed countries should at least reach 0.75 as the optimal degree of openness, while that of developing countries would be deemed high if it can fall between 0.6 and 0.7. There are both opportunities and challenges as a result of openness expansion. If a country wants to gain from its openness, it needs to strike a balance between its level of openness and development level, between pace of opening-up and competitiveness improvement, between capabilities of opening-up and ability to shoulder its due responsibility, and between gains from opening-up and inclusiveness and sharing; a "golden junction" should be pursued in different periods and at different levels of development.

At present, interests of different countries have been increasingly divided, trade liberalization has suffered setbacks, free flow of capital has been blocked, the international economic and trade rules have become fragmented, the global governance system has lagged behind the times, and multilateralism and trade and investment liberalization have faced challenges. This report has tried to study the above-mentioned issues with a long historical lens focusing on the "great changes unseen in a century" and come to the conclusion that **the common prosperity of the world would not become a reality without common opening-up; the world has a great potential in opening-up, and an opening-up featuring "harmony in diversity" should be promoted; major powers should take the lead in opening-up and take pro-active** **steps to carry the banner of global opening-up**, so that the world can step out of the "prisoner's dilemma" to achieve stable and long-term opening-up.

— Developed economies should be tolerant and inclusive, deal with their internal affairs in an innovative fashion, and play an exemplary role as they carry out opening-up. As an old saying has it, "the one who complains about fault of others would not fare well, and the one who blames himself for an undesirable situation would fare smoothly." The advanced economies should look inward at their own problems instead of scapegoating others if they want to overcome their economic development predicament. They should make use of their internal restructuring to root out the problem of unbalanced development, take a leading role in promoting the openness of the world, and use their own openness to drive the process of global openness.

— Emerging economies need to rely on innovation and cooperation, economic restructuring and upgrading, and greater emphasis on sharing to promote their opening-up. They need to continue to tap the potential of North-South openness cooperation, rely on technological progress and industrial upgrading, cultivate dynamic comparative advantages, promote high-quality development with greater openness, overcome the "middle-income trap", and shoulder more appropriate and reasonable international responsibilities.

— Developing countries should take a path of opening-up based on their national conditions, actively participate in the process, and make good use of their strengths while solving their existing problems. They should commit to folstering of opening-up capacities. While they rely on "blood transfusion" (external support), they should also make more efforts to improve their ability to develop independently to get rid of their dependence on the existing development patterns and bring out their strength to integrate into the global market network and strive for greater international development space.

"If you are open to each other, you will progress together, and if the border is closed, all will regress." The development predicament of the world is not caused by opening-up. On the contrary, it requires greater opening-up to overcome it. The general direction of economic globalization has not changed; rather, the economic globalization has entered a new stage, where it undergoes adjustments and build up momentum, before starting to move forward again. This is not only a prediction, but also a vision. It is the only way for the world to get out of the

zero-sum game and move toward a virtuous circle of development.

IV. China's Path

China has swayed between opening-up and closed-door policies during the past 180 years. It had shut its door to the outside work at the end of the Qing Dynasty and was bullied by Western powers. Then it had explored multiple ways of stepping out of the difficulties, until the founding of the People's Republic of China in 1949. After that, it had suffered from blockage from Western powers and isolated itself from the outside world, before it initiated the "Reform and Opening-up" drive after the 3rd Plenary Session of the 11th CPC Central Committee. In 2001, it joined the WTO, starting its institutional Opening-up. China's historical vicissitudes have proved that "Opening-up is a key move for China's development." Today, China has made breakthroughs and substantial progress in integrating into the world economy. Since the 18th CPC National Congress in 2012, China has been very inclusive in adapting to international economic and trade rules and further integrated into the process of globalization, thus embarking on a new journey that is led by concept of opening-up and development and marked by the Belt and Road Initiative, free trade areas and ports, and the Shanghai International Import Expo.

China has, whenever it comes to a critical juncture in history, made efforts to eliminate many obstacles and resolutely and unswervingly opened up to the outside world. This can be seen throughout the country's Opening-up history, whether in its decision to "open up the country for construction" more than 40 years ago, or its decision to take the path of market economy nearly 30 years ago; whether its decision to join the WTO nearly 20 years ago, or its decision to promote higher-level Opening-up to the outside world today. **China's opening-up to the outside world features "commonality", which is reflected by its integration into the economic globalization and world economy; at the same time, it also features "diversity", which is reflected by its opening-up pace based on its development stage and national conditions. It is an independent opening-up to the outside world has inherited the cultural genes of openness and tolerance in the Chinese civilization, advocating philosophies such as harmony in diversity, helping others while establishing** oneself, harmony of all nations, and the whole world being a family. China's future opening-up will exclude zero-sum game, promote well-being of all nations, encourage exchanges and mutual learning, and advocate all nations cherish their own culture and values and join hands to build a harmonious world.

China's opening-up has been based on its efforts to actively learn from the West without blindly copying its model and actively participate in globalization without ignoring its own national conditions. It has opted to build a market economy without deviating from socialism, and integrate into the world without failing to stick to its own path. Therefore, China has taken a path that combines independent development and opening-up in an appropriate manner. It has strengthened the integration of internal and external links to quickly transform pressure arising from Opening-up into a driving force for reform, and made use of the external pressure to help domestic development and promote its own interest. In this way, it has embarked on a road of combing internal Reform and Opening-up to the external world in an appropriate manner. China has made efforts to promote global openness through carrying out its own opening-up, which is a reflection of the philosophy that when a country develops, it should also play its role in promoting global development. By promoting its own development to contribute to the world, China has found a way to combine its own development and that of the world in an appropriate manner, which reflects the successful interaction between the world's general development and China's own national conditions.

China's initiative to open up to the outside world has led the country to become an important beneficiary of globalization; moreover, it has also made China an important contributor to globalization. China's opening-up has provided the world economy with stronger growth momentum, contributing more than 30% of the world's economic growth, thus becoming a main stabilizer and driving force for the world economy. China's opening-up has ensured that the global development is more inclusive, adheres to multilateralism and common development, and is committed to allowing different countries, different classes, and different groups of people to share the benefits of economic globalization. China's opening-up has improved fairness of global governance. It has contributed China wisdom to the building of a fairer and more equitable international economic order on the international arena, such as the WTO, the Group of Twenty (G20), and the BRICS. China's door to opening-up will

open wider and wider. On its new journey of building a socialist modern country in an all-round way, China has adapted to the new situation and requirements and proposed the building of a new development pattern of "dual circulation", in which domestic and foreign markets reinforce each other, with the domestic market as the mainstay. This is by no means a closed domestic circulation, but a more open "dual circulation" featuring focus on both domestic and international markets. Such a new pattern will not only cater to China's own development needs, but also bring more benefits to people of other countries.

Today, China is embracing a new historical starting point, which will also mark the start of deepening interaction between China and the outside world, with China pursuing higher levels of opening-up to the outside world. Given the starting point, we have, based on China's new development stage, its implemention of the new development philosophy, and its building of a new development pattern, put forward some predictions and suggestions on promotion of a higher level of openness and highquality development. In the future, China and the outside world will engage in mutual learning, and have an increasing influence on each other. How to bring out its open and inclusive national endowment, accomplish the great task of national rejuvenation while the world is going through major changes unseen in a century, promote the domestic and international "dual circulation", and achieve a benign interaction between China and the outside world — It requires us to get united and make utmost efforts to accomplish those tasks.

Today, what the world needs is a firm belief in openness, inclusiveness, and win-win cooperation; what it needs is benign rather than ill-will predictions; and what it needs is openness, cooperation and self-fulfilment, not self-fulfilment of a "New Cold War" or Thucydides's trap. We hope that the annual release of the *World Openness Report* can stimulate deeper thinking, gather more consensus, form greater synergy, promote expansion of openness of all countries in the world, improve people's living standards, better ensure world peace, and allow our human society to join hands to improve the well-being of the whole world.

Chapter I World Openness Index: Concept and Theories

Modern civilization has continually grown amid opening-up and exchange of ideas among different countries. A country decides its own level and path of openness based on its own national conditions and stage of development. From a historical perspective, opening-up is the only way to achieve national prosperity and development, a key to solving development problems of the times, and the source of forces driving the progress of human civilization. Over the past few decades, the entire world has become increasingly integrated, and open-up and development have become a basic consensus. Description of the degree of integration of the world economy, analyzing its trends, analysis of its causes and trends, and exploration of its impact are important issues to which scholars, politicians and the public have paid much attention.

I. Concepts of Openness

In the existing literature, the basic meaning of opening-up to the outside world is clear and consistent, that is, the specific entitiess of at least two economies carry out exchanges at the economic, social and cultural levels to form the flow of goods, services, personnel, capital, information, knowledge and technology, so as to promote their respective development. However, when it comes to the denotation of the concept of opening-up to the outside world, there have been multiple definitions in various documents.

The subjects of opening-up to the outside world can be divided into three levels. One is the subject at the macro level, which refers to a specific economy (that is, a country or territory) or region (including at least 2 economies) based on geographic scope, territorial or sovereign connotations, such as opening-up between economy A and economy B, between East Asia and South Asia, and between Asia and Europe, for example. Second, it refers to the subject at the meso -level, which mainly refers to the institutional sectors that make up the national economy, such as government departments (including non-profit institutions serving households), non-financial corporates, financial sub-sectors, and households; China's financial sector opening-up as an example is at this level. Sometimes it also refers to industrial sector (general or detailed classification) or administrative level (such as province, city, county, and so on), such as the opening-up of China's service industry or the opening-up of Beijing. Third, it refers to subject at the micro level, mainly corporates and individuals, such as China's Huawei investing in Europe, and foreign citizens studying or traveling in China. Accordingly, each type of subject has its own way to open up to the outside world. They are not independent of each other; there are top-down cross-nesting and bottom-up intersection and summation relationships among those three levels. The subject of opening to the outside world mentioned in this report mainly refers to the macro-level economy, that is, the specific national economy. This means that the openness index takes the entire economy as the basic unit of observation. The subjects at the meso level and micro level have not been included in the current focus of this report.

The objects of opening-up include major opening-up categories, such as economic, political, social and cultural opening-up, among which the most common in existing relevant literatures are cross-border economic opening-up, cross border social opening-up, and cross-border cultural opening-up. Considering the sovereignty and internality characteristics of political opening-up, it is seldom defined and discussed in existing literature. Cross-border opening-up, especially cross-border economic opening-up, is closely related to some well-known concepts, the most important of which include globalization, regionalization, and internationalization; they also include interconnectivity, interdependence, degrees of freedom, and so on.

There are a vast array of related papers discussing the definition, nature, origin, and timeline of globalization, and many politicians, business leaders, international institutions and scholars have had various descriptions of globalization. The primary key word of globalization is "global", which refers to the entire earth, at least most countries and regions on most of the continents; the second is "transformation", that is, the trend of particular changes. "Globalization" encompasses the trend of cross-border opening-up and exchanges, which spread from a small number of countries and regions to a large number of countries and regions on multiple continents. Opening-up and exchanges limited to a certain continent or among a small number of countries and regions on a few continents are not globalization, but regionalization.

In most cases, *globalization* has actually been regarded as synonymous with "economic globalization", and typical definitions are as follows. First, economic globalization refers to the continuous internationalization of markets. The *market* here is in its broad sense, including commodities (goods and services), enterprises and industries, technology and competition. Second, economic globalization refers to the ever rising levels of interaction and penetration of human economic activities, including materials (goods, services, labor, capital, and technology, among others), system and concept. Meanwhile, economic globalization has always been accompanied by controversy, whether it is about its origin, development process, or various gains and losses. Those who support globalization and those who are opposed to it have been violently debated over this issue for at least 20 years, and such debate has become even more fierce since the 2008 global economic crisis.

Internationalization is a trend of open exchanges between countries or regions — at least between two countries or regions (it does not need to be clarified if more than two countries and regions are involved). Of course, if a large number of countries and regions concerned are in a particular region (such as East Asia) of a particular continent, it can be defined as *regionalization*. If exchanges are among many countries or regions on multiple continents, then it can be defined as *globalization*.

The primary aspect of the connotation of globalization, regionalization and internationalization is the *extensity* or *breadth* of cross-border opening-up, rather than its *intensity* or *depth*. However, existing related indexes mainly measure the strength or depth of cross-border opening-up, leading to a dislocation of related concepts and connotations.

Box 1-1 Other Concepts Related to Cross-border Opening-up

1. Connectedness and interconnectedness

Connectedness refers to the degree of connectivity and smoothness between a country and the outside world, which can be described as participation in the international flow of products and services, capital, information, and people. Connectedness across the globe is global connectivity, and the corresponding concepts, naturally, are regional connectedness and local connectedness. In the Global Connectedness Index developed by DHL, globalization refers to global connectedness, that is, the concentration of relationships across borders: if there are more smaller countries in a country's international connectedness, the level of globalization will be lower; otherwise, it will be higher; and it has nothing to do with location or geographic distance.

Another related concept is *interconnectedness*. From the perspective of English etymology, interconnectedness is subordinate to connectedness. Generally used in the term "interconnected economies", it mainly refers to the mutual economic links between different countries, including the international flow or dissemination of commodities, finance (including investment), labor, and information (especially knowledge).

2. Interdependence

Interdependence has been popular in the world economy since the early 1980s. It refers to the interdependence between a country and other countries through trade, currency and finance (including capital), and debt financing. "Other countries" can be further defined in different geographical scopes. Whether the dependency relationship between different countries is symmetric has not been made explicit in this term. In fact, there is asymmetric dependence or imbalance, which has attracted widespread attention many years ago in the field of world economy, especially international trade.

3. Freedom

Freedom or degree of freedom mainly refers to the power distribution between different subjects and its trend at the meso level or micro level, especially the power distribution between the government and other subjects and its trend. Taking into consideration the specific fields of freedom, freedom-related concepts include economic freedom and political freedom. The Index of Economic Freedom (IEF) developed by the Heritage Foundation of the US refers to economic freedom as the basic right of every one to control their own labor and property: in an economically free society, individuals can work, produce, consume, and invest so long as they want to; the government allows labor, capital, and goods to flow freely, and does not force or restrict freedom beyond the scope necessary to protect and safeguard freedom itself. Both the Human Freedom Index (HFI) and the Economic Freedom of the World (EFW) Index, developed by the Fraser Institute in Canada, state that "individuals have economic freedom in the following circumstances: Property they have obtained not by force, fraud or theft is protected from violations by others, and they have the freedom to use, exchange or give it to others, as long as these actions do not infringe upon the same rights of others. Therefore, when there is voluntary exchange, competition, personal choice and property protection, there will be economic freedom. These two economic freedom indexes measure freedom at the micro-individual level. Obviously, the degree of freedom discussed here refers to the freedom of choice within a country or an economy.

Another related concept is *liberalization*, that is, the trend of the government loosening regulation of corporate behavior (See Smith, 2020°). This concept is sometimes related to the relaxation of laws related to social affairs, but it is most often used as an economic term, especially one that refers to reducing restrictions on international trade and capital. Obviously, liberalization includes both internal and external relations. Freedom related to opening-up to the outside world mainly refers to the distribution of power between local entities of a specific economy and foreign entities (overseas government, non-financial enterprises, financial enterprises, households, or a consortium of these entities). This is only a small part of the denotation of freedom as mentioned above, that is, cross-border freedom. Cross-border liberalization has played a central role in stimulating large-scale growth in international trade, foreign direct investment, foreign portfolios. However, companies in rich countries use cross-border liberalization policies to exploit workers in poor countries not only because the market is actually neither free nor fair, but also because rich countries cheat in the game of exporting to the rest of the world (Smith, 2020).

II. Theory of Opening-up to the Outside World

Among all the global practices so far, economy is the most important field of

① Smith, N (2020). Liberalization. *Encyclopaedia Britannica*, online edition.

opening-up to the outside world, and that of society, culture and politics are relatively secondary field of opening-up. Therefore, this report mainly focuses on cross-border economic opening-up while also analyzes cross-border social and cultural opening-up by putting them in the context of cross-border economic opening-up. This is because even if cross-border opening-up can be clearly divided into economic, cultural, social, and political opening-up, each of these four fields remains very complicated; therefore, they must each be analyzed thoroughly, a task that still faces huge and even insurmountable difficulties. In particular, the definition of cross-border political opening-up and the optimal form of interaction between political opening-up and domestic and foreign economic, cultural, and social opening-up remains to be studied in depth.

Economic opening-up, as a term, first appeared in the literature of comparative political economy in the early 1980s. However, as an idea, the history of economic opening-up is much longer, especially in the field of international economics. In Western economics, the history of studying the causes and effects of open economy can be traced back to the 18th century, and, at that time, it occupies an important position in the works of classical economists, such as Adam Smith and David Ricardo. These classical economists focused on the impact of international trade on the domestic economy and the positive and negative effects of free trade. Initially, the focus of their measurement was put on exchanges of commodities and currency exchange rates; at present, it is more on the impact of economic open-up on the domestic economic system.

According to traditional methods of measurement, generally speaking, the economic opening-up of an economy is negatively related to its size, especially its size of population: large countries tend to produce more for the domestic market, which, in the past, would lead to economic self-sufficiency through protection. These protections have been eased through the development of international governance (such as GATT and WTO; Keman, 2020⁽¹⁾). In the history of Chinese thought, the Huainanzi-Sima Qian Theorem, which advocates that "using what one has in large amounts to exchange for what he or she lacks", "using what one has to exchange for what he or she lacks",

⁽¹⁾ Keman, H. (2020). Economic Openness. *Encylopaedia Britannica*, https://www.britannica.com/ topic/economic-openness.

and "using what one is skilled (in making) to exchange for what he or she is incapable (of producing)", has concisely summarized the basic principles of modern market economies, especially cross-border market economies, in particular, the following three major trade theories: absolute advantage theory, comparative advantage theory, and factor endowment theory (Zhang et al., 2019^①).

1. A hypothesis on U-shaped evolution of openness to the outside world

The degree of openness of most economies has undergone a U-shaped evolution following their improving economic development level. In the pre-industrialization stage, the level of openness was very high. Once local industries and enterprises are to be developed to promote industrialization, a fairly long protection period would be needed to protect local premature industries. In this way, the level of opening-up to the outside world will decline. As the competitiveness of local enterprises and industries improves, the level of openness of the economy will gradually rise and the economy may even enter a laissez-faire state.

Why has the level of a country's opening-up undergone such a U-shaped evolution path? First, the development of a less developed country is, to a large extent, a process of learning from developed countries, especially Western countries, and establishing local industries. Therefore, adopting a completely closed-door economic policy will block the country's exchanges with advanced countries, hinder the import of advanced science and technology and machinery and equipment, and be abandoned by modern civilization. Second, should backward countries go to the other extreme and adopt a laissez-faire open policy? No. In the early stage of economic development, if a country implements a policy of fully opening up to the outside world, it will be completely defeated by the developed countries in international competition, even in the local market competition. The local premature modern industries will be suppressed and, in the international divison of labor, it would be in a position of supplying primary products and raw materials. As a result, it would be difficult for these industries to develop. A controllable and limited opening-up process would be a better choice for both domestic demand-based and export-based economies. Last but not least, only

⁽¹⁾ Zhang, Y. (2019): 40 Years of Opening-up in China (in Chinese). Beijing, China: Economy and Management Publishing House.

when the competitiveness of domestic enterprises and industries reaches a level that enables these enterprises and industries to compete with the developed countries can the country gradually increase the degree of openness to implement an open economy. In this way, the country's degree of openness will also undergo a U-shaped evolution during the entire process of its economic development.

2. Choices of path for the opening-up of economies of different scales

Does the degree of openness of all countries and economies go through the same U-shaped evolution trajectory? Not at all, because there are vast differences between countries and economies.

Modern civilization is based on the rise of nation-states, and the main support of the modern world economy is also nation-states and their derived economies. From the perspective of economic development, nation-states and their derived economies are very different. There are huge countries like Russia, which spans six time zones across Eurasia; there are also mini-countries, like the Vatican, with an area of less than one square kilometer; there are also super-large countries like India and China with a population of 1.3 to 1.4 billion; and there are also mini-countries, like the Vatican and Monaco, each with a population of less than 100,000. If we combine the two factors in our observation, we will find that there are not only sparsely populated major regional powers, such as Russia, Canada, and Australia, but also densely populated countries, such as Japan, Vietnam, India and other countries. Different types of countries have very different strategies and policy choices in pursuing development. Generally speaking, after World War II, a nation-state or region with a population of more than 20 million ("region" here refers specifically to a nation-state that, for various reasons, implements independent tariff and economic policies and can be regarded as an independent economy, such as Taiwan region, Hong Kong, SAR and Macao, SAR) can have significant economic influence. We use this as a criterion to divide countries in the world into two categories: large countries and small countries, or large economies and small economies.

In general, a large economy undergoes a U-shaped opening-up process, while a small economy may not. If a small economy opts to implement a laissezfaire policy, such as the free port policy in Hong Kong, SAR, Singapore's policy of relying on multinationals and foreign investment, and other countries' international tax haven policies, then its process of opening-up will not be U-shaped in the process of economic development; rather, it will be a slanting line with increasing openness, or a horizontal line without significant upward or downward trend.

3. Wave-shape changes in the opening-up trajectory

Admittedly, many factors have a bearing on the level of opening-up of a country or economy to the outside world. They do not only include size of the country or economy or economic development process. In reality, a more complicated scenario is that many countries and regions have experienced a bumpy and on-off economic development process, without a unified and clear track. In some countries, once a new government comes to power, it will readjust its policies; some will continue the policies of the previous government, and others will completely overthrow them. Even the current level of development has been the result of accumulation of various policies in many years; conversely, at this level of development, it is possible for policymakers to adopt a variety of completely different policy options in the future.

After the World War II, many developing countries adopted the protectionist policy of import substitution, with a very limited opening-up to the outside world, and they had achieved a certain degree of economic development. After the 1980s, for various reasons, they adopted an export-oriented opening-up policy, which greatly raised their level of opening-up. Later, after suffering from different forms of economic or financial crises, especially the 2008 global financial crisis, some protectionist measures were taken, leading to declining level of openness. Therefore, the trajectory and level of openness of these countries has shown a wave-shaped trajectory. As long as they do not reach a certain level of development, these countries will undergo similar wave changes in the future.

III. Opening-up Practices in Foreign Trade and Investment

Mankind has had opening-up practices in many fields, especially cross-border trade opening-up and investment opening-up. Both history and reality have shown that mankind has had very rich experiences in opening-up to the outside world, and they have been very different from each other, whether in terms of fields of opening-up or levels of opening-up, or in terms of process of opening-up or outcomes of openingup. The opening-up practices vary in different economies, or in different times within the same economy. Understanding these similarities and differences in opening-up to the outside world is essential for scientific understanding of the theories, methods, and results of analyzing opening-up to the outside world. This report takes human crossborder trade and investment opening-up as examples to understand the corresponding opening-up practices.

1. Effect of trade openness in economic development

A country's of choice of "optimal" trade openness system cannot be independent of its domestic economic characteristics (Edwards, 1993^①). It is because trade openness has both positive and negative effects on the local economy of concerned countries. Given differences in development stages, resource endowments, and technological conditions, among others, countries should maintain a degree of trade openness that is compatible with their level of economic development.

Trade openness is conducive to giving play to domestic comparative advantages and promoting overall domestic economic growth through economies of scale effect. Trade policy and economic growth are endogenous to each other. Most literature have directly or indirectly proved that trade openness actively will promote overall economic growth (Grossman & Helpman, 1990⁽²⁾; Davis, 1996⁽³⁾). Trade liberalization can promote the division of labor and cooperation among different countries and thus improve the efficiency of the knowledge accumulation process of *learning by doing*, which is conducive to unleashing domestic comparative advantages (Devereux, 1990⁽⁴⁾). The openness of the domestic market is also conducive to improvement in market competition and weakening the degree of domestic market monopoly, thus forcing

⁽¹⁾ Edwards, S. (1993). Openness, Trade Liberalization, and Growth in Developing Countries. *Journal of Economic Literature*, 31(3), 1358-1393.

⁽²⁾ Grossman, G. & Helpman, E. (1990). Trade, Innovation, and Growth. *American Economic Review*, 80(2), 86-91.

③ Davis, D. (1996). Trade Liberalization and Income Distribution. NBER Working Paper No. 5693.

⁽⁴⁾ Devereux, M. (1990). Growth, specialization, and trade liberalization. University College Dublin. School of Economics, UCD Centre for Economic Research Working Paper Series; WP90/4..

down the average market cost curve (Tybout & Westbrook, 1995⁽¹⁾; Kim, 2000⁽²⁾). It can also promote domestic economic growth through economies of scale (Krugman & Helpman, 1985⁽³⁾). Historical facts and empirical studies have provided support for this. Historical studies by Kindleberger (1987)⁽⁴⁾ and Bhagwati (1988)⁽⁵⁾ found that the high growth stages since the World War I had basically been accompanied by low tariffs. Edwards (1993)⁽⁶⁾ studied the first batch of developing countries that first adopted export-oriented policies and found those with lower degree of distortion in export sectors. Bautista et al. (1998)⁽⁷⁾ found that Zimbabwe's free trade measures, such as abolishing import and foreign exchange controls and lowering import taxes, had significantly increased the total disposable income of households.

Trade openness optimizes resource allocation through competition mechanisms and promotes productivity. Two channels promote productivity improvement as follows. First, competition leads to *the survival of the fittest* in productivity. Trade openness allows companies with low production efficiency to withdraw from the market, and the surviving companies with high productivity will have higher profit margins. Their high profit margins further attract more highproductivity companies to settle in, thereby pushing up the market's marginal productivity (Melitz, 2003). There will also be redistribution of resources among firms with varying productivity (Epifani, 2003[®]), with resources flowing from low-

⁽¹⁾ Tybout, J. & Westbrook, M. (1995). Trade liberalization and the dimensions of efficiency change in Mexican manufacturing industries. *Journal of International Economics*, 39(1~2), 53-78.

⁽²⁾ Kim, E. (2000). Trade liberalization and productivity growth in Korean manufacturing industries: price protection, market power, and scale efficiency. *Journal of Development Economics*, 62(1), 55-83.

③ Helpman, E. & Krugman, P. (1987). *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and The International Economy*. The MIT Press, Edition 1, volume 1, number 026258087x.

④ Kindleberger, C. (1987). *The World in Depression:1929-39*. Penguin Books Ltd, New Edition.

⁽⁵⁾ Bhagwati, J. (1988). *Protectionism*. Cambridge: The MIT Press.

⁶ Edwards, S. (1993). Openness, Trade Liberalization, and Growth in Developing Countries. *Journal of Economic Literature*, 31(3), 1358-1393.

⁽⁷⁾ Bautista, R., Lofgren, H. & Thomas, M. (1998). Does Trade Liberalization Enhance Income Growth and Equity in Zimbabwe? The Role of Complementary Policies. The TMD Discussion Paper No. 32.

⁽⁸⁾ Epifani, P. (2003). Trade Liberalization, Firm Performance, and Labor Market Outcomes in the Developing World: What Can We Learn from Micro-Level Data? *SSRN Electronic Journal*, 3(5).
efficiency firms to high-efficiency trade firms (Pavcnik, 2002⁽¹⁾), especially to more efficient, export-oriented, and skill-intensive firms (Epifani, 2003). *The survival of the fittest* mechanism, therefore, elevates the average productivity of the industry, and also optimizes the domestic industrial structure. Second, trade openness enables enterprises to have more methods to reduce costs. Trade openness encourages local enterprises to participate in international market exchanges and competition and corporate managers will have more choices in productivity improvement and cost reduction (Kruger, 1985)⁽²⁾. After tariff barriers are reduced, enterprises can obtain more and cheaper inputs (Khandelwal & Topalova, 2011⁽³⁾), and competition will improve the efficiency of resource allocation, alleviate economic distortion, and encourage R&D formation to promote local well-being (Grossman & Helpman, 1991⁽⁴⁾).

Trade openness accelerates the diffusion of technology and promotes the local technological upgrading. Countries that adopt opening-up policies are more capable of absorbing advanced technology (Barro & Sala-i-Martin, 1995⁽⁶⁾). With opening-up policies, the less developed countries can make use of the large amount of knowledge capital that has already accumulated in industrialized countries to promote their domestic technological upgrading (Grossman & Helpman, 1990). Trade has become an important channel for the diffusion of technology among countries (Lichtenberg & Potterie, 1996⁽⁶⁾; Kelle, 2002⁽⁷⁾; Bylde, 2004⁽⁸⁾). Developing countries can import large amounts of intermediate goods and capital goods and, through them, benefit from foreign technological knowledge spillover to promote their domestic technological

⁽¹⁾ Pavcnik, N.(2002). Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants. *Review of Economic Studies*, 69(1), 245-276.

⁽²⁾ Krueger, A. (1985). *Developing-country trade policies and the international economic system*. The World Bank.

③ Khandelwal, A. & Topalova, P. (2011). Trade Liberalization and Firm Productivity: The Case of India. *The Review of Economics and Statistics*, 93(3), 995-1009.

⁽⁴⁾ Grossman, G. & Helpman, E. (1991). Trade, knowledge spillovers, and growth. *European Economic Review*, 35(2~3), 517-526.

⁽⁵⁾ Barro, R. & Sala-i-Martin, F. (1995). Technological Diffusion, Convergence, and Growth. *NBER Working Paper* No. w5151.

⁶ Lichtenberg, F. & van Pottelsberghe de la Potterie, B. (1998). International R&D spillovers: A comment. *European Economic Review*, 42(8), 1483-1491.

⁽⁷⁾ Keller, W. (2002). Trade and the Transmission of Technology. *Journal of Economic Growth*, 7, 7-24.

⁽⁸⁾ Blyde, J. (2004). Trade and Technology Diffusion In Latin America. *The International Trade Journal*, 18(3), 177-197.

upgrading (Coe et al., 1997⁽¹⁾; Acemoglu, 2003⁽²⁾; Ishikawa, 2007⁽³⁾). Imports of machinery and equipment can also increase the demand for skill-based technological change (Gourdon, 2011⁽⁴⁾). Technology can also spill over through the supply chain interaction between foreign-invested and local enterprises (Epifani, 2003⁽⁵⁾). The generous market rewards generated by technological innovation can further stimulate new technological innovation and market entry of foreign capital (Bustos, 2009⁽⁶⁾). After foreign enterprises enter the market, they authorize domestic companies to use their technology, which is conducive to reducing domestic production costs (Hwang et al., 2016⁽⁷⁾).

Trade openness promotes employment and increases the average factor income, thus narrowing the development gap between different countries. The empirical studies of some developed and developing countries (Salimi et al., 2014[®]), OECD countries (Dan, 1993[®]), Bangladesh and other countries (Munshi, 2006[®]) show that trade openness is conducive to income growth and reduction of income inequality. It is based on the factor price equalization theory, that is, in an open economy, the prices of production factors tend to be equalized across countries as a result of the global

¹⁾ Coe, D., Helpman, E. & Hoffmaister, A. (1997). North-South R & D Spillovers. *The Economic Journal*, 107(440), 134-149.

² Acemoglu, D. (2003). Patterns of Skill Premia. Review of Economic Studies, 70(2), 199-230.

③ Ishikawa, J. (2007). Trade Liberalization and Technology Transfer through an Intermediate Product. *The International Economy*, 11, 3-10.

④ Gourdon, J. (2011). Wage inequality in developing countries: South–South trade matters. *International Review of Economics*,58(4), 359-383.

⁽⁵⁾ Epifani, P. (2003). Trade Liberalization, Firm Performance and Labour Market Outcomes in the Developing World. What Can We Learn from Micro-Level Data. The World Bank Policy Research Working Paper No. 3063.

⁶ Bustos, P. (2009). Trade Liberalization, Exports, and Technology Upgrading: Evidence on the Impact of MERCOSUR on Argentinian Firms. *American Economic Review*, 101(1), 304-340.

⁽⁷⁾ Hwang, H., Marjit, S. & Peng, C. (2016). Trade liberalization, technology transfer, and endogenous R&D. *Oxford Economic Papers*, 68(4), 1107-1119..

⁽⁸⁾ Salimi, F., Akhoondzadeh, T. & Arsalanbo, M. (2014). The Triangle of Trade Liberalization, Economic growth and Income Inequality. *Communications on Advanced Computational Science with Applications*, 1-14, doi:10.5899/2014/cacsa-00026.

⁽⁹⁾ Dan, B. (1993). Equalizing Exchange: Trade Liberalization and Income Convergence. *Quarterly Journal of Economics*, 108(3), 653-679.

⁽¹⁾ Munshi, F. (2006). Does openness reduce wage inequality in developing countries? A Panel data Analysis. Working Papers in Economics 241, University of Gothenburg, Department of Economics.

flowing of the factors (Samuelson, $1967^{(1)}$; Chipman, $1969^{(2)}$).

Excessive trade openness will also cause problems such as harming the development of domestic industries, solidifying dependence on external value chains, and weakening the build-up of domestic value chains. For example, in the value chain system dominated by Europe, the United States and Japan, China not only faces the risk of trade sanctions as a result of protectionism, but also faces the risk of its own value chain being *locked in* and *captured*. In terms of mode of trade, China has long focused on processing trade and OEM-based production, putting it in the middle and low end of the global value chain hierarchy. It is very difficult for China to break through the low end of the value chain. Although it grasps manufacturing technologies, it has failed to build many high-quality brands that is recognized globally. And it is difficult to achieve the transition from *Made in China* to *Created in China*.

Economic historian Paul Bairoch once said that historically, free trade is an exception and protectionism is the norm (Felber, 2019⁽³⁾). Although free trade is more conducive than protectionism to economic growth and social well-being increase (Poole, 2004⁽⁴⁾; Mankiw, 2015⁽⁵⁾), trade protectionists believe that free import will affect domestic employment and corporate competitiveness, and, therefore, import barriers should be imposed on foreign goods. Contrary to the ultra-conservative view, whether a country's degree of trade openness is appropriate should hinge on the capacity of its economy in sustaining such openness and the characteristics of the country's economic development stage. If a country is to maintain the appropriate degree of openness that matches its economic and system fundamentals, it will need to bring out the role of trade liberalization in contributing to economic growth, while preventing excessive openness from harming its economic development.

⁽¹⁾ Samuelson, P. (1967). Summary on Factor-Price Equalization. *International Economic Review*, 8(3), 300-306.

⁽²⁾ Chipman, J. (1969). actor Price Equalization and the Stolper-Samuelson Theorem. *International Economic Review*, 10(3), 399-406.

③ Felber, C. (2019). Trading for Good: How Global Trade Can be Made to Serve People Not Money. London: Zed Books Ltd.

⁽⁴⁾ Poole, W. (2004). Free Trade: Why Are Economists and Noneconomists So Far Apart?. *Review*. 86 (5), 1-6.

⁽⁵⁾ Mankiw, N. (2015). Economists Actually Agree on This: The Wisdom of Free Trade. *New York Times*, April 24..

2. Effect of investment openness on economic development

Cross-border direct investment can be seen in most economies in the world, and has a profound impact on the economic and social development of relevant economies. It has a positive effect in terms of promoting technological innovation, upgrading the industrial structure, and increasing international competitiveness. And China is a typical case in point and attention should be paid to direct investment in China.

First, foreign direct investment in China used to be an important part of China's domestic fixed-asset investment. In the 1980s and 1990s, the proportion of foreign direct investment in China's fixed-asset investment was obviously on the rise, jumping from an average 4% in the 1980s to hit 11.8%, the highest record, in 1996. The large amount of direct investment had eased China's financing pressure as it planned to boost its economy through increasing investment, and provided good indigenous incentive for the long-term sustainable development of the Chinese economy^①.

Second, FDI has promoted China's foreign trade development, in terms of not only *quantity*, but also *quality*. From 1992, when Deng Xiaoping carried out his *southern tour* to encourage China to further deepen reform and expand opening-up, to the years ahead of China's accession into the World Trade Organization (1992-2001), the average annual export growth rate of foreign-invested enterprises reached an average 27.9%, and the total export volume of foreign-invested enterprises accounted for 50.8% of the national total, making them the backbone of China's export. The continuously increasing foreign direct investment in capital-intensive and technology-intensive industries has, it is fair to say, promoted the structural upgrading of China's export products.

Third, FDI has increased job opportunities in China and raised the income level of employees. In 1987, there were only 210,000 employees in enterprises invested by investors from Hong Kong, SAR, Macao, SAR and Taiwan region and foreign investors, accounting for 0.15% of the country's total urban employment. By 2017, the proportion had risen to 6.08%. In terms of employee income, the salary level of employees in foreign-invested enterprises is relatively high, and since 1998, their salary level has always been higher than that in urban enterprises, and it has, in most of these years, also been higher than that of joint-venture enterprises. In 1998, the average salary of foreign enterprise employees was more than 1.7 times that in urban

① Source: China Statistical Yearbook, relevant years.

enterprises; by 2017, the average salary level in foreign interprises was still 1.2 times that in urban enterprises.

Fourth, FDI helps China's industrial upgrading and technological progress. The pace of foreign direct investment has been basically the same as that of China's industrial upgrading. In the 1990s, the proportion of China's secondary industry, especially manufacturing, in the national economy had risen rapidly and gradually become the most important driving force for national economic growth, contributing to about 60% of China's GDP, which had been quite stable at that time. The key industry for foreignfunded enterprises at that time was also manufacturing. In recent years, the tertiary industry has gradually become an important growth engine for the Chinese economy, with its proportion in national GDP rising from 42.2% in 2002 to 53.3% in 2018. Meanwhile, the focus of foreign direct investment has gradually shifted from the secondary to the tertiary industry. It can be seen that the industrial upgrading of investment openness has been moving in the same direction with the industrial upgrading of the Chinese economy. With foreign investors continually increasing direct investment in China's capital- and technology-intensive industries, advanced production techniques and management knowhow have also been introduced into China, which, thanks to the spillover effect, have contributed to the country's technological progress.

Fifth, FDI has helped China improve its *soft environment*. In the early stage of Reform and Opening-up, the entry of foreign direct investment into China required Chinese laws and regulations to match it. Statistics show that from 1979 to the end of 1985, China enacted more than 300 economic laws (including administrative regulations and rules), about half of which were related to foreign economy^①. Since then, China has continually enacted or amended laws and regulations related to the introduction of foreign investment. In recent years, as China's traditional advantage in attracting foreign investment has gradually weakened, the focus of its opening-up has been upgraded from *factor flow-based opening-up* to *rule- and system-based opening-up*. At present, improving the business environment has become an important starting point for maintaining and enhancing China's attractiveness to foreign businessmen.

At the same time, we should have a rational view of direct investment openness. On

⁽¹⁾ The editorial committee of Almanac of China's Foreign Economic Relations and Trade (1986). *Almanac of China's Foreign Economic Relations and Trade*. Zhanwang Publishing House of China, p53.

the whole, it promotes economic development, but it also may causes inefficiency and even negative effects in some aspects. Some foreign-funded enterprises have become monopolistic through mergers and acquisitions. In some premature industries, the entry of multinational companies squeeze out host-country companies, and ultimately make it difficult for host-country companies to grow. FDI also poses risks to the host country's economy in terms of capital flow. The influx of foreign capital en masse can push up the exchange rate of the host country's currency and may cause asset bubbles, while the withdrawal of large amounts of foreign capital will put the host country's currency under depreciation pressure. In late 1990s, a financial turmoil erupted in Southeast Asian countries, and the inflow and outflow of foreign capital was an important reason for the formation and eruption of the crisis. The large inflow of foreign capital at that time boosted the region's rapid development. Without the rational guidance of the government, however, large amounts of foreign capital had flown into such industries as securities and real estate instead of industries that play a central role in improving social productivity. As a result, while speculative capital owners gained enormous profits, foreign investment had failed to fundamentally change the development structure of Southeast Asia. When foreign capital owners found that it was difficult to continue to make profits from speculative activities, they would inevitably withdraw capital in large quantities out of those countries, leaving behind an unsustainable development mode that had been built on extravagance and capital speculation. Coupled with the introduction of large amounts of foreign capital, it had led to aggravated foreign debt burden for those countries, ultimately triggering a crisis. Thailand's foreign debt was \$20 billion in 1992, then reached \$86 billion before it started to depreciate its currency in 1997.

Judging from the experiences of major countries all over the world, after World War II, especially after the Cold War, global investment openness and economic integration have become a major trend. However, governments of concerned countries have not had a fixed attitude towards direct investment openness. They have often made discretionary decisions.

— The United States' attitude towards FDI after World War II had gone through a process from *investment liberalization* to *neutral position* and then to *simultaneous openness and supervision*. Tensions between the United States and Middle East oilproducing countries in the 1970s, the large-scale direct investment by Japanese companies in the United States in the 1980s, and the deterioration of Sino-US relations after 2018 were all important reasons for the tightening of FDI in the United States.

— After World War II, Japan was prepared to reconstruct its economy from scratch. In order to prevent foreign capital from taking the opportunity to enter and control its market, the Japanese government implemented a conservative policy for foreign direct investment in Japan. With the rise of the Japanese economy, Japan has begun to gradually loosen control of FDI, although its effect remains questionable. The Japanese government has always encouraged ODI and the country has eventually become a major ODI power.

— Brazil's attitude towards FDI has also undergone changes. In the early postwar period, the Brazilian government had guided and encouraged foreign investment to enter machinery, automobile and other manufacturing industries. However, in the 1970s, the problems of profit remittance by multinationals and trade deficits became more and more serious. The Brazilian government imposed restrictions on foreign direct investment in terms of localization rate and proportion of profit remittance. In the 1980s, a debt crisis broke out in Brazil. To relieve the pressure brought about by the crisis, the Brazilian government started again to encourage the entry of foreign capital, marking another U-turn of its policy stance.

IV. A Framework on Opening-up Model of National Economy

An opening-up economy can form a *sub-system*, that is, an open economy. If it is attached with geographical or territorial limits, such as a country, it can be made more concrete, such as an "open Chinese economy" or an "open world economy". There can be another cycle within this sub-system, including four major links: production, distribution, exchange and final use. In fact, this open sub-system is not independent of other "non-open sub-systems" of the economy to which it belongs, but is inextricably linked to them, whether their linkage is strong or weak.

In the field of economic openness, cross-border exchanges undoubtedly have had the longest history, including but not limited to cross-border trade. Economic opening-up to the outside world has long been dominated by the opening-up of crossborder trade, and cross-border trade has long been dominated by goods. In recent decades, the proportion of services has gradually increased, and it has almost become predominant in some economies. Foreign trade in goods has long been dominated by primary and final products, although the proportion of intermediate products has gradually risen and even become the main part of cross-border trade in some economies. Cross-border trade is actually a direct manifestation or extension of a country's endowment of resources (including natural resources and human resources) and production technology endowments. This is exactly the basic principle discussed in the classical theory of international trade. Therefore, this report uses the crossborder trade theory as a starting point to construct a theoretical model of opening-up to the outside world.

As mentioned earlier, there are different schools of cross-border trade theory, but they can be unified within the same framework and reflected by setting different parameters. In other words, the various schools of cross-border trade theory can be nested in the same theoretical framework, which can contain the essence of the various schools of the theory. Costinot & Rodríguez-Clare (2014) proposed a macro framework that embeds various frontier mainstream cross-border trade models to reflect the price determination mechanism of products in cross-border trade. The independent variables related to cross-border openness are as follows: production costs, export costs, bilateral variable trade costs, fixed costs for entering a partner economy, and costs for a partner economy to enter the reporting economy. Based on this framework and our measurement of openness, this report makes the following assumptions.

1. Cross-border trade openness

Trade openness factors that affect bilateral variable trade costs include tariff rates and non-tariff measures. Cross-border trade opening-up includes the openingup of final product trade as well as that of intermediate product trade. Among them, the cross-border intermediate goods will enter the production process of the partner economy, thereby having a bearing on the production cost of the corresponding production process. Obviously, trade policy of intermediate goods has a significant bearing on trade of intermediate goods. In the past two decades, trade in intermediate goods has gradually become a powerful factor that has a significant bearing on the development of trading partners.

2. Cross-border investment openness

It includes the opening-up of foreign investment and the opening-up of outbound

domestic capital investment. The introduction of foreign capital can not only ease capital shortage, but also improve productivity of local enterprises in the host country through the competition effect and the spillover of technology and management knowhow. The main role of foreign investment is also to make full use of overseas resources to enhance international competitiveness. Therefore, the degree of investment openness mainly affects production technical parameters.

3. Cross-border financial openness

Financial openness can reduce the financing costs of export and foreign investment of enterprises, and significantly promote internationalization activities that carry huge fixed costs. Both theoretical models and empirical studies emphasize the impact of the financial system on the fixed export costs of enterprises.

4. Cross-border knowledge openness

The openness of knowledge, especially technology, can enable a country to make use of the world's advanced technologies. It is of great significance, especially for latecomer countries that China represents.

5. Cross-border institutional openness

Institutional openness is committed to removing institutional barriers to international economic and trade exchanges, fostering a good business environment, and improving the quality of institutions. The impact of institutional quality on the production and operation of enterprises is related to two theoretical frameworks in institutional economics; one is the contract theory; the other is the property theory. When these two theoretical frameworks are introduced into the basic model of international trade, they can be treated as an institutional cost variable, which is a structural variable that is composed of a series of parameters measuring contract quality and strength of property rights protection.

After incorporating the above five assumptions, the determinants of the price of cross-border trade products would cover these five openness factors. For theoretical framework and detailed mathematical derivation of the various schools of international trade, please refer to the appendix of this report.

It should be emphasized that although the above model includes openness factors

in the fields of investment, finance, technology, and institutions, it still belongs to the international trade model. This is very consistent with the reality of global cross-border opening-up. The breadth and depth of the current cross-border investment, finance, technology and institutional openness have reached an unprecedented level, but cross-border trade openness remains the most attractive area in global opening-up. There is a close link between cross-border non-trade openness and cross-border trade openness.

Based on the above-mentioned theoretical model, the main contents that should be measured for opening-up to the outside world are as follows.

- Cross-border trade, including export and import of goods and services, and the traded goods and services can be seen as either final products or intermediate products;

— Cross-border direct investment, including foreign direct investment (FDI) and outbound direct investment (ODI);

— Cross-border financial investment, which mainly refers to inbound and outbound cross-border financial investment with a debt maturity of less than one year. It mainly refers to cross-border securities investment;

—Cross-border knowledge openness, especially technology openness, including the import and export of knowledge and technology;

— Cross-border institutional arrangements, including institutional or policy arrangements, such as cross-border contracts and property rights protection.

Cross-border trade, cross-border direct investment, and cross-border financial investment are all very mature fields of international economics research, on which there has been general consensus and so there is no need to go into details here. However, cross-border knowledge, technology, and institutional openness should be further expounded.

Cross-border flow of knowledge, especially technology, can be put in not only the economic category, but also the social and cultural categories. This is because knowledge and technology are intangible and need to be externalized in other tangible carriers or recorded in a certain form so that it becomes easy for them to be observed and measured. They are either externalized in products, such as cultural and high-tech products, or exist in a specific carrier, such as people (cross-border students, tourists, and migrants), or are recognized as specific rights, such as patents and other intellectual property rights. This means that the observation of knowledge or technology needs to be defined in a broader sense. Therefore, this report will indirectly monitor the cross-border flow of knowledge

and technology through openness in the cultural and social fields.

The same is true for cross-border institutional arrangements. A general system can only become conveniently observable when it is transformed into a specific crossborder system or even a cross-border policy. When we analyze cross-border system or policy, we need to start from studying cross-border behavior, that is, we need to make legal, regulatory and policy arrangements for a specific cross-border behavior. To facilitate monitoring, this report has mainly measure cross-border institutional arrangements through cross-border policies.

In summary, this report defines cross-border openness as cross-border economic openness and the directly related cross-border social, cultural and policy and institutional openness as follows.

1. Economic openness. That is, cross-border economic openness, including crossborder trade, direct investment and securities investment;

2. Social openness. That is, cross-border social openness, mainly referring to specific cross-border interpersonal movement, including flows of cross-border tourists, students, and migrants;

3. Cultural openness. That is, cross-border cultural openness, including crossborder flows of cultural goods, intellectual property rights, patent applications, and science documents citations;

4. Policy openness. That is, cross-border policy and institutional arrangements closely related to the above-mentioned economic, social and cultural openness.

The above division of cross-border openness areas aims to distinguish the performance of cross-border openness from cross-border openness policies: the first three categories are the performance of cross-border openness, and the fourth category is cross-border openness policy. This is because one of the main focuses of the cross-border openness measurement is to clarify whether the target of measurement is the performance of cross-border openness, or the cause of cross-border openness, or some sort of combination of these two categories of factors. This is also where major differences arise in existing literature: policymakers and those who are heavily influenced by policies mainly focus on cross-border openness. Index compilers may want to meet these two needs simultaneously, but they have to face the challenges of corresponding difficulties.

Chapter II World Openness Index: Methodology

The term *opening-up to the outside world* has rich connotations and extensions. The World Openness Index integrates a number of statistical indicators related to opening-up to the outside world, such as economy, society, and culture, and can measure the level of openness of an economy in a more comprehensive and systematic manner. The index system measuring the level of opening-up to the outside world is the core content of the world openness index. The statistically measurable quantitative indicators are created through quantifying economic, social, cultural and other related openness factors, which provides a new way to quantitatively analyze the openness and open-up trend of various economies.

Compared with other similar indexes on openness, this index has the following characteristics. First, it is positioned to measure economic openness and non-economic openness that is closely related to economic openness. Second, the results of openness and openness policies are equally emphasized, and inward and outward openness are equally emphasized. Third, the dimensionless methods of inward and outward opening indicators are rigorously based on the supply and demand theory.

In this chapter and subsequent chapters, unless specified, the word "country" can be used in common with the word "economy".

I. Principles of Measuring Opening-up to the Outside World

1. Scientific natures

Scientific theory and method have been adopted in this study. The openness index focuses on *on-the-border* openness and does not measure phenomena

beyond the border. The setting of the indicator system and data conversion processing are strictly based on professional openness theory and the processing of basic data and the weighting of indicators have strictly followed statistical theories and methods.

The balance of two-way openness. Cross-border openness includes the entry of foreign factors and the exit of domestic factors and both are the measurement content of this indicator system. Under the premise of data availability, they will be treated equally, including the setting of weighting.

The objectivity of openness data. The index numbers must be in line with reality. It requires the selection of indicators to be able to reflect the main openness practices and the method for determining the weight of each indicator must be rational. Moreover, the assumptions made when supplementing some missing data must be consistent with the actual situation.

The heterogeneity of openness measures. Specifically, what indicators measure should not overlap each other. There should be no theoretical causal relationship among indicators, but the designing of this index needs to meet the following requirements. The openness policies as the cause should be measures and the openness performance based on the cause should also be measured. For this reason, in the designing of this indicator system, the overlapping caused by combining openness cause and openness performance must be minimized. Such overlapping basically does not affect the relative openness rankings of concerned economies, and, therefore, the design is acceptable. However, when the total openness of all economies aggregated or the openness of the world as a whole is assessed, such overlapping means that the openness of each economy and that of the world as a whole would be overestimated.

For that reason, such overlapping effect of the index has been reduced from the following two aspects. First, even if some indicators measure the same target, they should be measured from different angles. For example, indicators such as cross-border tourists, international students, and cross-border migrants measure the headcount-based scale of cross-border population movement in social openness, and the corresponding cross-border economic costs (such as transportation, education service and travel consumption costs) are measured using the cross-border economic openness. (cross-border trade in goods and services). Second, if, for various reasons, it is impossible to find suitable, different angles for separate measurement, which inevitably leads to

overlapping. Therefore, the overlapped parts will be deducted in this index when those indicators are aggregated to prevent the overall index from being higher than the actual level of openness. For example, cross-border intellectual property trade and cross-border cultural product trade measure the level of cross-border cultural openness, but they have actually included in the economic openness measurement. For this reason, such repetition needs to be deducted from the overall openness of the concerned country. Unless the original data cannot support it, the aforementioned principles have been observed to the greatest extent in the designing and calculation of this index.

2. Representativeness

The representativeness of this index is reflected in two aspects.

Representativeness of fields of openness. This report measures cross-border openness in the following three areas: economy, society, and culture. Economic openness has so far been the main area of global cross-border openness and has in turn promoted related social and cultural openness. Social and cultural openness, which is not so directly related to economic openness, and political openness (or international governance), which lag far behind economic openness, are not main areas of human openness so far, and, therefore, are not included in this index. The aforementioned fields that have been included are sufficient to represent the openness practices of mankind.

Representativeness of openness entities. This index measures the cross-border openness of 129 economies, which not only accommodate the vast majority of the total population and economic output of the world, but are also the main entities of human cross-border openness activities. Human cross-border communication involves governments, for-profit market institutions and individuals, as well as non-profit institutions and individuals. They are added up according to their economies to form the basic unit of observation in this index —national economy (country or region). These economies are added up to constitute the vast majority of the human world, becoming largely representative of the world.

3. Sustainability

Data availability is high. Data in this indicator system come from public sources,

such as the International Monetary Fund's balance of payments statistics, the World Bank's World Development Indicators, the United Nations' social and cultural statistics, the World Trade Organization's cross-border trade opening-up policy data, and the UNCTAD's cross-border investment liberalization policy data, are publicly released on their respective official websites, and are free and available to readers around the world.

The source of data is stable. The data of the above indicators are all released by the aforementioned international organizations at a fixed frequency for a long period of time. These data are mainly provided by international inter-governmental organizations based on the official statistical authorities of countries, or compiled by those organizations based on the scattered official data of relevant economies.

The quality of data is high. The compilation of the above indicator data by the aforementioned international organizations or authorities of concerned economies is based on the statistical systems, methodologies and best practices established by authoritative international statistical manuals. The quality of the original data sources has generally been guaranteed by official authorities, and even if the statistical practices of some economies are different from those of others, the differences would be explained thoroughly so that readers can fully understand, evaluate and use the data.

Last but not least, this index would have a broad prospect of expansion and application. The reputation of an index comes in part from its ease of application. When this index releases the rankings of economies, it will also release the scores and original values of the secondary, tertiary, and basic-level indicators to facilitate users to understand, assess, and apply it.

II. Indicators Measuring Opening-up to the Outside World

1. List of indicators measuring opening-up to the outside world

This indicator system has 21 measurement indicators for openness performance, which measure the performance of economic openness, social openness, and cultural openness.

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Internaional citations of science documents Cultural goods import		-	Patent applications abroad by residents						
		pertormanee	Internaional citations of science documents						
Cultural goods export			Cultural goods import						
			Cultural goods export						

Table 2-1 List of Indicators Measuring Opening-up to the Outside World

2. Brief introduction of openness policy indicators and openness performance indicators

Openness policy refers to authoritative, standardized regulations, which are directive contents on fields of cross-border openness made by economies out of their

self-interest and will. Openness policy is usually an important causal variable for openness performance, but it is not the only causal variable. In practice, an openness policy is often the focus of an economy in regulating its own fields of openness. It is a government's legitimate right to formulate and implement openness policy. Through openness policy, an economy can adjust the width and strength of fields of its cross-border openness, thereby forming its own pace of opening-up. Of course, the formulation and implementation of openness policies are often the result of the combined forces of relevant domestic and foreign factors.

The cross-border openness policies involved in this report are mainly economic and social openness policies. This indicator system is composed of eight openness policy indicators, of which three are designed to measure the strength and breadth of cross-border openness policies, while five are designed to measure the breadth of coverage of cross-border openness policies. Cultural openness policies will also be introduced when it becomes ripe in the future to fully match the areas covered by openness performance indicators.

The openness performance refers only to the direct performance achieved by the cross-border openness behavior itself, excluding the indirect performance of the openness behavior. The openness behavior has a far-reaching bearing on economy, society, and culture, and its cause and effect chain is very long. This report, however, only focuses on the direct performance of openness.

10010 = 1			
Indicator code	Name of indicator	Source of data	
1.1.1	Weighted applied tariff rate	WB	
1.1.2	Non-tariff trade barriers	WTO	
1.1.31	Outbound openness of concerned free trade agreement(s)	WTO	
1.1.32	Inbound openness of concerned free trade agreement(s)		
1.2.11	Outbound openness of concerned international investment agreement(s)	UNCTAD	
1.2.12	Inbound openness of concerned international investment agreement(s)	UNCIAD	
1.3.1	Financial openness policy	Chinn-Ito Index	
1.4.1	Cross-border visa openness policy	Henley & Partners	

Introduction of Basic Openness Indicators

3. Introduction of basic openness indicators

Table 2-2

Indicator code	Name of indicator	Source of data		
2.1.11	Export of goods			
2.1.12	Import of goods			
2.1.21	Export of services			
2.1.22	Import of services	IMF/WB		
2.2.11	Foreign direct investment	ΠΝΓ/ W Β		
2.2.12	Outbound direct investment			
2.2.21	Portfolio investment inflows			
2.2.22	Portfolio investment outflows			
2.3.11	Inbound tourists	World Tourism		
2.3.12	Outbound tourists	Organization/WB		
2.3.21	Inbound students	UNIESCO		
2.3.22	Outbound students	UNESCO		
2.3.31	Immigrants	UNDESA		
2.3.32	Emigrants	UNDESA		
2.4.11	Intellectual property export			
2.4.12	Intellectual property import	IMF/WB		
2.4.21	Patent applications abroad by residents	WIDO		
2.4.22	Patent applications by nonresidents	WIPO		
2.4.3	International citations of science documents	SCImago		
2.4.41	Cultural goods import	LINESCO		
2.4.42	Cultural goods export	- UNESCO		

(Continued)

(1) Indicators on cross-border openness policies

Weighted applied tariff rate (tariff rate, applied, weighted mean, all products). It is the weighted rate of tax on imports from different partner economies imposed by the reporting economy, based on weighting of the reporting economy's import from each of those economies in its total imports. Among them, the import tax rate is based on HS product classification six-digit or eight-digit code (it needs to be converted to SITC classification three-digit code). This indicator comes from the World Bank estimates based on multiple databases^①.

① World Bank staff estimates using the World Integrated Trade Solution system, based on data from United Nations Conference on Trade and Development's Trade Analysis and Information System database, and the World Trade Organization's Integrated Data Base and Consolidated Tariff Schedules database.

Non-tariff measures (NTMs). It refers to the following measures under the monitoring announced by the GATT-WTO agreement: anti-dumping, anti-subsidy, quantitative restriction, safeguard measure, animal and plant quarantine, special safeguard measure, technical trade barrier, tariff quota, and export subsidy. This indicator measures the number of non-tariff trade measures, and does not involve the types of commodities or the value of cross-border trade involved in those measures. And, therefore, it is a breadth indicator of cross-border trade policy rather than an indicator of strength. The data come from WTO.

Trade openness policy measures the number of economies covered by trade agreements and is an indicator measuring breadth of cross-border openness. The Regional Trade Agreement (RTA) of the WTO refers to any reciprocal trade agreement between two or more partners, which aims to eliminate various trade barriers between them and regulate their trade cooperation relationship. Regarding the effect of RTA on global trade liberalization, there are different opinions. RTA is designed to benefit the signatory countries, but if distortions in resource allocation and trade and investment transfers are not minimized, the expected benefits could be reduced. In addition, the increase in RTAs has also caused the problem of overlapping membership. If traders cannot meet the requirements of multiple sets of trade rules, trade flows would be jeopardized. Moreover, as the scope of RTAs expands to include policy areas that are not subject to multilateral regulation, the risk of inconsistent agreements may increase. Most of the earlier signed RTAs only involve such rules as tariff liberalization, trade defense, standards, and rule of origin. The coverage of the newly signed RTAs has gradually been expanded to include service liberalization and commitments to service rules, investment, competition, intellectual property rights, e-commerce, environment, and labor, which may lead to regulatory confusion and enforcement issues. As of June 2016, all WTO member countries had participated in at least one regional trade agreement in force. As of January 17, 2020, there had been 30 RTAs in force around the world^①. Relevant data come from WTO.

International investment policy, which, in this report, is measured by the number of international investment agreements signed. This indicator measures the breadth of international investment policies, that is, the number of partners that have

① RTA website of WTO: https://www.wto.org/english/tratop_e/region_e/region_e.htm.

signed international investment agreements, rather than the strength of international investment policies⁽¹⁾. The International Investment Agreements (IIAs) are mainly divided into the following two categories. First, the Bilateral Investment Treaties (BITs) are agreements reached between two economies to promote and protect the investment of their respective investors in the other's territory. Most IIAs belong to BITs. Second, the Treaties with Investment Provisions (TIPs) refer to various treaties with cross-border investment provisions other than BITs, which can be subdivided into the following three categories. (1) Broad economic treaties, including common obligations in BITs, such as free trade agreements with special investment chapters. (2) Treaties with limited investment-related provisions. For example, the investment of investment or investment-related funds. (3) Treaties that only contain investment *framework* provisions. For example, those provisions are only about negotiation tasks of investment cooperation and/or future investment issues⁽²⁾. The data come from the UNCTAD.

Financial openness policy reflects tolerance of authorities of an economy towards cross-border financial flows, especially transaction management policies. This report uses the Chin-Ito Index for measure. The index is based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER), and includes the degree and intensity of *capital control*. The data are publicized by Chinn & Ito³.

The cross-border visa policy for an economy's ordinary citizens reflects the tolerance of that economy's authorities towards cross-border visa policy for those holding an ordinary passport at home and abroad. This report uses the Henley & Partners Passport Index to measure the breadth of the cross-border liberalization policy for ordinary citizens. For a particular economy, when its ordinary citizens holds a passport issued by authorities of that economy to enter other economies, how many

① Official UNCTAD website: https://investmentpolicy.unctad.org/international-investment-agreements

⁽²⁾ Apart from those two types of IIAs, there is also an openness category of investment-related instruments (IRIs), including various binding and non-binding documents, such as sample agreements and document drafts, multilateral conventions on dispute settlement and arbitration rules, documents adopted by international organizations, and other documents. As a measurement indicator for cross-border direct investment policy, the international investment agreements in this report are not included in IRI.

③ Website where the index is released: http://web.pdx.edu/~ito/Chinn-Ito_website.htm.

economies would grant them the visa exemption or visa-on-arrival treatment, or how many other economies whose ordinary citizensare granted the visa exemption or visa-on-arrival treatment when they enter the territory of the economy, would reflect that economy's ease of cross-border personal mobility policies. The data come from the official website of Henley & Partners^①.

(2) Indicators on economic openness performance

This indicator system contains eight indicators on economic openness performance, all of which are compiled in accordance with the Balance of Payments Manual (BPM6) and come from the Balance of Payments and International Investment Position (BOP/ IIP), published by the IMF.

Export and import of goods. The balance of payments statistics cover crossborder transactions of goods that *cause ownership change between residents and nonresidents*. The main data come from the International Merchandise Trade Statistics, the customs system, or the International Transactions Reporting System (ITRS), although it needs to be adjusted based on the sources of the data. It is because the International Merchandise Trade Statistics counts goods that *enter its economic territory (import) or leave its economic territory (export), which increases or decreases the stock of material resources of the economy*. The customs system does not cover certain goods or travel items that have gone through cross-border ownership transfers, and the ITRS does not cover certain goods that have undergone cross-border ownership changes without making relevant payments[®]. Moreover, when international merchandise trade statistics, customs statistics, and international transaction reporting system data are converted into goods statistics under BOP, the freights and insurance costs that occur from the border of the exporting country to the border of the importing country should be deducted as the import price is converted from CIF to FOB. This is because

¹ https://www.henleypassportindex.com/passport.

⁽²⁾ Since no change in ownership occurs between residents and non-residents, or the goods have no value, they are not included in the general goods category under certain circumstances, such as re-export trade, personal belongings of international migrants, goods acquired by the lessor under financial leases, and returned goods.

the International Merchandise Trade Statistics system uses FOB¹ for collecting export statistics and CIF for collecting import statistics. The BPM6 summarizes the specific items that are frequently adjusted based on the merchandise trade statistics in accordance with source data, including seven added items, six deducted items, and three added or deducted items. The seven added items are as follows: goods purchased by the carrier at the port, fishing, seabed minerals and rescued property after resident-operated ships are sold, goods with change in ownership after illegally entering/leaving the territory, goods acquired from other economies (only applicable to import) due to processing in other countries, goods sold abroad after processing in other economies (only applicable to export), net export as a result of reselling of goods (only applicable to export), non-monetary gold. The six deducted items are as follows: personal belongings of immigrants, goods imported by non-resident enterprises for construction projects, goods used for maintenance or storage without change of ownership, goods sent abroad after processing or returned without change of ownership, with returned goods subject to CIF/FOB price adjustment (only applicable to import). The three added or deducted items are as follows: goods lost or damaged in transit, goods in customs warehouses or other areas, with ownership changed, and high-value capital goods, whose delivery (time) is different from the ownership $(time)^{(2)}$.

Service export and import. The Manual on Statistics of International Trade in Services (MSITS) is the main source of information for cross-border services trade data. The conceptual framework of MSITS is the same as that of the BPM6 and the System of National Accounts 2008. The classification of services is mainly based on products, and, secondly, traders. It has also been adjusted in accordance with Central Product Classification (CPC).

Cross-border direct investment includes foreign direct investment and outbound direct investment. This report measures the flow of direct investment, that is, the flow

① There are three types of FOB calculations, which are as follows. (a) Free-on-board price for delivery at the border port of the exporting country (FOB, applicable to goods shipped by sea or inland water); (b) The free-carrier price for delivery at the border terminal of the exporting country (FCA, applicable when the shipping method used is not suitable for FOB); (c) Delivered-at-frontier, or delivery in the exporting country (DAF, applicable to shipping methods that are not suitable for FOB and FCA; for example, export of goods by rail or pipeline).

② BPM6, Chinese version, Table 10.2, p140.

generated among parties with direct investment relationships. Direct investment occurs when the investment of a resident investor in a certain economy constitutes the control of, or has a significant bearing on, a resident enterprise of another economy. Apart from equity that generates control or influence, direct investment also includes related debt and other debts and equities between companies that share the same direct investor. If the direct investor has more than 50% of the voting rights in the invested enterprise, then it is clear there is a controlling relationship and the invested enterprise is the subsidiary. If the direct investor has 10% to 50% of the voting rights in the invested enterprise is a joint enterprise. Control or influence can be direct (through ownership of voting rights).

Cross-border portfolio investment flows includes portfolio investment inflows and portfolio investment outflows. This report measures the flow of portfolio investment, which refers to the flow of cross-border transactions of debts or equity securities that are not included in direct investment or reserve assets.

(3) Indicators on social openness performance

The number of cross-border tourists includes the number of inbound tourists and that of outbound tourists. Tourists enter other economies from their permanentresidence economy for traveling that lasts not more than 12 months and that does not aim to obtain labor compensation from the visited economy. When the number of tourists is not available, the number of visitors would be used instead, namely, tourists, visitors on that specific day, cruise ship passengers, and crew members. Economies differ in terms of sources and collection methods of entrants to their territory. In some cases, the data come from border statistics and surveys. In other cases, the data come from tourist accommodation agencies. In some economies, the arrivals only refer to those arriving by air, while in other economies they only refer to those who settle down in a hotel; some economies take into account the entry of nationals residing abroad, while other countries do not consider such situation. Therefore, one should be cautious when comparing the number of arrivals from various economies. The data on inbound tourists refer to the number of arrivals, not the number of tourists. Therefore, people who travel to the same economy multiple times over a period of time are counted as newcomers each time. Outbound tourism refers to the number of times people travel from the economy where they usually live to any other economy, aiming not to engage

in remunerative activities in the visited economy. The data of outbound tourists refer to the number of outbound travelers, not that of tourists. Therefore, a person who has left a country many times over a period of time is counted as a new outbound traveler each time. The data are directly quoted from the World Bank's World Development Indicators, which is from the World Tourism Organization (WTO) Yearbook of Tourism Statistics.

The number of cross-border international mobile students includes the number of inbound students and that of outbound students. International mobile students here refer to those studying in higher-educational institutions. According to the UNESCO Institute for Statistics (2012), higher education is composed of the following two stages. The first stage is Level 5 of the International Standard Classification of Education (ISCED), including Level 5A, which is mainly a theory-based courses designed to provide sufficient qualifications for entering advanced research courses and majors with high-skill requirements; and level 5B, courses are usually more practical, i.e. technically and/or professionally specific. The second stage, ISCED level 6, includes courses dedicated to advanced research and original study and ultimately, advanced research qualifications will be granted. Data come from the *UNESCO Statistical Yearbook*^①.

The number of cross-border migrants, including the number of inbound migrants and that of outbound migrants. What is measured here is the stock of migrants. International migration is the most difficult component of demographic change to measure and estimate. Therefore, the quality and quantity of data used to estimate and predict net migration varies from country to country. In addition, the movement of people across international borders is often a response to changing social, economic, political, and environmental forces, and fluctuates dramatically. For example, refugee flows may involve large numbers of people crossing borders during a short period of time. Data are available only for 1990, 1995, 2000, 2005, 2010, 2015 and 2019, estimated by the Population Division of the United Nations Department of Economic and Social Affairs[®].

The cross-border social openness, represented by cross-border tourists,

⁽¹⁾ For online version of the database: UIS: http://data.uis.unesco.org/Index.aspx?DataSetCode= EDULIT_DS&popupcustomise=true&lang=en.

⁽²⁾ https://www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp.

international students and migrants, reflects the general picture of cross-borderpersonal communication and information, knowledge, technology, emotion and labor integration that it carries. It is very important for the economic development of concerned open economies.

(4) Indicators on cross-border cultural openness performance

There are seven indicators on cross-border cultural openness performance covering the fields of intellectual property, patents applications, international citations of science documents and trade in cultural goods.

Cross-border intellectual property flows include intellectual property export and import. The costs of using intellectual property rights refer to license fees involved in authorization of the use of exclusive rights (such as patent rights, trademark rights, copyrights, industrial processes and designs that include trade secrets, and franchise rights), as well as reproduction or dissemination (or both) of intellectual property rights in the original or prototype works (such as copyright of books and manuscripts, computer software, movies, and audio recordings) and related rights (such as the rights of live broadcasting and television relaying, cable transmission or satellite broadcasting). The data come from the IMF's BOP/IIP database or the World Bank's World Development Indicators.

Cross-border patent applications includes residents applying for patents abroad and non-residents applying for patents within the concerned country. Patent application refers to a worldwide patent application filed with the national patent authorities through the Patent Cooperation Treaty procedures to obtain the exclusive rights of an invention, which means a product or process that provides a new way of doing things or solving technical problems. The patent right, which provides invention protection for the patentee, is within a certain period of time, generally 20 years. Unless otherwise stated, the number of resident and non-resident patent applications include patent applications submitted through the PCT system as PCT national/regional phase entries. Non-resident patent applications are filed by applicants outside the concerned country or region. Resident patent applications refer to patent applications in which the first applicant or assignee is a resident of the concerned country or region. Patent data are important resource for studying technological changes in a country or region. They provide a unique source of detailed information about multiple facets of invention activities and processes (such as geographic location, technical and institutional origin, individual and network), which can be used for analyzing a wide range of topics related to technological change and patent activity, including industry-science links, corporate patent strategy, and study of internationalization and patent value indicators. Patent-based statistics reflect the invention performance of countries, regions, and companies, as well as other aspects of the dynamics of the innovation process, such as cooperation on innovation or technological paths. The data come from World Intellectual Property Organization (WIPO) or the World Bank's World Development Indicators.

International citations of science documents. The data come from the SCImago journals and country rankings. The country rankings are scientific indicators developed based on the information contained in the Scopus database (Elsevier B.V.). Citation data come from more than 34,100 articles and country performance indicators from more than 5,000 international publishers in 239 countries around the world.

Cross-border trade in cultural goods includes export and import of cultural goods. According to the definition of the 2009 UNESCO Framework for Cultural Statistics, cultural products refer to consumer products that convey ideas, symbols and lifestyles, namely, books, magazines, multimedia products, software, sound recordings, movies, videos, audiovisual programs, handicrafts and fashion. Data are from the *UNESCO Statistical Yearbook*^①.

III. Basic Indicator Data Processing and Weight Setting

Statistical methods are adopted to process the missing values of basic indicators, and the basic indicator data have been nondimensionalized in accordance with the supply and demand principle of economics (see Appendix for details).

The weighting of the indicator system is based on expert survey method. On the basis of a questionnaire survey of 41 experts on international economics, the arithmetic average of the results obtained through the questionnaire was taken as the weight of each indicator. The results are as follows.

⁽¹⁾ http://data.uis.unesco.org/Index.aspx?DataSetCode=EDULIT_DS&popupcustomise= true&lang=en.

Table 2-3	Weights of Indicators						
Secondary indicator	Tertiary indicator	Basic indicator					
		Weighted applied tariff rate (0.339)					
		Non-tariff trade barrier (0.259)					
		Inbound openness of concerned free trade agreement(s) (0.051)					
Openness policy	Economic openness policy (0.9), and	Outbound openness of concerned free trade agreement(s) (0.051)					
(0.518)	Social openness policy (0.1)	Inbound openness of concerned international investment agreement(s) (0.05)					
		Outbound openness of concerned international investment agreement(s) (0.05)					
		Financial openness policy (0.1)					
		Cross-border visa openness policy (0.1)					
		Export of goods (0.169)					
	Economic openness performance (0.69)	Import of goods (0.169)					
		Exports of services (0.161)					
		Import of services (0.161)					
		Foreign direct investment (0.141)					
		Outbound direct investment (0.141)					
		Porfolio investment inflows (0.029)					
		Porfolio investment outflows (0.029)					
		Inbound tourists (0.1896)					
		Outbound tourists (0.1896)					
Openness performance (0.482)	Social openness	Inbound students (0.215)					
(******)	performance (0.17)	Outbound students (0.215)					
		Immigrants (0.0954)					
		Emigrants (0.0954)					
		Intellectual property export (0.183)					
		Intellectual property import (0.183)					
		Patent application by non-residents (0.171)					
	Cultural openness performance (0.14)	Patent application abroad by residents (0.171)					
	r (1)	International citations of science documents (0.11)					
		Cultural goods import(0.091)					
		Cultural goods export(0.091)					

Chapter III World Openness Index: Results and Analysis

Based on the theories and methodologies proposed in the previous two chapters, this chapter measures the openness index of 129 major economies around the world, and compares and analyzes their openness from such perspectives as openness of economies, openness of geographic regions, the relationship between openness and economic development, and the relationship between openness and economic scale. The openness index measures the data results from 2008 to 2019, and utmost efforts have been made to enrich indicators of the index and expand sources of data to ensure the quality of the measurement.

I. World Openness Ranking

(Sorred by openness index in 2019)														
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Change of place	Index change %
Singapore	1	1	1	1	1	2	2	2	2	2	2	2	+1	2.5
Germany	2	3	3	3	4	4	4	4	4	4	3	3	+1	3.8
Hong Kong, SAR	3	2	2	2	2	3	3	3	3	3	4	4	+1	3.4
Ireland	4	4	4	4	6	5	7	7	8	8	9	11	+7	7.3
UK	5	6	5	6	9	7	6	6	5	5	5	5	0	2.2
Switzerland	6	5	6	5	8	6	5	5	6	7	7	10	+4	4.1
The Netherlands	7	9	8	8	7	9	8	8	7	10	8	8	+1	1.8
France	8	7	9	9	10	11	10	11	10	11	10	9	+1	1.8
Canada	9	8	11	10	11	10	9	10	9	9	11	7	-2	1.0

Table 3-1OpennessRankings, 2008-2019: the 40 Most Open Economies(Sorted by openness index in 2019)

									-	Contin				
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Change of place	Index change %
Malta	10	10	14	12	12	12	12	12	11	6	6	6	-4	-1.0
Italy	11	11	13	13	13	13	13	13	13	13	14	15	+4	2.6
Belgium	12	12	15	14	15	14	14	15	14	14	17	16	+4	2.1
Israel	13	13	16	16	17	16	15	14	15	15	18	17	+4	2.6
Korea	14	15	17	19	22	19	28	36	41	43	50	51	+37	11.4
Cyprus	15	16	28	32	32	30	51	40	19	18	19	19	+4	2.9
Australia	16	14	12	11	14	17	18	21	22	22	25	25	+9	3.8
Sweden	17	21	21	22	20	18	20	18	17	17	20	22	+5	3.0
Spain	18	17	18	17	19	20	21	22	20	19	22	20	+2	2.7
Czech	19	18	19	20	21	24	24	23	23	24	26	27	+8	4.1
Luxemburg	20	31	7	15	5	8	11	9	27	23	15	41	+21	7.8
Japan	21	28	25	26	16	15	16	16	12	12	12	12	-9	-1.5
US	22	19	10	7	3	1	1	1	1	1	1	1	-21	-17.8
Austria	23	20	22	24	23	22	19	19	18	20	21	21	-2	2.7
Denmark	24	23	24	23	24	23	23	20	21	21	24	23	-1	3.2
Hungary	25	26	26	21	26	25	26	26	26	27	27	26	+1	3.5
Norway	26	22	20	18	18	21	17	17	16	16	16	13	-13	-0.5
Estonia	27	25	27	28	27	27	22	24	24	28	29	29	+2	4.5
New Zealand	28	24	23	25	25	26	25	25	25	25	13	14	-14	-0.4
Latvia	29	27	29	27	29	28	29	28	30	31	35	36	+7	5.4
Costa Rica	30	29	31	30	33	59	43	43	43	59	57	58	+28	10.6
Lithuania	31	30	30	36	50	47	47	52	45	42	39	37	+6	5.1
Finland	32	32	32	31	31	29	27	27	29	29	28	28	-4	2.7
Portugal	33	34	35	33	34	31	31	31	31	30	30	30	-3	2.9
Uruguay	34	37	39	39	39	36	33	32	35	34	31	31	-3	2.9
Chile	35	33	36	40	37	37	36	33	28	26	23	18	-17	-0.7
Nigaragua	36	36	38	37	36	44	42	41	42	39	40	40	+4	4.7
Macao, SAR	37	40	43	48	47	42	44	50	44	44	46	48	+11	5.9
Panama	38	38	34	35	30	35	37	37	34	36	36	34	-4	2.6
Peru	39	35	37	47	46	53	49	49	51	61	58	60	+21	8.7
China	40	42	41	42	43	43	45	47	53	58	61	62	+22	9.6

(Continued)

Note: 1. Countries with black bold names are G20 members; the same applies thereafter if not specified otherwise.

2. For complete table of index of openness rankings of 129 129 economies, see Apendix 1.

II. Openness Analysis

1. Global openness and that of major economies

1.1 Mega-trend of global openness

From 2008 to 2019, the World Openness Index had been fluctuating between 0.74 and 0.78, showing an overall trend of volatility and decline, dropping by 3.98% to 0.748 from 0.779. In 2008, the index was the highest hit the lowest level in 2018. In 2013, 2014 and 2019, it rose slightly from the previous year.





Note: The World Openness Index is the weighted average of the openness index readings of 129 economies based on their 2010 constant price GDP share.

1.2 Most open and least open economies in the world

The 10 most open economies are all developed economies. In 2019, the top ten economies in terms of openness index are Singapore, Germany, Hong Kong, SAR, Ireland, the United Kingdom, Switzerland, the Netherlands, France, Canada, and Malta. With the exception of Ireland, which replaced the United States, the remaining nine economies were also among the top ten most open economies in 2008. The weighted openness index of the ten most open economies was 0.8217 in 2019, down by 5.97% compared with that in 2008, which shows a weakening trend of their openness during this period.

Table 5-2 The 20 Most Open Economies, 2008 and 2019										
Rank	Economy	Openness index, 2019	Economy	Openness index, 2008						
1	Singapore	0.8646	United States	0.9328						
2	Germany	0.8552	Singapore	0.8438						
3	Hong Kong, SAR	0.8503	Germany	0.8243						
4	Ireland	0.8371	Hong Kong, SAR	0.8221						
5	United Kingdom	0.8171	United Kingdom	0.7998						
6	Switzerland	0.8133	Malta	0.7921						
7	Netherlands	0.7997	Canada	0.7874						
8	France	0.7986	Netherlands	0.7856						
9	Canada	0.7953	France	0.7848						
10	Malta	0.7838	Switzerland	0.7814						
11	Italy	0.7814	Ireland	0.7802						
12	Belgium	0.7777	Japan	0.7782						
13	Israel	0.7772	Norway	0.7666						
14	Korea	0.7718	New Zealand	0.7656						
15	Cyprus	0.7696	Italy	0.7618						
16	Australia	0.7681	Belgium	0.7618						
17	Sweden	0.7674	Israel	0.7575						
18	Spain	0.7669	Chile	0.7535						
19	Czech Rep.	0.7668	Cyprus	0.7481						
20	Luxembourg	0.7667	Spain	0.7466						

Table 3-2The 20 Most Open Economies, 2008 and 2019

However, between the 11th and 20th in the above list, the significant change is that Japan fell from the 12th place in 2008 to outside the top 20, while Korea and Australia ranked 14th and 16th in 2019 from outside the 20th place in 2008. And Sweden, the Czech Republic and Luxembourg replaced Norway, New Zealand and Chile.

1.3 Overview of changes in global openness

About 80% of economies have expanded their openness, with China being a typical one; among nearly 20% of economies that have seen their openness reduced, and the United States is a typical one. The changes in open index of 129 economies from 2008 to 2019 are shown below.



Figure 3-2 Openness Index, 2008-2019: the 10 Economies with Largerst Change and G20 Members

From 2008 to 2019, 102 of the 129 economies, or 79.1%, saw their opening-up to the outside world expand. Among them, the economy with the largest expansion of opening-up is Nepal, with an openness index of 84.7%. China's openness index expanded by 9.6%, ranking 9th in the list of economies that had expanded their openness. And that of Korea expanded by 11.4% (5th). China and Korea are among the top ten economies that expanded their opening-up to the outside world and they are the only two G20 members among the top ten economies with the fastest opening-up expansion.

21.5% of economies saw their opening-up to the outside world shrinking. Among the 28 economies that have reduced openness, the three countries with the largest decline in the openness index are the United States, Egypt, and Jamaica, with a drop of 17.8%, 9.5%, and 6.5% respectively. In addition to the United States, there are four G20 members among those 28 countries with shrinking opening-up, including Brazil (-6.3%), Japan (-1.5%), Turkey (-1.2%), and Indonesia (-0.2%).

From 2008 to 2019, 51.5% of economies have risen in their openness rankings,

45.4% have fallen in their rankings, and 3.1% have maintained their rankings (of course, there will be some fluctuations). Among the 129 measured economies, 67 saw their openness rankings rise, 58 fall, and 4 remain unchanged. The three countries that rose by most notches are Korea, Georgia, and Iceland, gaining 37, 34, and 33 places, respectively. The three countries with the largest declines in the ranking are Egypt, Jamaica and Brazil, dropping 47, 37 and 34 places, respectively. The openness ranking changes of the 129 economies from 2008 to 2019 are shown in the Figure 3-3 below.



Figure 3-3 Changes in Openness Index from 2008 to 2019: 129 Economies

The uneven rise and fall of the openness index has led to the corresponding changes in rankings of those economies that are not necessarily in the same direction or by equal margins. From 2008 to 2019, among 102 economies that opened wider to the outside world, 67 saw their openness rankings rise, 4 remain unchanged, and 31 fall, accounting for 65.7%, 3.9%, and 30.4%, respectively. Nepal's openness increased by 84.7%, but its ranking only rose by 4 places. Among the nine economies whose openness index increased by 9% to 12%, the three economies that rose the most were South Korea (up by 37 places), Georgia (up 34 by places), and Iceland (up by 33 places); China rose by 22 places. Among the 31 economies whose openness increased but whose rankings fell, Slovenia and Greece had the biggest contrast (both saw their

openness rise by 0.8%, and their rankings fell by 17 and 16 notches, respectively); Bulgaria was in a similar situation (openness up by 0.4% and ranking down by 16 places). For the 28 economies whose openness declined, their rankings all fell, with Thailand falling by the smallest margin (one place) and Egypt falling the most (47 places).

1.4 Openness index of major countries

1.4.1 G20 members' openness

G20 includes 19 countries. "Members" as mentioned in this part, if not specified otherwise, refer to G20 members.



The openness of G20 exceeds the world's average level of openness. From 2008 to 2019, the openness index of G20 ranged between 0.753 (2019) and 0.796 (2008), which was 0.7% (2018) to 2.19% (2008) higher than the global openness index.

The G20's degree of openness had been on the decline year by year. From 2008 to 2019, its openness decreased by 5.4%. It registered the highest level of openness in 2008 (0.7960), and it was in 2018 when it registered the lowest level of openness (0.7515). The G20 openness trend is highly consistent with that of the world as a while, and the correlation coefficient between the two is 0.9988.



Figure 3-5 Openness Index, 2008-2019: Advanced Members and Emerging Members of G20

The developed members of the G20 were more open than the emerging economies in the group, but the gap between the two groups had continued to narrow. In 2019, the weighted average openness index of the eight developed members of the G20 was 0.7837, and that of the emerging economies in the group was 0.7058. During the sample period, the openness index of the developed members of G20 decreased by 7.87%, but that of emerging economies of G20 increased by 5.3%. As a result, the openness index gap between the two groups of G20 members had continued to narrow, down from 26.9% to 11%.

Developed-country members of the G20 still lead the world in terms of openness. Four developed-country member states, including Germany, the United Kingdom, France and Canada, are among the top ten most open economies in the world in 2019 (in comparison, there were as many as five developed-country members in the same list in 2008). The other four developed-country members — Italy, Australia, Japan, and the United States — rank 11th, 16th, 21st and 22nd, respectively. In comparison, the rankings of G20 emerging-economy members lag far behind, and, the ranking gap among them is much larger. South Korea, the most open emerging-economy^① G20 member with an openness index of 0.7718 in 2019, ranked 14th, only higher than the developed-country members Australia, Japan and the United States. Brazil, the least open emerging-

① Korea is now a developed economy.

economy G20 member, ranked 99th.

14 G20 members, such as China, saw their openness expand, while 5 G20 members, such as the United States and Japan, saw their openness decline. During the sample period, Korea's openness index increased the most, reaching 11.4%, followed by China, whose index increased by 9.6%. However, that of the United States fell by 17.8%, Japan by 1.5%, and Brazil by 6.3%. The trend of openness of the world's two largest countries has been at both ends of polarization, which is both eye-catching and thought-provoking.

1.4.2 US' opening-up to the outside world

As the world's largest economy, the level of openness of the United States and its trend have a huge impact on the world.

The United States was once the most open economy in the world. On this openness list, the economic openness index exceeded 0.9 only three times, reaching 0.9328, 0.9145 and 0.9084 from 2008 to 2010, all happening in the United States. Among them, the reading in 2008 was the highest ever on this list, which was also the most open years in the 12-year sample period of the United States.

Since 2009, the level of openness of the United States has gradually declined, and in recent years, the declining trend has accelerated. During this sample period, the United States' openness index fell year-on-year for nine years, and only rebounded rather mildly in 2013 and 2019. It openness index registered the steepest declines in the year 2016 (down by 4.6%), 2018 (down by 3.2%), and 2012 (down by 2.8%). The year 2016 witnessed a major change in the US government, with the new government sworn



Figure 3-6 Openness Index and Its Changes, 2008- 2019: United States
in; right after it took over, the new government started to implement the conservative policy line centered on *America First*, and various measures have been taken to restrain openness in the economic, social and cultural fields. In 2018, the United States launched a large-scale trade war with China, accelerated the building of the US-Mexico border wall, and intensified restrictions on immigration.

The absolute decline in the level of openness of the United States has directly led to a significant decline in its rankings on the openness lists. From 2008 to 2014, the United States was at the top of the list, but in 2015, it had been relegated to the third place; from 2016 to 2019, its ranking further went down to 7th, 10th, 19th, and 22nd place.

The accelerated decline in the openness of the United States has seriously dragged down the trend of global opening-up. From 2008 to 2019, the US' rate of contribution to the World Openness Index dropped from 28.9% to 22.9%.



1.4.3 China's opening-up to the outside world

China continues to expand its opening-up to the outside world. Since 2008, especially since the 18th National Congress of the Communist Party of China, the country has adhered to multilateralism and actively participated in global affairs in various fields. In 2008, its openness index was 0.6768, and then it climbed year by year, reaching 0.7420 in 2019, a cumulative increase of 9.6%. The increase is second only to Korea among the G20 member economies, and it ranks the 9th among the 129 measured economies in the world.

The continued expansion of openness has raised China's ranking on the global openness list. China ranked the 62^{nd} in 2008, and it has risen year by year, climbing to the 40^{th} in 2019, up 22 places from 2008.



Figure 3-8 Openness Index and Its Change, 2008-2019: China

China has become a positive force in the world's overall opening-up drive, which has effectively eased the momentum of shrinking global openness. As shown in the Figure 3-9 below, during the sample period, the openness of the world as a whole, the G20 as a whole, or the developed G20 members had tended to shrink, but China has *swum against the stream* to continue to raise its level of openness.



Figure 3-9 Openness Index, 2008-2019: China, United States, G20 and Its Advanced Economies and Emerging Economies, and the World

From 2008 to 2019, China's share in the world economy rose from the third place to the second, which has been unchanged till this day. It has helped increased its influence on the overall openness of the world. China is becoming a positive force contributing to the expansion of the world's openness and plays a positive role in promoting harmony and integration of mankind.

2. Openness of different geographical areas

Based on the criteria of the World Bank, the 129 sample economies included in this report can be divided into 7 regions in accordance with their respective geographic location, namely, East Asia & Pacific (19 economies), Europe & Central Asia (43 economies), Latin America & Caribbean (23 economies), Middle East & North Africa (12 economies), North America (2 economies), South Asia (5 economies), and Sub-Saharan Africa (25 economies). The openness index of of a region is the weighted average of the openness indexes of all economies in that region based on their GDP share of 2010 constant price, as shown in the Figure 3-10.



Figure 3-10 Openness Index, 2008-2019: East Asia and Pacific, Europe and Central Asia, Latin America and Caribbean, Middle East and North Africa, North America, South Asia, and Sub Saharan Africa

Among the seven regions, North America and Latin America & Caribbean saw their openness shrink. From 2008 to 2019, the openness index of North America, which includes Canada and the United States, fell by 16.3%. Canada's openness index increased by 1%, but that of the United States fell by 17.8%. As it accounts for 25% of the world economy, the United States has dragged down the regional and global pace of cross-border opening-up.

The openness of the other five regions had shown an expanding momentum. South Asia saw its openness expanded by 4%, the highest, while East Asia and the Pacific by 2.9%, Europe and Central Asia by 2.5%, and Sub-Saharan Africa by 0.4%, the lowest level of openness increase among the five regions. Among them, East Asia and Pacific and South Asia account for 35% of the global economy and 58% of the world's total population. Their openness improvement momentum, which leads the world, is naturally important to alleviate the decline in global openness.

3. Openness and economic development

Openness is closely related to economic development. From 2008 to 2019, the correlation coefficient between the GDP per capita of 129 measured economies and their openness index is 0.7392. The coefficient of the 129 economies for each year of the sample period is shown in the figure below. Except for the year 2008, when it was below, the coefficients for the other ten years of the sample period all fell between 0.73 and 0.77, and the standard deviation of the 11 correlation coefficients was only 0.028, indicating that this value sequence had been very stable.

The correlation between openness and economic development will be heterogeneous due to specific differences among different economies. The Figure 3-11 shows that openness and economic development of different economies show a common trend of development (see the openness index trendline in Figure 3-11), but there is also heterogeneity.

First, on the whole, the more developed the economy, the higher the openness index. Before a country's GDP per capita reached \$2,000 (the first vertical line in Figure 3-11), its openness index increased almost linearly with economic development. When its GDP per capita was between \$3,000-\$5,000 (between the first and second vertical lines in Figure 3-11), the upward rising momentum of its openness index would slow down and even start to decline.

When a country's GDP per capita was between \$5,000-\$45,000 (between the 3rd and 4th vertical lines in Figure 3-11), its openness index would rise steadily, before the upward trend slowed down. Therefore, the relationship between the two factors can be divided into the following four stages for observation: Stage I , GDP per capita reached \$2,000; Stage II , GDP per capita was at \$2,000-\$5,000; Stage III, GDP per capita stood at \$5,000-\$45,000; and Stage IV , GDP per capita was more than \$45,000.

From Stage I to Stage III, the relationship between openness and economic development had been getting ever closer: the more the economy develops, the higher the openness, and vice versa. At Stage IV, the closeness of relationship between the two factors had been greatly reduced. As shown in Figure 3-11, the correlation coefficient between a country's openness index and its GDP per capita was 0.4367 at Stage I . It rose to 0.4818 at Stage II, reached the highest point of 0.763 at Stage III, before declining significantly to 0.2139 at Stage IV.



Figure 3-11 Openness and Economic Development, 2019: 129 Economies Note: GDP per capita is measured by 2010 constant US\$.

Second, the stability of the relationship between openness and development varies at different stages of development. Regardless of theory or practical experience, the level of openness is only one of the many factors that influence development. Figure 3-12 above shows that the openness of most economies fluctuates around the trendline of the openness index and GDP per capita. If the trendline shows the theoretical relationship or long-term trend between the two factors, then these fluctuations show the diversity

of the relationship between the two factors in reality. The coefficient of variation, that is, the standard deviation of a sequence divided by its mean, can measure the degree of fluctuation of the sequence around the mean. As shown in Figure 3-11, from Stage I to Stage IV, the coefficient of variation of the openness index is 0.0732, 0.0584, 0.0842 and 0.0432. It indicates that the volatility of openness worsens when a country's economic development is at Stage I, about 20% at Stage II lower than that at Stage I, but 44% higher at Stage III than that at Stage II, and then decreased by 49% at Stage IV than that at Stage III.

The relationship between openness and development can also be examined by dividing the 129 measured economies into four income groups. The statistical criterion for income grouping comes from the World Bank and it includes the following four groups: high-income group, middle-high-income group, middle-low-income group, and low-income group. The relationship among these four groups during the 2008-2019 period is shown in the figure above. The conclusions shown in Figure 3-12 are consistent with those obtained from the above analysis based on 129 economies.



Figure 3-12 Openness and GDP Per Capita, by Income Groups, 2008-2018 Note: GDP per capia is measured by 2010 constant US\$.

In summary, the higher the level of economic development, the higher the level of openness, and the closer the relationship between the two factors. When the a country's GDP per capita is less than \$2,000 or between \$5,000 and \$45,000, the openness will be expanded at a faster pace, and fluctuation will worsen; when the GDP per capita falls between \$2,000 and \$5,000 or more than \$45,000, the level of openness will move steadily to a higher level. At present, the development of most economies is far from reaching Stage IV, and the level of openness fluctuates dramatically.

4. Openness and scale of economy

The openness of an economy has a low correlation with its size. As shown in the figure below, the correlation coefficient between GDP (current price, 100 million US dollars) and the openness index of 129 measured economies was 0.2359 in 2018 and 0.2561 from 2008 to 2019, which is much lower than the corresponding correlation coefficient of openness index and GDP per capita, which stood at 0.7408 and 0.7391, respectively.

Figure 3-13 below shows that in 2019, as a whole, the openness index seemed to have risen with the expansion of the size of the economy. However, among all groups of economies, whether their scale is small, medium, and large, the openness index of some economies was low, and their openness had not expanded linearly as their economic scale increased. The openness indexes of almost all the economies had fluctuated dramatically around the openness index-economic scale trendline, which obviously reflects the quite complicated relationship between economic growth and openness. That is, the economic growth of some economies is accompanied by a higher level of openness than other economies of similar size, while there are also some conomies for which the relationship between economic growth and openness is just the opposite or unclear. For specific individual economies, their level of openness may vary when they have the same economic scale.

The 129 economies are divided into the following three groups: the trillion group, including 16 economies with a GDP exceeding \$1 trillion in 2019; the 100-billions group, including 41 economies with a GDP between \$100 billion and \$1 trillion; and the 10-billions group, including 72 economies with a GDP of less than \$100 billion (including 13 economies with a GDP of less than \$10 billion). Then the three groups of economies are arranged in descending order based on GDP scale, and the numerical

openness index is shown in Figure 3-13.

Economies with a GDP of more than \$1 trillion (current prices) have a high and stable level of openness. In 2019, the openness index of the \$10-billions group economies (using the current price GDP share as the weight) was 0.6795, while that of the \$100-billions group economies was 0.7287, and that of the trillions group economies was 0.7621. Obviously, the larger the economy, the more open it becomes. The coefficients of variation of openness index of corresponding groups was 0.087, 0.181 and 0.076, respectively, with fluctuation of the openness index of the \$100-billions group being much more dramatic than that of the other two groups.

Specifically, the relationship between openness and economic scale is relatively stable in both large economies (GDP reaching \$1 trillion) and small economies (GDP less than \$10 billions), and it is more stable in large economies than in small economies. The next two figures show that the openness indexes of these two categories of economies have less dramatic fluctuations around the trendline. However, the level of openness also varies. Some large economies have a high level of openness, but there are also some large economies whose openness is low, although, on the whole, their level of openness increases slightly as their sizes grow. In small economies, the level of openness, on the contrary, decreases significantly as their scales increase. This once again points to the complexity of economic growth, and openness is only one of the factors influencing its performance.







Figure 3-14 Openness and Economic Size, 2019, by Three Categories Note: The size of national economy is measured by current price GDP (unit: 100mn USD).

III. Optimal Level of Openness

What is the best or optimal level of openness? From the distribution of the openness indexes of measured economies in this report, the openness of a country is highly correlated with its level of economic development, but it does not show a completely linear incremental relationship. Given the complexity of the openness-development relationship, it is not easy to find the optimal level of openness. Both relevant theories and practices show that **the optimal openness should be the appropriate openness, and the appropriate openness is reflected in balanced openness**.

The appropriateness of openness should be examined from static and dynamic perspectives as well as passive and active perspectives. First, in a static system where all variables are in the same period, openness interacts with multiple influencing factors or variables, and, from a mathematical point of view, it must be convergent. If it diverges, it will inevitably lead to disorder and chaos. The converging point as a result of the interaction of many variables is the static equilibrium point of openness. Second, in an economic system, variables would change over time, and there will be a series of *golden junctions* in different periods of time and at different levels of development. **Such dynamic equilibrium state highlights the matching of openness with development stage**. Seen from the law of development, things are always in motion, and openness balance can only be achieved in dynamics. Third, from a philosophical perspective of *agency*, openness should reflect the mega-trend of human development, guiding and facilitating movement to a higher level of equilibrium. What is emphasized here is the role of openness ideas in guiding the objective world, the force of openness practices in pushing forward the development of the objective world, and pro-active efforts to transform the objective world.

Specifically, in working out theories and taking practical measures to promote openness, relevant countries need to attach importance to the connotation of *balance* in the following aspects.

First, it is the balance between the level of openness and the level of development. Seen from annual cross-sectional data of different economies, it can be found that economies with high GDP per capita are relatively open. Although the performances of large economies and small economies vary, there is generally a positive correlation between openness and the level of development, which is in line with the law of economic development. Both excessive openness and conservativeness that are not commensurate with the level of development deviate from equilibrium, and are likely to cause development disorder and social conflict. The openness of one economy in any field can incur costs and produce benefits, and there must be an equilibrium between the two, that is, the marginal cost of openness equals its marginal benefit to fix the optimal tariff level and the optimal level of capital protection, among others. One economy should not have its hands and feet bound in expanding openness. The old-fashioned mindset, the hurdles erected by vested interest groups, and excessively conservative stance in pursuing openness will all prevent the demand for development from being unleashed, leading to loss of international space for its development and opportunities for participating in globalization. At the same time, one economy should not be blind and reckless or excessively bold in pursuing opening-up. Comprehensive and complete openness, like eliminating window screens to allow in mosquitoes, will not help the economy promote development and optimize well-being of its people. Therefore, one economy's openness must adapt to its level

of development.

Second, it is the balance between openness progress and improvement in competitiveness. opening-up should not be unconditional. The level of openness should match improvement in industrial capabilities. The realization of such a balance is a complex process and also one of dynamic adjustment. Developing countries that are undergoing the process of economic take-off need to formulate opening-up strategies based on its economic development. The key is to improve their *internal strength*, promote good practices and weed out corrupt ones, and push for utilization, transformation and upgrading of their comparative advantages. **Openness without capacity improvement will not go far, and competitiveness without dynamic openness is difficult to maintain**. Once a country's learning ability improves and its productivity develops, the previously adopted protective policies would have to be liberalized even abandoned, which is beneficial to all parties.

Third, it is the balance between capacity of openness and capacity of governance. The results of similar Opening-up policies in different economies vary significantly. Oranges grown south of the Huai River are tasteful oranges; once transplanted to the north of the river, they become trifoliate oranges (although they resemble in the shape of leaves, yet they differ widely in taste). This saying reflects the importance of one economy's openness capacity adaptating to and match its level of governance. The governance of a nation can be compared to *water* which *has no fixed* forms but can adatp to all forms. One economy's openness policy needs to adapt to the *soft* power constraints of governance level and capacity. Meanwhile, domestic systems and mechanisms in various fields also need to be continuously improved so that modernized governance can meet the requirements of development of an open economy in reality. Since the establishment of the WTO, among the more than 30 new member states, some have seized the opportunity to develop rapidly, while others have failed to achieve significant progress. The key lies in whether their openness can match their national capacity and whether a proper balance can be struck between the two factors. Judging from the openness-oriented development experiences of late-comer countries, openness and reform should move forward at a similar pace and reform should be promoted through opening-up, so that their governance can be continuously improved and they can continually pursue high levels of openness to create a benign dynamic balance.

Fourth, it is the balance between strength of openness and shouldering of responsibility. In the face of international governance deficits, the openness of one economy especially one large economy must develop ourselves to help others and promote the well-being of the world so as to achieve both its national development and development of the world as a whole. All countries should promote their own opening-up and strengthen their ability to carry out opening-up policies, while shouldering their duty and demonstrating their sense of responsibility, and playing their role in pushing forward the establishment of a fair and equitable international order. The developed countries and major powers should make more efforts to closely combine their self-development and the build-up of an open world. They should voluntarily and pro-actively take the responsibility of prmoting openness and development of the world economy, expand their own openness to make the world more open, provide public goods for the international community, actively guide globalization in the right direction, and push forward the establishment of a fairer and more equitable international governance system.

Last but not least, it is the **balance between openness benefits and inclusiveness plus sharing**. Openness aims to promote development, and its fundamental purpose is to improve people's livelihood and well-being. At present, the world's Gini coefficient has reached 0.7, far higher than the international warning line of 0.6. Global development is excessively unbalanced, and peace remains an unattainable goal of the world. More developing countries need to open up and actively participate in the division of labor in the global value chain to bridge their development gap. If a country's development is excessively unbalanced, the society would be easily trapped in turbulence; therefore, its domestic policy adjustment need to be strengthened to resolve the problem of wealth gap as a result of its opening-up. **All economies need to work together to build a cooperative-game mindset, abandon the zero-sum game mindset. And, as they open up, treat each other equally and join hands to promote global co-governance, so as to promote more comprehensive and balanced openness, continually expand and distribute the** *cake of development*, **achieve the Pareto optimality, and usher in a bright future for mankind**.

We as human beings have had a long openness history, but the openness based on a world market is still a phenomenon that has only occurred since the 1990s, and it has only been more than 30 years so far. In today's world, cross-border openness remains the trend of the times. Different from economic openness, social and cultural openness involves the transnational movement of people, which is restricted by factors such as transportation, culture, language, among others, and therefore, cannot be as smooth as trade in goods. As a result, social and cultural openness is far from reaching the optimal level of openness. Increased openness means improved social well-being, and a higher level of openness is a goal that any economy should pursue. At the same time, it is necessary to ensure thatone economy's level of openness should match the conditions of its economic and social development; the level and performance of openness should, therefore, be evaluated from the perspective of openness appropriateness.

IV. Main Conclusions

The openness index provides a clear description of the level of openness and dynamic trends of the world's major economies, serving as a reference path for choosing the most rational openness policies.

First, **the world still has a great openness potential**. In 2019, the highest openness index reading of a single economy is 0.8646 (Singapore), which is not only lower than the highest reading on the list (0.9328), but also significantly lower than the theoretical upper limit (1). In fact, in terms of cross-border personnel openness (in the social field) and information, knowledge and technology openness (in the cultural field) measured by this index, the economies still have an even greater potential in cross-border openness.

Second, **expanding openness is in the common interest of mankind**. The previous analysis in this report shows thatone economy's economic development or growth (which accumulates to form economic scale) is positively correlated with openness, although this positive correlation will become stronger or weaker, or become looser or closer, due to the heterogeneity of the economy (such as development stage, policy choices, population, geographic location, among others). The more open one economy is, the more developed it becomes. This is an indisputable fact, and we should be full of confidence in the prospect of the world's openness in the future.

Third, one economy should follow the principle of *seeking truth from facts* as it opens up. Appropriate openness means balanced opening. It is not that the greater

the openness of one economy is, the better it will be for that economy; or the faster one economy opens up, the better it will be for that economy. The appropriateness of openness should be based on conditions of the concerned economy or the world, and a balance should be struck between level of openness and national conditions. It should also be based on one economy's need to promote reform and development, take into consideration the special characteristics of national conditions, improve capabilities, and assume international responsibilities, so that policymakers can properly manage the strength, level and speed of opening-up.

Fourth, **the openness theory needs to be further built**. In the field of economics, the theoretical relationship between economic development and openness has been clearly clarified and well established. In other fields, more efforts should still be made to establish the theoretical relationship between social development and social openness, between cultural development and cultural openness, and between comprehensive national power and comprehensive openness, so that more scientific theories can serve as guidance for the opening-up practices all over the world.

Last but not least, **the openness index itself still needs to be improved**. The heterogeneity between theories, methods, and data of the openness index needs to be improved. The time series length of the openness index need to be expanded, the number of economies need to be increased, and the timeliness lag of the index release needs to be improved through improving basic data predictability.

To sum up, openness contributes to the well-being of mankind and is the only way to achieve civilization rejuvenation. If we return to the closed-door policy, the space for human development would be narrowed, and we may even repeat the mistakes of the Great Depression in the 1930s. Given the painful lessons of history, we human beings should reflect on the fact that an isolationist and closed-door policy would not make people rich or make the economy strong; sharing and co-prosperity, as a prophecy to fulfil, can only be achieved through opening-up.

Chapter IV Economic Globalization and the Megatrend of Global Openness

Economic globalization is a basic characteristic of modern times. After the end of the Cold War, globalization has advanced rapidly, and the economic integration of the whole world has moved forward at an unprecedented pace, which has contributed to the development and prosperity of the world and the improvement in the well-being of the people. However, globalization and de-globalization always go hand in hand. In recent years, due to the unbalanced development of different countries and especially the impact of the new novel coronavirus pandemic, the rise of anti-globalization sentiment has prompted more people to reflect on the pros and cons of globalization. But in general, economic globalization is an irreversible historical trend. The current "countercurrent" conforms to the law of "spiral development". With the new round of integration of rules and technological revolution, globalization will, amid twists and turns, embark on a new journey.

I. Development of Economic Globalization

1. Early exploration of the Silk Road and economic globalization before the 15th century – Version 1.0

Economic globalization is a concept that emerged after the industrial revolution, but mankind had begun to explore the outside world a long time ago. The most famous of those explorations is arguably the ancient Silk Road, which can be seen as the embryo of economic globalization. It was in the Han Dynasty when the ancient Silk Road first became prosperous. Since Zhang Qian made his first mission to the western regions, trade along the Silk Road had developed rapidly among China, India, Southeast Asia, Sri Lanka, the Middle East, Africa and Europe. During the Tang Dynasty, the Silk Road became prosperous again and served as a major commercial channel, through which more commodities had been traded. With the rise of the Arab Empire and the southward shift of China's economic center, the Maritime Silk Road had increasingly flourished. By the Song Dynasty, the Maritime Silk Road had gradually replaced the traditional Silk Road in the northwestern region. At the same time, people on the vast Eurasian prairie, including Scythians at the early stage, or later the Huns, Sogdians, Turks, and Mongols, had been promoting the extension and development of the grassland Silk Road for thousands of years.

2. Formation of world market from the end of the 15th century to early 20th century – Version 2.0

As industrial revolution gradually started in all European countries, one after another, coupled with the development of navigation techniques, people had started to engage in long-distance voyages. Christopher Columbus discovered the new world, and Ferdinand Magellan completed his circumnavigation. With the colonial expansion of Western countries, human activities began to spread across the five continents and seven oceans. Before the World War I, one did not need a passport to migrate to other countries. As a result, more than 30 million people moved to the United States and 12 million to Canada and Argentina, which can be seen as the first peak of globalization, leading to the gradual formation of a unified global market. At that stage, international trade was mainly driven by the industrial revolution. Britain, France, and the Netherlands took the lead to complete the industrialization process, leading to large-scale modern production, which created an urgent need for the supply of raw materials and a global market. Driven by profit-making prospect, capitalist countries had searched the world for resources and expanded markets around the world; as a result, they had promoted connections between different countries and led to the initial formation of a global market, thus playing a role in laying the foundation for future economic globalization. As Marx said, because the bourgeoisie has opened up the world market, the production and consumption of all countries have become worldwide.

3. Accelerating production and trade globalization during the WW $\[$ and Cold War – Version 3.0

After the two world wars, there emerged two camps in the East and the West. Western capitalist countries built the Bretton Woods system and the "three pillars" of the General Agreement on Tariffs and Trade, the International Monetary Fund and the World Bank, marking a shift from spontaneous economic globalization to institutionalized economic globalization. Meanwhile, the acceleration of production and trade globalization, coupled with the accelerated technology and industry transfer, had led to the second peak of globalization. The post-war restoration of the international order and the establishment of international organizations had provided a relatively peaceful and free environment for all countries. Multinational corporations had become the main driving force for the deepening of economic globalization during that period. The post-war era was a golden age for the development of multinationals. From 1968 to 1969, there were about 7,276 newly established multinational corporations, which had more than 27,300 foreign subsidiaries. International trade developed rapidly during that period. The global trade volume in 1991 was 60 times that at the end of World War II. In the mean time, the Soviet Union and and other countries that had adopted the planned economy system in Eastern Europe established the Council for Mutual Economic Assistance to engage in close cooperation. As a result, the world had two parallel markets.



Figure 4-1 World Trade Volume

Note: World excluding Hong Kong re-exports. Source: https://www.wto.org/english/res e/statis e/trade evolution e/evolution trade wto e.htm.

4. Economic globalization develops at a fast pace post-Cold War - Version 4.0

As the Cold War came to an end, economic globalization started to develop at a fast pace. The Soviet Union and Eastern European countries embarked on the road of market-oriented reform through the implementation of economic transition. The WTO replaced the General Agreement on Tariffs and Trade. In particular, driven by the new technological revolution, the global flow of information, capital and commodities has accelerated, leading to the "shortened" spatial distance on the earth and the disappearance of "time gap" of information exchanges. This had accelerated the economic internationalization and made the world unprecedentedly open. The original "one-country economy" that applies to all countries in the world has crossed national boundaries to become an integrated "world economy", leading to trade, capital, production, consumption, technology, service, and organizational globalization and formation of global industrial, supply and value chains, thus creating a global interdependent and mutually supporting economic scenario. During this period (1990-2019), the total world trade volume increased by 5.4 times, the global investment stock increased by 16.6 times, and the global air passenger traffic increased by 4.3 times. China joined the WTO in 2001 to get fully integrated into the world market and grew into the second-largest economy and the largest trading power in terms of trade in goods, accounting for 13.1% of the world's total trade volume in 2020, up from 4% in 1990. Meanwhile, it accounted for 15% of the world's total foreign investment inflow in 2020, compared with 6.1% in 1990. In terms of outbound investment, China accounted for 18% of the world's total in 2020, compared with 1% in 1990, becoming an important force to promote economic globalization, making China an important driving force promoting the continual development of economic globalization.

Box 4-1 Global Production Network of Boeing and Apple

Boeing airplanes and Apple mobile phones are the most typical case. The manufacturing process of the two companies has become globalized. Boeing has made full use of globalized industrial chains in making its 787 passenger plane. When it made its 727 model, the workload of foreign suppliers only accounted for 2% of the total. When it made the 777 model, the ratio rose to 30%. And it reached an astonishing 70% in making the 787 model. The value of an aircraft can be divided into that of fuselage,

wings, tail, and landing gear, which combine to account for about 40% of the total value of the plan. In the 787 passenger plane, Italy's Aletney and the Water Aircraft Industry Corporation of the United States are responsible for the central part of fuselage, and most of the wings and tail are monopolized by the three Japanese heavy industry consortia, Mitsui, Mitsubishi, and Kawasaki. Boeing is only responsible for making about 35% of the aircraft and the final assembly. Boeing CEO Philip Condit has a classic description of such division, saying that Boeing is an assembly company, or it can be called an equipment integrator. Apple has 766 global suppliers from 28 countries and regions, including 69 American suppliers, 346 Chinese suppliers and 126 Japanese suppliers.



Source: KOF Swiss Economic Institute.

The research report of the KOF Swiss Economic Institute has confirmed that process. Since the 1990s, the world globalization index had risen rapidly, from 43.3 in 1990 to 61.8 in 2018, and the level of openness had increased by 50 percent. After the 2008 global financial crisis, the pace of opening-up weakened in most countries, but the momentum had nonetheless been kept, with the globalization index kept at medium to high levels of about 60 on average. During that period, developing countries, such as China and India, began to rapidly integrate into the world. China's globalization index increased from 36.3 to 64.3, which exceeded average level of the world as a whole and was even higher than that of countries of the upper high income group. India's

globalization index increased from 31.9 to 62.2, roughly at the same level of the world as a whole. **Compared with developed countries**, developing countries, such as China and India, had a globalization index that is 20-30 percentage lower. **Generally speaking, economic globalization and the opening-up of countries reinforce each other.** As the economic globalization develops, it will create demand for all the countries becoming more open. And the more open the policies of those countries, the better the economic globalization will fare.

II. Increasing Resistance to Economic Globalization

"The more rapid its advancement, the more dangerous its path would be." Economic globalization is a "double-edged sword", with both driving force and resistance increasing simultaneously. After the 2008 global financial crisis, populism and extreme nationalism have been on the rise in many countries, which have blamed their own problems on economic globalization, setting off a counter-globalization wave. Economic globalization has entered a new stage of adjustment and momentum accumulation before it can re-start.

1. Rising protectionism

While economic globalization expands the "cake", which refers to benefits of development, the problem of properly dividing and distributing the "cake" has become prominent. There have occurred increasingly serious contradictions between growth and distribution, capital and labor, and efficiency and equity. The global wealth gap has become so serious that the world's Gini coefficient has hovered around 0.7. The "victims" of globalization have become increasingly dissatisfactory, setting off a global wave of protectionism. In recent years, there have been major events that typically reflect such a trend, such as Brexit and Trump's election as the US president. The rise of far-right or far-left parties in some countries, emphasizing that their domestic and national interests should be the top priority of policymaking, while opposing economic globalization and adopting protectionist policies in dealing with other countries. According to a WTO report released inJune, 2021, Since the outbreak of novel coronavirus pandemic, the G20 members initiated 140 trade and trade related measures, of which 39 measures or 28 percent were trade restrictive measures.

Box 4-2 Populist Movements in History

There have been three peaks in the history of populist movement. In the first wave of populist movement, including Russia's populist movement in 1870 and the People's Party movement of the United States in 1892, both safeguarding the interests of the peasant class and opposing demands of capitalists. The second wave happened from the 1930s to the 1960s, which included Latin America's populist movement, in which a series of populist economic policies was adopted. Latin America is a rare area in global politics that has provided room for long-term implementation of populist macroeconomic policies. The third wave of populist movement is a by-product of the political transformation of Asia-Pacific countries and regions. It was very influential and had been used as an instrument and political strategy in the transformation of those countries.

2. Global value chains to be reshaped

After the global financial crisis, the developed countries began to analyze the risk of industrial hollowing-out brought about by economic globalization. Many countries tried to revitalize their manufacturing industry. The US put forward the plan of manufacturing reshoring and devised preferential policies to support manufacturing, especially small and medium-sized enterprises, which has produced some results. At the same time, many countries have started the fourth industrial revolution featuring the widespread application of new-generation information technology. Taking the transformation of the German automobile industry as an example. It has transformed from traditional mode of mass production to personalized designing and customized production based on digital technology and artificial intelligence, making manufacturing reshoring more feasible. Study shows that after growing rapidly for many years, the division of labor in the global value chain has approached the "ceiling" of development. According to the Global Value Chain Development Report 2019 jointly issued by the WTO and other organizations, from 2007 to 2017, the overall average participation in global value chain dropped by 4 percentages. It has become a trend that the global value chain will shrink temporarily and feature decentralization and localized production.

Box 4-3 New Development Trends of Global Value Chain

According to the calculation of World Input-Output Database (WIOD), from 2011 to 2015, the added value created by the production activities of domestic production and domestic consumption alone increased by nearly \$15 trillion, while the production activities of the global value chain involving more than two countries decreased by \$300 billion. It is estimated that by 2030, the proportion of offshore production activities of intermediate products in the total production activities may drop from the current 9.4% to 8.8%.

3. Restructuring of international rules intensifies gaming

"The East is rising and the West is declining" — this is the most revolutionary change in the international power balance. The voice and influence of emerging markets have increased, and the interests of developed and developing countries have clearly diverged. The emerging markets and developing countries as a whole have risen. Their share in global economy and trade increased by about 20% compared with the 1990s, and their proportion in the world's total foreign investment increased by 18%. The developed countries require emerging market countries to assume greater international responsibilities, aiming to maintain and strengthen their competitive edge through rules, and shift from free trade to "fair trade". The emerging market countries, as a whole, have risen and are unwilling to passively shoulder "international responsibilities" and "constraints" that have been put forward by the developed countries and that have made it unaffordable for them given their development stage and level of competitiveness. At the same time, the willingness and ability of developing countries to participate in global governance are constantly improving. Continual efforts are needed to promote a more fair and reasonable global governance system. Meanwhile, different countries have different demands in the fields of cross-border e-commerce, intellectual property, digital economy, emerging services industry, and even ecology and culture, which are not directly connected with economy and trade.

Box 4-4 Carbon Border Tariff of the United States and European Union

Tackling climate change is a global challenge. In 1992, the United Nations General Assembly adopted the *United Nations Framework Convention on Climate Change*,

which established the basic principles of *Common but differentiated responsibilities* for international cooperation in addressing climate change. Countries actively promote carbon peaking, carbon emission reduction and carbon neutralization in the form of *Intended Nationally Determined Contributions* The European Union, the United States and other western countries accelerated the implementation of the Carbon Border Adjustment Mechanism (CBAM). In July 2021, the European Commission launched a carbon border levy plan to impose taxes on imported carbon intensive products such as steel, cement, chemical fertilizer and aluminum, so as to protect EU enterprises from being at a competitive disadvantage due to the adoption of higher environmental protection standards.

4. Eye-catching international governance deficit

The deep-seated contradictions of global development are becoming increasingly prominent: global problems are increasing, but solutions are insufficient; global rules are increasing, but international coordination is insufficient; the global market is expanding, but regulations and supervision are insufficient. Since 2016, some major powers have shown a clear tendency to focus on domestic development, with their stances and views divided on global issues. They have adopted a more selective and pragmatic approach, with the United States withdrawing from some important international organizations. In terms of multilateral trading system, progress of the WTO's Doha-Round Negotiations has been very slow; the selection process of the Appellate Body has been blocked; and the Dispute Settlement Mechanism (DSB) has been paralyzed. Therefore, the authority of multilateralism has been weakened. There lacks similar multilateral institutions and uniform standards and rules in the field of international investment. Trade barriers between countries and relevant sanctions have intensified, increasing costs of government supervision and business operation. In such fields as international finance, digital economy, and internet, new business models have continued to emerge, and the systemic construction of rules has significantly lagged behind the real needs of the businesses. Although the "hard power" of emerging markets and developing countries has somewhat increased, they still lack in "soft power", and they are still unable to undertake the important task of building and improving international economic governance.

III. Momentum of Economic Globalization Remains

From a long-term historical perspective, the development of everything has its own laws. The internal driving force of economic globalization is usually thought to be declining international transaction costs caused by natural or man-made factors, and is the result of productivity development and technological progress. The fall of the Berlin Wall, China's opening-up, the integration of the European Union, and the deepening of the global value chain system — the "global village" has for the first time become a reality in a real sense. Until today, this driving force has not been reversed, and no one can bear the price of moving backwards.

1. Market factor: Demand for economic development becoming the fundamental driving force for economic globalization

In terms of economics theory, market expansion \rightarrow deepening of devision of labor \rightarrow economy of scale \rightarrow efficiency improvement \rightarrow economic growth is an objective law. In essence, all countries suffer from varying levels of contradictions, such as lack of natural resources, capital, labor, technology, and markets. To resolve those contradictions, they must make full use of international markets and resources and make utmost efforts to participate in the international division of labor. The 2008 global financial crisis and this year's novel coronavirus pandemic both have some impact on the international production model. However, the modern industrial production determines that global distribution is more reasonable and efficient. As long as this production pattern and the unified world market do not change fundamental, there will always be the driving force for the in-depth development of economic globalization. In fact, after the 2008 global financial crisis, global production activities quickly recovered after a brief decline; although the growth rate was not as high as it was before the crisis, the global production had expanded steadily. People have experienced unprecedented integration and had access to the benefits of economic globalization, and it would be a historical "regression" to return to the previous state of isolation, which is not in the fundamental interest of mankind.

2. Technology factor: Technological progress having provided solid material foundation for economic globalization

The scientific and technological revolution is the main driving force for economic globalization. Generally speaking, the great advancement of scientific and technological revolution and the expansion of market division of labor have promoted the rapid development of productivity and led to accelerated globalization. Economist Richard Baldwin holds that economic globalization is an economic phenomenon caused by the successive reduction of three "transportation" costs. First, it is the decreasing cost of transportation of goods, which leads to the concentration of production and the formation of several regional manufacturing sections. Second, it is the reduced cost of information dissemination. The cost of cross-border communications has been greatly reduced, which has brought about another major change in the production model to form a global supply chain. Last but not least, it is the reduction in the cost of personnel mobility, which will further flatten the world in the future. As new energy, new medicine, artificial intelligence, internet of things, virtual reality, 3D printing, blockchain and other cutting-edge scientific and technological achievements become applicable and be applied to industrial production, they will create great new market demands. With the support of the global 5G network, the threshold for some small companies, start-ups and even individuals to integrate into economic globalization has been greatly lowered. Hundreds of millions of people have participated in cross-border e-commerce, and there are more and more cross-border personnel exchanges. Global interconnectivity and free flow of commodities and factors will become easier, and the global economic integration will be further deepened.

Box 4-5 Technologcial Development Promotes Economic Globalization

The United States has proposed to increase its R&D investment to the highest level in history of 3% of GDP, in an effort to achieve breakthroughs in the fields of new energy, basic science, stem cell research, and aerospace. The EU has increased its investment in the green economy to maintain its leading position in the world in the field of green technology. Japan has focused on the development of energy and environmental technologies, and taken information technology, environmental protection, electric vehicles, medical care, and solar energy as key areas for the development of emerging industries. Russia has proposed to develop nano and nuclear energy technologies. In tackle climate change, all countries have actively developed new energy industries and accelerated the energy revolution marked by green and low-carbon technologies. New energy vehicles have become the development direction of the global automotive industry. The information network industry is an important driving force for the recovery of the world economy. The global internet is being upgraded to the next generation, and the sensor network and the internet of things are on the rise. In these fields, breakthroughs in key technologies and industrialization will promote industrial revitalization, leading to a new round of industrial transfer, international division of labor, and global market expansion, making it difficult to separate a country's economy from the world economy, with economic globalization thus becoming irreversible.

3. System factor: Global market system and international rules provide institutional foundation for economic globalization

After the end of the Cold War, many countries have successively embarked on the road of market-oriented reform, which has vigorously promoted economic globalization. At present, although the multilateral trading system is struggling, as the global economy undergoes major changes, adjustments and reconstructions, international rules are evolving rapidly, and market-oriented reforms in various countries are deepening, the institutional foundation of economic globalization is still being reinforced. At the same time, regional integration is booming; more and more economies have signed free trade agreements to promote regional openness cooperation, which is an important supplement to the multilateral system and a devious process of multilateral governance. Regional economic integration strengthens internal alliance and the concerned countries can not only enjoy the benefits of the open market in the region, but also rely on it to formulate a higher level of opening-up standards. After the implementation of the rules becomes mature, they can be adopted at the global level, become the universal global rules, and provide the institutional foundation for deepening economic globalization.

4. Security factor: openness security provides new inherent demand for economic globalization

The theory of dissipative structure indicates that an open system can constantly exchange matter and energy with the exterior and move towards an orderly state. In a closed system, entropy will continually increase, pushing it towards disorder and decay. The same is true for the economic system. Economic globalization has knitted all countries together, and they have to share interests and risks, reducing the possibility of large-scale hot wars. In today's globalization, a country's financial and economic policies can never be confined within its own border. Changes in the monetary policy of the US affect global financial markets, and China's economic policy adjustment also has a significant spillover effect. As their interests are intertwined, economic security has also become a global issue, and no country can deal with it alone; cooperation and joint response need to be strengthened on a global scale. At the same time, global challenges such as climate change, pandemic, and food security are increasing. Global cooperation and global governance need to be strengthened to cope with those global challenges. It has become a pragmatic choice for all countries to strengthen international cooperation, ensure their own security through opening-up, and improve common security. The experiences of East Asia show that a country can have more room for manoeuver if it has higher level of openness. If one learns to swim in the sea, it would be easier for he or she to swim in the river, the same is true for the opening-up of a country, which can gain an edge in international competition if it voluntarily and pro-actively open up.

IV. New Economic Globalization Trends against the Backdrop of Novel Coronavirus Pandemic

"Warm and cold, we share together." Globalization has made it easier for the novel coronavirus to spread. But the pandemic will not put an end to global interconnectedness. It is more accurate to say that the basic direction of globalization has not been changed. Only the adjustment of globalization has accelerated to ensure globalization can be more sustainable in the future.

1. Pandemic triggers reflections on economic globalization

The huge impact of the epidemic has plunged the world economy into serious contraction, which is second only to the two world wars and the great depression in 1929 during past 100 years. According to statistics, the world economy shrank by 4.3% in 2020, and the GDP of more than 85% of economies declined. **The epidemic has**

changed people's view of globalization, prompted people to rethink the risks of globalization and re-examine industrial security. In the name of ensuring supply chain security, some countries begun to build self-supporting or diversified industrial chain supply chains. In 2020, the Japanese government implemented the projects Promoting Domestic Supply Chain Investment and that of Supporting Overseas Supply Chain Diversification to support medical, automobile, electromechanical and other enterprises to increase local investment or disperse to Southeast Asia. In 2021, the US' government launched a investigation into the supply chains of four key products, including semiconductor chips, electric vehicle batteries, rare earth minerals and pharmaceuticals, increased the domestic production of key products, and cooperated with Asia Pacific economies for the diversification of their supply chains. Transnational capital also hunted for rebalance between security and efficiency, preferring to sacrifice part profits but also shortening supply chains to avoid risks. Lamy, former director general of the WTO, said that "preparedness" will rise after the epidemic, production will be more localized, and the global value chain will become shorter; "De globalization" may be exaggerated, and it is more likely to be local decoupling, especially in the medical industry.

2. Pandemic highlights urgency of improving global economic governance

Some people can also see opportunities in crises. Some people hold that the existing international governance model has failed to adapt to the development of economic globalization, and **the pandemic has exposed the defects of international governance, which may become a turning point in modern history and bring about a new world order**. The weakening of international cooperation, and the rise of protectionist unilateralism —these characteristics existed before the pandemic hit and became more prominent after the eruption of the pandemic. Henry Kissinger holds that mankind is standing at an epoch-making historical juncture; the pandemic will permanently change world order and it is necessary to prepare for the transition of order and usher in the future world order. In fact, whether the international governance will improve or worsen after the pandemic will depend on the common choice of the international community, especially the choices of major powers, such as China and the United States. In particular, the decoupling theory, the new cold war theory, and the "Thucydides's trap" must be prevented from becoming self-fulfilling prophecies.

The development of digital economy in the post-pandemic era has provided opportunities for improving global economic governance. The pandemic has highlighted the bright future of the "digital economy". In the post-epidemic era, crossborder data flow and digital trade will become new carriers of globalization, and digital technology, digital infrastructure, and the data governance system will become new opportunities for globalization transformation. Ian Goldin, former vice-president of the World Bank and an globalization expert in the UK, holds that the pandemic will not terminate globalization, but highlight the importance of global cooperation. In the postpandemic era, trade, investment, and travel will all recover and rebound, and the rapid development of the digital economy may also accelerate the process of globalization.

3. Pandemic can hardly stop mega-trend of economic globalization despite twists and turns

From a long-term historical perspective, "counter-globalization is a necessary episode, and globalization is the mega-trend of the world." Globalization represents the historical torrent of human progress. Even if there are setbacks in the short term, the general direction of development will not fundamentally change. After a round of governance adjustments and rule revisions, globalization may bring about a new round of economic growth. Raphael Cohen, a US expert in RAND Corporation, holds that globalization has undergone the test of two world wars, the Cold War, the war on terrorism, as well as multiple pandemics and multiple waves of anti-globalization. It has become quite resilient and able to withstand pressure. The current pandemic will never become "the last straw to crush globalization" and will not put an end to globalization. It hinders the development of globalization in the short term, and in the long term, it will in turn force countries to make policy adjustments, which help reduce the resistance to the deepening of globalization and promote its in-depth development.

History speaks volumns about the fact that the development of globalization does not be accomplished overnight. Plague, war, crisis, and changing international landscape may all hinder or even interrupt its development. Economic globalization may hit a trough within a certain period of time, and be blocked, or suffer setbacks, but it is set to move forward, like a river flowing towards the sea despite twists and turns. Globalization and global openness are two sides of the same coin. Pushing globalization to continually move forward and expand openness of the world is the only way to solve the development problems the world faces today. In the same time-space conjuncture where history and reality meet, all countries should follow the law of historical advancement to move forward, pursue development in accordance with the trend of the times, and adapt to the mega-trend of economic globalization. Those who hesitate and adopt a wait-and-see attitude will only lose opportunities and get lost, while those who forge ahead will gain development and contribute to the world.

Chapter V WTO and Global Economic Governance

The era of globalization requires global governance. Economic globalization has brought closer all countries closer but also brought about problems, such as increasing frictions and contradictions and inconsistent rules. Global economic governance has emerged to cater to the need of times and gradually developed and evolved. **Multilateralism and regionalism are the two wheels driving economic globalization and governance**. Multilateralism mainly refers to the multilateral trading system represented by the WTO and the G20, APEC, International Monetary Fund, World Bank and BRICS are also important multilateral governance platforms. Regionalism mainly refers to regional economic global economic global areas. To improve global economic governance, **the two wheels need work together**. The role of relevant governance platforms in international economic policy coordination should be brought out to promote economic globalization and make it more open, inclusive, balanced, and win-win-based.

I. WTO as Important Pillar of Global Economic Governance

The WTO was established in 1995 and is the **only international organization in the world that deals with international trade relations**. It has 164 members and accounts for about 98% of global trade. For a long time, the WTO, the International Monetary Fund, and the World Bank have also been called the "three pillars" of global economic governance. They have played an important role in cultivating a free, transparent, and non-discriminatory international trade environment and establishing a rule-based multilateral trading system.

1. WTO functions and rules reflecting free trade spirit

The painful lessons from World War II have made almost all countries more willing to promote the establishment of a stable global economic governance system and promote development of trade. Since the establishment of the multilateral trading system, after years of development, a whole set of institutional arrangements has been formed around the world with free trade as the goal, fair competition as the foundation, and standardized government behavior as the core, and based on the market economy.

The core functions include carrying out trade negotiations, resolving trade disputes, and reviewing trade policies. Among them, trade negotiation is the main function, and the topics involved range from mainly reduction of tariffs of goods at the early stage. Later, they have gradually been expanded to include services and intellectual property rights. The first eight rounds of multilateral trade negotiations since 1947 have been completed. The 9th Doha round negotiations began in 2001 and is yet to be concluded. Trade disputes have mainly been resolved through expert panel and appellate body. Since its establishment, the WTO has agreed to resolve 600 disputes and decisions have been made regarding more than 350 disputes, which has effectively reduced the politicization of disputes. The purpose of the trade policy review is to urge its members to fulfill their commitments and abide by the rules. It covers trade, finance and taxation, currency, exchange rate, industry, investment and other policies and measures, which has gone beyond the scope of trade policies in the narrow sense.

The main rules cover trade in goods, trade in services, intellectual property rights and other rules. Trade in goods is mainly reflected in agreements related to trade in goods, including market access and disciplinary regulations and involving tariff reduction, inspection and quarantine, rules of origin, subsidy discipline, and trade facilitation, among others. Trade in services is mainly reflected in the *General Agreement on Trade in Services*, including general rules, such as market access, and special disciplines for specific industries. Intellectual property rights are mainly reflected in the *Trade-Related Intellectual Property Agreement*, which stipulates copyright, trademarks, patents, and geographical indications. Other rules include the *Agreement on Trade Investment Measures* and the *Agreement on Government Procurement*.

In the current situation of slow progress in multilateral negotiations, some members negotiated through the joint statement initiative on issues such as e-commerce, investment facilitation and domestic regulation of service trade, and started discussions on issues such as small, medium-sized and micro enterprises, trade and environment, and women's economic empowerment. The rules formulated by members in these areas will become a breakthrough for the formulation of new multilateral rules.

Basic principles include non-discrimination, transparency, fair competition, open markets, and special and differential treatment. Among them, the principle of non-discrimination requires its members to allow each other to have access to most-favored-nation treatment and national treatment to ensure "equal opportunity" in international trade. The principle of transparency requires its members to maintain transparency in all trade policy measures, and laws and regulations to enhance stability and predictability. The principle of fair competition requires its members to follow the basic rules of market economy and avoid measures that distort market competition. The open-market principle requires its members to reduce tariffs and non-tariff barriers to facilitate trade in goods, and expand the opening-up of services industry to promote trade liberalization. The principle of special and differential treatment allows its developing members to be flexible in complying with rules and fulfilling their obligations to help them benefit more from international trade.

2. WTO effectively promoting development of economic globalization

The WTO has established a binding trade rule system and a predictable international trade environment, promoted the development of an open world economy, and become an engine of economic growth, a source of power for economic globalization, and a propeller for improving well-being of the world.

It has promoted trade liberalization and facilitation. After many rounds of negotiations, tariffs and non-tariff barriers have been drastically reduced almost all over the world. According to the results of the Uruguay Round negotiations, the current average bound tariffs of developed members have dropped to 3.8%, and goods subject to tariffs account for 99% of the trade volume. The average bound tariff of developing members has dropped to 14.4%, and goods subject to bound tariffs account for about 90% of the total trade volume. Since the establishment of the WTO, the level of trade liberalization and facilitation has increased significantly, and the volume of world trade

has expanded nearly four times, far exceeding the economic growth rate over the same period.

It has promoted improvement in international investment environment. The WTO rules have created a precedent for negotiation management and standardized development in the field of international economic and trade, which is conducive to creating a stable, open, and predictable international investment environment. The rapid development of international trade has led to the accelerated international capital flow. Since the establishment of the WTO, international direct investment has increased by approximately 320%, and cross-border capital flows have increased from several million dollars to several trillion dollars, with the number of multinationals exceeding 80,000.

It has promoted global economic integration. The WTO rules have promoted the free flow of production factors, such as goods, services, technology and capital, among others, on a global scale, allowing its member countries to achieve rapid economic development through a larger (global) market, more frequent technology and technique exchanges, and more rationable resource allocation. They have also been enabled to complement each other in fields where they have advantages, accelerate the formation and development of global industrial chains, and promotes economic globalization and growth of the world economy.

3. WTO needs to carry out reform

At present, the world's economic landscape is undergoing profound adjustments, and unilateralism and protectionism are on the rise. As a result, economic globalization is suffering setbacks, and the WTO is facing a survival crisis. The authority and effectiveness of the multilateral trading system are facing unprecedented challenges.

In terms of the challenges facing the WTO's operation and rules, on the one hand, the operation of the Appellate Body has suspended due to obstruction of the selection and activation of its members, which has seriously affected the operation of the dispute settlement mechanism. On the other hand, the abuse of national security exception measures, the use of unilateral measures that are not in line with WTO rules, and the misuse and abuse of trade remedy measures have disrupted the rule-based, free and open international trade order and damaged interests of WTO members, especially the developing-country members. At the same time, regarding the status and treatment of developing members, industrial subsidy, State-owned enterprises, and other issues, relevant members have been seriously divided and it is difficult for them to reach consensus.

In terms of the need for the WTO to adapt to the development of the times, the organization is not perfect and has not yet fully achieved the goals set in the *Marrakesh Agreement* Establishing the World Trade Organization. Regarding function of negotiations, the Doha Round of negotiations has been very slow in reaching a consensus on such topics as agriculture, development and rules, although it has been launched for more than 19 years. It has also failed to promptly deal with new issues, such as e-commerce and investment facilitation, that reflect international economic and trade situation in the 21st century. At the same time, remarkable headway has been made and significant progress has been made in trade liberalization and facilitation through global bilateral and regional trade agreements; regarding review and supervision, the transparency of trade policies needs to be improved. It is very difficult for 164 member states to reach a consensus and the WTO needs to become more efficient in its operation.

Table 5-1	5-1 Multilateral Trade Negotiations in Nine Rounds						
Round of negotiation	Time	Partici- pant	Topics	Ratio of tariff cut (%)	Value of trade involved (\$bn)		
Geneva	1947	23	Tariff	20	10		
Annecy	1949	13	Tariff	2	_		
Torquay	1950-1951	38	Tariff	3	—		
Geneva	1956	26	Tariff	2.5	2.5		
Dillon	1960-1961	26	Tariff	4	4.9		
Kennedy	1964-1967	62	Tariff; anti-dumping	35	40		
Tokyo	1973-1979	102	Tariff and non-tariff measures	33	300		
Uruguay	1986-1994	123	Tariff, non-tariff measures, rule, non-tariff measures, rules, dispute settlement, intellectual property rights, textile, and agriculture	38	3,700		

 Table 5-1
 Multilateral Trade Negotiations in Nine Rounds

(Continued)							
Round of negotiation	Time	Partici- pant	Topics	Ratio of tariff cut (%)	Value of trade involved (\$bn)		
Doha	2001-	164	Agriculture, non-agriculture, services, rules, trade and development, intellectual property rights, trade facilitation, trade and environment	-	-		

Source: Compilation based on relevant regulations of the WTO.

The reform of the WTO has become a topic of increasing concern from all parties, and it is also an unavoidable topic for global economic governance. The G20 Buenos Aires Summit in 2018, the Osaka Summit in 2019 and the Riyadh Summit in 2020 all support necessary reforms to the WTO to help it better play its role. The BRICS leaders meetings in 2018, 2019 and 2020 claimed that they support necessary reforms to the WTO to ensure the effectiveness and relevance of the organization, better deal with current and future challenges, and serve the interests of all members .

Box 5-1 Relevant terms of WTO

Bound tariff. It refers to the cap of the tariff rate. WTO members have the right to adjust their implemented tariff rates, but they cannot exceed the promised bound tariff rates. Bound tariff is the basic principle of WTO tariff negotiations, which aims to prevent member states from arbitrarily increasing the implemented tariff rates and to ensure transparency and stability.

Appellate body. The Appellate Body is an important part of the WTO dispute settlement mechanism. It is composed of 7 members, all recognized authorities and not affiliated to any government. After the expert panel report is released, if the concerned parties in the dispute disagree, they can appeal, which will be heard by the Appellate Body. Usually, each appeal case is heard by three Appellate Body members, and a decision is made after such procedures as review of written statements and hearing. The conclusion of the expert panel can be maintained, modified or revoked, and it will take effect after being approved by the dispute settlement body.

Subsidy. It refers to fiscal aid, income or price support provided by the government
or public institutions of the exporting country (region) that benefits the recipient. Subsidies are divided into prohibited subsidies and actionable subsidies. Prohibited subsidies are divided into export subsidies and import substitution subsidies. Actionable subsidies refer to those other than prohibited subsidies. If a member's subsidy adversely affects other members, the latter can take countermeasures or resort to dispute settlement mechanisms.

Trade policy review. It refers to the mechanism by which WTO members are regularly reviewed by other members. Before 2018, the top four WTO members in terms of trade volumeshould be reviewed every two years, and other members can be reviewed every 4-6 years or longer. Starting from 2018, the review duration has been extended, with the top four members being reviewed every three years, and other members every 5-7 years or longer. It is carried out through written answers to the question list and on-site communication at the review meeting, and finally the chairman of the review meeting will present a written summary.

II. Regional Economic and Trade Arrangements Represented by Free Trade Areas on the Rise

For a long time, the two wheels of multilateralism and regionalism have accompanied and reinforced each other. When the multilateralism wheel moves fast, the regionalism wheel would be slower. When the multilateralism wheel moves slowly, the regionalism wheel would be faster. In recent years, protectionism has been on the rise, and the multilateral trading system has fallen into a deadlock. The negotiation over, and development of, free trade area has significantly accelerated. As an exception to the most-favored-nation treatment of the WTO, the FTA has become an important way for countries to promote trade and investment liberalization, and participate in the formulation of international economic and trade rules.

1. Number of agreement increasing rapidly

Free trade agreements emerged in large numbers after 2000. Before 2000, there were only 29 free trade agreements notified to the WTO and still in force. After the global financial crisis broke out in 2008, the number of free trade agreements rose sharply. By the end of 2020, the number of regional trade agreements that have been

signed or under negotiation and reported to the WTO had reached 501, most of which have emerged in the past 10 years. Of the 342 regional trade agreements currently in force, more than 85% are signed in the form of free trade agreements.



Figure 5-1 Number of Free Trade Agreements Effective after Being Notified to the WTO Source: WTO website.

2. Scale and size expanding significantly

Major economies have generally accelerated the construction of free trade areas, which has led to the continuous emergence of super-large FTAs represented by the *Regional Comprehensive Economic Partnership Agreement* (RCEP). After the *Comprehensive and Progressive Trans-Pacific Partnership Agreement* (CPTPP) came into effect, its influence has gradually increased. The *Japan-Europe Economic Partnership Agreement* entered into force. The United States and Japan signed the trade in goods agreement and the *High Standard Digital Trade Agreement*. And the *North American Free Trade Agreement* was revised and re-signed. The developing countries have caught up in building of free trade areas. Vietnam has achieved high-standard opening-up through joining CPTPP. Mexico has entered the "circle" of high standard agreements through joining CPTPP and the *North American Free Trade Agreement*. The South American Common Market, which is a customs union organization in Latin America, signed a free trade agreement with the EU. And in Africa, the *African* Continental Free Trade Agreement has also officially come into force.

Box 5-2 Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)

In October 2015, 12 countries, including the United States, agreed to pass *the Trans-Pacific Partnership Agreement* (TPP). In January 2017, the United States announced its withdrawal. After that, the remaining 11 countries declared that they would sign a new free trade agreement (CPTPP). The CPTPP was negotiated in January 2018, signed on March 8, and formally entered into force on December 30 of that year. CPTPP covers a population of over 500 million, and the total GDP accounts for 13% of the global economy.

The CPTPP covers a wide range of rules, which require that the signatories should revoke or reduce tariffs on industrial and agricultural products, provide facilitation measures in the field of trade and investment, and their bound tariffs should be higher than the level stipulated by existing trade rules, such as those of the WTO. In addition, the agreement is called "comprehensive and progressive" because, in addition to efforts to reduce trade costs, it also stipulates higher requirements on environmental standards, intellectual property rights, and state-owned enterprises.

Box 5-3 RCEP: the Largest FTA in the World

RCEP is currently the largest free trade zone in the world. In 2019, the 15 member countries of RCEP have a total population of 2.27 billion, a total GDP of 26.2 trillion US dollars and a total export of 5.2 trillion US dollars, accounting for about 30% of the global total. RCEP free trade zone means that about one third of the global economy will form an integrated market. RCEP includes major countries in East Asia and will give strong impetus into regional and global economic growth.

3. Continuous improvement in level of openness

The scope and depth of economic cooperation between free trade agreement partners have continued to expand, showing a trend of ever-increasing openness. **In terms of trade in goods**, in international high-standard free trade agreements, usually tariffs on most products have been canceled, which is close to complete liberalization. For example, in most free trade agreements signed by the United States, the European Union, and Australia, the number of tax items and imports of zero-tariff products account for more than 99% of the total, and tariffs on most products will be immediately cancel when the agreement takes effect. **In terms of service trade and investment**, the developed countries usually make service and investment market opening-up commitments in the form of a negative list in their free trade agreements. That is, they only specify limited restrictive measures and no restrictions are imposed on market entry or national treatment in other sectors that have promised to open up. At the same time, in recent years, **the "three zeros" concept, that is, zero tariffs, zero barriers, and zero subsidies**, has also received much attention.

4. More in-depth negotiation topics

As the global economic and trade situation changes, free trade agreements have covered a wider range of topics to include more "21st-century topics". The rules have had stronger binding force, and stricter enforcement has been required. **In terms of scope of issues**, most of the free trade agreements the developed countries have signed include high-standard "behind the border" issues, such as intellectual property right protection, environment, labor, state-owned enterprises, e-commerce, and competition policy. The behind-the-border measures are diverse, concealed, and difficult to predict. Although they are related to trade, they are traditionally a matter within the scope of a country's economic sovereignty. **In terms of requirements of the rules**, through the establishment of the dispute settlement mechanism, the implementation of these rules has been linked to tariff reductions, making them "rules with teeth".

5. More prominent guiding role of rules

Free trade areas are characterized by higher level of openness, greater flexibility, and faster progress. The level of openness is often "a head higher" than that of multilateralist arrangements. It has become an important carrier across the world for promoting regional economic cooperation through an institutional framework. Now free trade areas account for more than half of global trade. As a "test field" for experimenting with new international economic and trade rules and initiatives, free trade areas have catered to the new trend of economic globalization and played an increasingly prominent role in guiding and pushing forward setting and implementation of rules.

Box 5-4 Regional Trade Arrangements and Multilateral Trading System

Despite the current slowdown in the progress of the multilateral trading system, the conclusion that "the multilateral trading system represented by the World Trade Organization is the main channel of global trade rules, and regional trade liberalization is a useful supplement" remains unchanged. The multilateral trading system and regional trade arrangements have always been two paths and two wheels for promoting trade liberalization. The multilateral trading system provides disciplinary constraints and a rule basis for regional trade arrangements to prevent regional fragmentation and the "spaghetti bowl" effect. Regional arrangements are more flexible than multilateral arrangements, relatively easier to accomplish, and easy to implement. They have enriched economic cooperation, and are also an important way to promote the development of the multilateral trading system.

III. New Trends Evolving from Global Economic Governance

With the evolution of the multilateral trading system and regional economic and trade arrangements, the global economic governance structure and rule system are also gradually evolving. With the changes in the international balance of power and the unsmooth development of economic globalization, especially the adjustment of the international trade and investment landscape since the outbreak of the global financial crisis in 2008, the global economic governance system has undergone accelerating changes, and the current pandemic has intensified this process.

1. More multilateral governance platforms

Traditionally, WTO, IMF and World Bank have been the thre pillars of the global economic governance mechanism. In the post-global financial crisis era, the role of the three pillars has declined. Meanwhile, governance mechanisms at different levels have gradually played an important role. The importance of the G20 has increased significantly and gradually become one of the main platforms for global economic governance; the importance of such cooperation mechanisms as APEC, BRICS, and Shanghai Cooperation Organization is also rising. Forum mechanisms such as the World Economic Forum, the Boao Forum for Asia, and the Hongqiao International

Economic Forum are also actively contributing to global economic governance. Since 2008, the **G20** has held 15 leaders' summits and one special summit, with its topics expanding from fiscal and financial cooperation to cooperation in trade, development, and public health. As a result, its role in economic governance and policy coordination has been increasingly strengthened. After years of development, the **BRICS** mechanism has gradually expanded its influence and become an important platform for promoting global governance reforms and pragmatic cooperation among its member states. **APEC** has held 27 informal leaders' meetings, focusing on topics such as trade and investment liberalization and facilitation, and economic and technological cooperation in the Asia-Pacific region, and has played a positive role in promoting global and regional economic growth. At the same time, it must be noted that different mechanisms and platforms are relatively independent, and international coordination and cooperation are also facing some challenges, such as rising costs.

2. Changing governance landscape

As the overall prowess of the developing countries increases, making more contributions to growth of world economy, their willingness and ability to participate in global economic governance have increased, which, as a matter of act, requires the global economic governance system to be reformed to increase their representativeness and voice. As a result, the global economic governance landscape featuring dominance by the developed countries has gradually shifted to one featuring gaming between the North and the South. The cooperation mechanism of developing countries and emerging economies has been continuously strengthened, with their role in international economic affairs having become more important. At the same time, some countries have delayed and thwarted reform of international institutions, such as the IMF and the World Bank, shifted their focus from multilateral arrangements to bilateral and regional arrangements, established exclusive trade and investment arrangements, and made efforts to compete for the power to formulate the newgeneration international economic and trade rules. In general, the developing countries need to improve their ability in agenda-setting and guidance of rules, and there remain complex possibilities of changes in the power game and landscape evolution of global economic governance.

3. Governance reform still lagging behind

The global economic governance system as a whole has failed to reflect the current new pattern of international development, and lacks in representativeness and inclusiveness. The global industrial landscape has been constantly adjusted, leading to the gradual emergence of new industrial chains, value chains, and supply chains. However, trade and investment rules have failed to keep up with the new situation, and such problems as closedness of mechanism and fragmented rules have become prominent. The ability of global financial markets to cope with risks needs to be strengthened, and the global financial governance mechanism is yet to adapt to new requirements. So that it is difficult for it to effectively resolve the problem of frequent turbulences and accumulation of asset bubbles in the international financial market. **In particular, the outbreak of the novel coronavirus pandemic has exposed the defects of the international governance system**. Moreover, the role of relevant multilateral institutions has failed to be fully brought out, making it difficult for them to effectively coordinate international cooperation in the fight against the pandemic.

4. Gradual generalization of governance issue

Some developed countries have create new rules and set new thresholds in the fields of finance, economy and trade, and networks to maintain their competitive edge in digital economy and emerging industries. Topics in the economic and trade negotiations led by those countries have been increasingly generalized to include such "behind the border" issues as state-owned enterprises, free flow of data, investment dispute settlement mechanism, competition neutrality, labor standards, and environmental protection. Some topics also involve politics, culture, and ideology, among others. On the one hand, it reflects the fact that **the gaming involving the right to formulate international economic and trade rules has become more intense**. On the other hand, it also lead to greater challenges for the improvement of the global economic governance system.

5. Constant evolution of governance philosophy

As the challenges posed by global governance deficit, trust deficit, peace deficit, and development deficit become increasingly severe, the international community has generally realized that global governance must be built on the willingness and interests of most countries so that equal participation and common development can be achieved. China has put forward the philosophy of building a community with a shared future for mankind and pushed for equal rights, equal opportunities, and equal rules for all countries in international economic cooperation. It has promoted democratization and legalization of global governance rules, and pushed forward the development of the international economic order in the direction of equality, justice, and win-win cooperation. As a result, it has won widespread recognition from the international community, and enriched and improved philosophy of global governance. The vast number of developing countries wish to strengthen cooperation, integrate into the global industrial chain, and boost economic growth. The international community generally agrees that issues such as counter-terrorism, poverty, climate change, refugees, and public health are global in nature and require cooperation among all countries.

Facing changes in the global economic governance reform, all countries should **persist in keeping up with the times**, build a fair and rational global economic governance model, and better adapt to the new requirements of the international economic landscape. They should **adhere to the principle of extensive consultation**, **joint contribution and shared benefits**, improve open and inclusive institutional arrangements, and respond to the challenges of global economic governance through coordinated and connected development. They should **adhere to multilateralism and open regionalism**, give full play to the constructive role of global and regional multilateral mechanisms, jointly safeguard rules-based multilateral trading system, and strengthen macroeconomic policy coordination. They should also **adhere to common development**, provide more support for the integration of the developing countries and small and medium-sized enterprises into the global value chain, improve fairness, synergy, and inclusiveness of development, and promote the building of a community with a shared future for mankind.

Chapter VI Cooperation in Global Trade and Investment Opening-up

Cooperation in opening-up of trade and investment is in the common interest of all countries in the world. Since World War II, more countries have reduced barriers blocking cross-border flow of goods, capital, information, and personnel through multilateral, bilateral and regional negotiations, and become participants, beneficiaries and promoters of opening-up cooperation. Globally, international trade and cross-border investment facilitation and liberalization have continued to grow, which has promoted global economic growth and peaceful development.

I. Opening-up Practices in International Trade

Throughout the history of international trade, free trade and trade protectionism have engaged in long-term gaming. Since the GATT took effect, trade liberalization and facilitation have entered an institutionalized track. The multilateral trading system and regional bilateral trade agreements have jointly pushed for tariff and non-tariff barrier reduction, extending from *opening-up at the border* to *opening-up behind the border*. Remarkable progress has been made in market opening-up in global trade in goods and services.

1. Trade in goods

The actual level of tariffs in the world has fallen generally. The level of import tariffs of various countries has been significantly reduced, which has strongly pushed forward the development of international trade. From 1995 to 2017, the simple average

applied tariff rate for all products in the world fell from 12.2% to $5.2\%^{\circ}$, and the most-favoured-nation weighted average tariff rate from 15.4% to $9.5\%^{\circ}$. After 2018, the tariff level of some economies has increased slightly. From a regional perspective, zero tariff would be applied to more than 90% of the traded goods after the RCEP takes effect.



Figure 6-1 Weighted Average Applied Tariff Rate of All Products (%) Source: The World Bank (2021). World Development Indicators, online dataset.

① Simple mean applied tariff is the unweighted average of effectively applied rates for all products subject to tariffs calculated for all traded goods. Data are classified using the Harmonized System of trade at the six- or eight-digit level. Tariff line data were matched to Standard International Trade Classification (SITC) revision 3 codes to define commodity groups. Effectively applied tariff rates at the six- and eight-digit product level are averaged for products in each commodity group. When the effectively applied rate is unavailable, the most favored nation rate is used instead. To the exte. See webpage: https://data.worldbank.org.cn/indicator/TM.TAX.MRCH.SM.AR.ZS.

⁽²⁾ Weighted mean most favored nations tariff is the average of most favored nation rates weighted by the product import shares corresponding to each partner country. Data are classified using the Harmonized System of trade at the six- or eight-digit level. Tariff line data were matched to Standard International Trade Classification (SITC) revision 3 codes to define commodity groups and import weights. Import weights were calculated using the United Nations Statistics Division's Commodity Trade (Comtrade) database. See webpage: https://data.worldbank.org.cn/indicator/TM.TAX.MRCH. SM.FN.ZS.

Headway has been made in reduction of non-tariff barriers. From 1995 to 2008, 1,728 non-tariff barriers were removed globally. After the global financial crisis, protectionism has been on the rise. The global trade environment came to be tightening, and some economies adopted unified standards to reduce non-tariff barriers through regional or bilateral negotiations. The EU and Japan, based on their *Economic* Partnership Agreement (EPA), have jointly adopted uniform safety and environmental protection standards in the automotive field, uniformly used international standards for quality management system in the medical device field, and uniformly used international textile labeling system in the textile field. On the basis of the WTO Agreement on Sanitary and Phytosanitary Measures, RCEP has further strengthened provisions for the implementation of pest-free and low-endemic areas, risk analysis, examination and approval, certification, import inspection, and emergency measures. In 2020, the novel coronavirus raged across the world. Some economies provided facilitation measures, such as tariff reduction and exemption for imports of antipandemic materials. According to the WTO report in July 2021, since the outbreak of the epidemic, members have implemented 248 trade promotion measures in the field of goods, which is much higher than the number of trade restriction measures.

The level of trade facilitation has risen significantly. Driven by the WTO *Agreement on Trade Facilitation* and other multilateral rules, many countries have continued to raise their trade facilitation levels and voluntarily improved their business-doing environment. For example, the Eurasian Economic Union pushed forward the establishment of a single window system to improve customs clearance efficiency. From 2016 to 2020, the compliance time for Russia's export documents was reduced from 72 hours to 66 hours, and its compliance time for import documents was reduced from 96 hours to 72 hours. In Kazakhstan, the border compliance time of export dropped from 133 hours to 105 hours. Former WTO Director-General Roberto Azevedo once pointed out that the implementation of trade facilitation measures by countries can increase global trade by more than \$1 trillion each year.

2. Service trade

Market entry thresholds continue to decline. Accordign to the *General* Agreement on Trade in Services (GATS), all members have committed to opening up their services industry, and the level of openness of the developed economies is generally higher than that of the developing economies. Since the start of the 21st century, GATS negotiations have suffered setbacks, but through participating in bilateral and regional trade negotiations, countries have made more preferential commitments in the services industry and further lowered market entry barriers. For example, in the *Korea-US Free Trade Agreement* (KORUS), South Korea expands its market access commitments to almost all service sectors and allows cross-border services and commercial presence in the form of e-commerce. Canada opened up new maritime transportation market and dredging services to the EU after the EU-Canada *Comprehensive Economic and Trade Cooperation Agreement* (CETA) became effective. Another example is RCEP, under which the 15 RCEP members have all made opening-up commitments in the services industry that are more preferential than their commitments made in the ASEAN 10+1 Free Trade Agreement. Except for the three least developed countries of Laos, Cambodia and Myanmar, other signatory parties have all pledged to increase the number of service sectors to be opened up to more than 100 (out of 160 service sectors, according to WTO categorization).

Service liberalization continues to improve. In terms of trend of service trade liberalization, the International Trade in Services Agreement (TiSA) negotiations, which became effective in 2013, cover all areas of the services industry, including emerging services industries, such as e-commerce and information services, and conform to the development trend of global information technology and digital trade. Although they have not yet made substantial headway, they represent the direction of further expansion of service trade liberalization. In terms of practices of service trade liberalization, some countries have gradually relaxed areas that were once strictly restricted. In terms of foreign shareholding restrictions, India opened its retail industry in 2012, allowing foreign retailers to hold up to 51% of the shares of joint ventures; in 2016, foreign shareholding restrictions for civil aviation companies and broadcast and cable media were lifted. Regarding the movement of natural persons, Germany simplified the evaluation and certification procedures of foreign vocational certificates in 2012, lowering the threshold for high-quality talents to enter Germany. Later, it launched the MobilPro-EU program to facilitate flow of professionals from within and outside the EU.

The negative list model has gradually become the mainstream practice. Under the GATS framework, countries adopt a positive list approach and make commitments on market access and national treatment for the four service provision methods. TiSA requires adoption of a mixed list model, that is, a positive list for market access and a negative list for national treatment, which improves the flexibility of GATS commitments. In recent years, under the framework of FTAs led by developed countries, such as the Comprehensive and Progressive Trans-Pacific Partnership Agreement (CPTTP), the EU-Japan Economic Partnership Agreement (EPA), the United States-Mexico-Canada Agreement (USMCA), among others, a negative list model has been adopted; restrictions on service providers shall not be imposed outside of the sectors included in the negative list. At the same time, some agreements have also included a "ratchet provision" to lock in the service trade liberalization commitments made by the contracting parties so that they would not go back on their commitments; in this way, it promotes the continuous expansion of openness in the services industry. The eight members of the RCEP that have made promises on the positive list also include negative list elements, such as the ratchet plus most-favourednation treatment or transparency lists, to achieve a relatively high level of service trade liberalization based on the negative list model within six years after the agreement entered into force.

II. Opening-up Practices in International Investment

After the end of the Cold War, peace and development have become the main theme of the times; more and more multinationals have stepped out of national boundaries and developing countries have expanded entry of foreign capital, leading to the rapid growth of international investment. Countries have continued to relax restrictions on foreign investment, included more investment liberalization and facilitation provisions in regional bilateral agreements, and continued to explore multilateral investment rules to achieve substantial progress in the opening-up of international investment.

1. Significant relaxation of foreign investment restrictions

The developing countries have been bold in lauching reforms. In general, the developed countries have a better foundation for investment liberalization, while the developing countries have made greater progress. According to the latest FDI Regulatory Restrictiveness Index released by the OECD in 2020, from 1997 to 2019, Vietnam, Korea, China, India, and Malaysia were the top five economies in terms of promotion of investment liberalization reforms, with their restrictiveness index declining by 0.54, 0.4, 0.38, 0.27, and 0.27, respectively. They were followed by such countries Turkey, Indonesia, the Philippines, Finland and Hungary, most of which are developing countries (see Figure 6-2).



Figure 6-2 Economies with the Greatest Achievements in Investment Liberalization Reform Source: OECD.

Some key industries made breakthroughs in opening-up. After tough negotiations, some sensitive industries that some countries have been protecting for a long time, such as finance, health care, telecommunications, and media, have been gradually opened up to foreign investment. For example, Brazil fully opened the medical and health industry in 2015, allowing foreign ownership to reach 100%. Ethiopia allows foreign capital to enter some transport services in 2021. Even in the most difficult financial field, some major economies have also abolished the restriction on the proportion of foreign shareholding, leading to equal treatment for domestic and foreign capital.

	Country (2-alpha code)									
	AR	AU	BE	BR	CA	CL	CN	FR	DE	IN
Banking										
No restrictions on proportion of domestic or foreign shareholding	•		•	•		•	•	•	•	
Restrictions on shareholding ratio; domestic and foreign investment equally applicable					•					
Special regulatory procedures required if domestic or foreign shareholding exceeds a certain proportion		•								
Restrictions only on proportion of foreign shareholding										•
Restrictions on proportion of foreign capital in banking system										
Insurance										
No restrictions on proportion of domestic or foreign shareholding	•	•	•	•		•	•	•	•	
Restrictions on shareholding ratio; domestic and foreign investment equally applicable					•					
Special regulatory procedures required if domestic or foreign shareholding exceeds a certain proportion										
Restrictions only on proportion of foreign shareholding										•
Restrictions on proportion of foreign capital in insurance system										
Securities										
No restrictions on proportion of domestic or foreign shareholding	•	•	•	•	•	•	•	•	•	
Restrictions on shareholding ratio; domestic and foreign investment equally applicable										•
	IT	JP	KR	RU	SA	SG	ZA	СН	GB	US
Banking										
No restrictions on proportion of domestic or foreign shareholding		•			•		•	•	•	
Restrictions on shareholding ratio; domestic and foreign investment equally applicable	•									
Special regulatory procedures required if domestic or foreign shareholding exceeds a certain proportion			•			•				•
Restrictions only on proportion of foreign shareholding										
Restrictions on proportion of foreign capital in banking system				•						

Table 6-1 Regulations on Foreign Shareholding Ratio in Financial Industries of Some Major Economies

(Continued)

	Country (2-alpha code)									
	AR	AU	BE	BR	CA	CL	CN	FR	DE	IN
Insurance										
No restrictions on proportion of domestic or foreign shareholding	•	•	•		•		•	٠	•	•
Restrictions on shareholding ratio; domestic and foreign investment equally applicable						•				
Special regulatory procedures required if domestic or foreign shareholding exceeds a certain proportion										
Restrictions only on proportion of foreign shareholding										
Restrictions on proportion of foreign capital in insurance system				•						
Securities										
No restrictions on proportion of domestic or foreign shareholding	•	•	•		•	•	•	٠	•	•
Restrictions on shareholding ratio; domestic and foreign investment equally applicable				•						

Note: The corresponce of countries' 2-alpha codes with its name are as follows: AR - Argentina, AU - Australia, BE - Belgium, BR - Brazil, CA - Canada, CL - Chile , CN - China, FR - France, DE - Germany, IN - India, IT - Italy, JP - Japan, KR - Republic of Korea, RU - Russia , SA - Saudi Arabia, SG - Singapore , ZA - South Africa, CH - Switzerland, GB - United Kingdom, US - United States. Source: Compilation based on public information of central banks.

2. Significant strengthening of investment promotion

Tax incentives are used to attract investment. To bring out the role of investment in driving economic growth, all countries have adopted preferential tax policies to attract investment, including tax relief, preferential tax rates, accelerated depreciation, and tax credits. In 2017, the United States implemented the largest tax cut bill in 30 years, and the federal corporate income tax rate was reduced from 35% to 21%. India initiated a nationwide reform of the goods and services tax system to eliminate tax rate gaps among different regions and achieve free flow of goods and services.

Competing in establishing special economic zones. Both developing and developed countries regard Special Economic Zones (SEZs) as an important platform to improve their competitiveness in attracting capital inflow, implement fiscal and regulatory incentives in the region, provide infrastructure support, and promote industry investment. Special economic zones have sprung up "like bamboo shoots after a rain". By the end of 2018, 147 economies had established 5,400 special economic zones, an increase of 54% over 2008 (see Figure 6-3).

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Figure 6-3 Development of Special Economic Zones Source: United Nations Conference on Trade and Development.

3. Pre-establishment national treatment + negative list model widely accepted

For a long time, due to security and regulatory considerations, most countries have adopted a positive list model in managing entry of foreign investment, and foreign investment can only enter areas within the scope of the list. Led and pushed by developed countries, the more open *pre-establishment national treatment* + *negative list* model has become the central part of the new-generation international investment rules. The United States has signed BITs based on the pre-establishment national treatment + negative list model with more than 40 countries and regions, and the FTAs that it has signed with other countries and regions often include negative list arrangement. The EU has gradually shifted from a positive list to a negative list system, and the China-EU Comprehensive Investment Agreement is based on the negative list system. More and more developing countries are also adopting this model. Latest data shows that at least 77 countries, including more than 60 developing countries, have adopted the *pre-establishment national treatment* + *negative list* model in pacts they have signed with other countries. In 2020, the Regional Comprehensive Economic Partnership Agreement (RCEP), agreed by the ten ASEAN countries plus China, Japan, South Korea, Australia, and New Zealand, adopted the negative list system to promote investment liberalization, which significantly improved the transparency of investment policies.

III. Achievements of Trade and Investment Opening-up Cooperation

Over the past few decades, countries have actively participated in and promoted opening-up cooperation in trade and investment. The rapid development of international trade and investment has led to the steady growth of the world economy and also contributed to world peace.

1. Leapfrog development of international trade

Expanding scale of trade in goods. From 1990 to 2019, the total international trade in goods increased from \$7.1 trillion to \$38.1 trillion, an increase of 4.4 times, with an average annual growth rate of 9.8%, and its ration to global GDP increased from 31.3% to 44%. Due to the impact of the novel coronavirus pandemic in 2020, the World Trade Organization predicted that the total international trade in goods would fall by 9.2%. With the development of science and technology worldwide and the rising level of industrialization, the share of trade in manufactured goods had risen, while that of trade in agricultural and primary products had declined. Before the World War II, the share of trade in manufactured goods in international trade in goods was only about 40%. In 1953, it exceeded 50%. In 1995, it reached the peak of 80%, and it is currently kept at about 70%.



Figure 6-4 Global Trade in Goods to GDP Ratio

Source: WTO.

Rapid growth of service trade. From 1990 to 2019, the total international trade in services increased from \$1.6 trillion to \$11.8 trillion, an increase of 6.4 times, with an average annual growth rate of 11.7%, and its share in international trade rose from 18.5% to 23.6%. In terms of components of trade in services, emerging service trade and technical service trade have developed rapidly. Construction, insurance and pension, finance, information technology services, intellectual property rights, culture, entertainment, and business service, and other commercial services trade has become dominant, accounting for 53.2% of the total international service trade in 2019, up from 37.2% in 1990.

Entrenched trend of *rising South and falling North*. From the end of World War II to the 1990s, the international trade had been dominated by the developed countries, or the North. The share of the developed countries' international merchandise export had been on the rise since the 1950s, reaching an all-time high of 72% in 1999. From 2000 to 2019, the share had fallen year by year to hit 54%, while that of the developing countries, or the South, had climbed from 30% to 46%. The overall trade landscape features a trend of "rising South and falling North". While the share of the developing countries' international merchandise export rose by 18 percentages, that of the developed countries had dropped by 18 percentages, with their balance shifting from 28:72 to 46:54. China joined the WTO in 2001 and its global share in export of goods



Figure 6-5 Value of Export of Goods and Share Changes of the Developed and Developing Countries and Changes

Source: WTO.

had increased rapidly from less than 4% in 2000 to 13.2% in 2019.

Significant innovations in trading methods. First, it is the rapid development of intra-product trade. In the international industrial chain, the developing countries generally engage in the midstream links, such as product processing and assembly, while the developed countries focus on upstream and downstream links, such as product research and development, design, and sales. Currently, trade in intermediate goods has accounted for two-thirds of the total international trade. Second, trade within multinationals has become increasingly important. In the 1970s, the internal trade of multinationals only accounted for 20% of total international trade. It rose to 40% in the 1980s and 1990s, and now it is about 80%. Last but not least, it is the sudden rise of e-commerce. E-commerce has made it easier for carrying out international trade. It has also helped reduce the cost of international trade development. Statistics from the United Nations Conference on Trade and Development show that the scale of global e-commerce had increased from \$1 trillion in 2012 to \$25.6 trillion from 2018.

2. Growth of international direct investment amid fluctuations

Investment scale gradually expanding. After the end of the Cold War, international direct investment activities had increased remarkably. From 1990 to 2007, the total global FDI flows increased from \$204.9 billion to \$1.89 trillion, with an average annual growth rate of 8%. In the wake of the outbreak of the financial crisis in 2008, the momentum of global FDI growth had weakened in volatility. In 2015, it surged to \$2.03 trillion. From 2016 to 2018, global FDI flows decreased year by year, down by 5.7%, 22% and 5.8%, respectively. In 2019, it rebounded to \$1.54 trillion. Due to the impact of the novel coronavirus pandemic, global FDI flows slumped by 34.7% to \$998.9 billion in 2020.

More balanced geographical distribution. In terms of global FDI outflows, the proportion of the developed economies after World War II dropped from over 90% to about 70% at present. In terms of inflows, the developing countries attracted more foreign investment than the developed countries in 2012. In 2018, the developing countries accounted for a record 54% of global FDI inflows. The developing countries in Asia and Latin America and the Caribbean (LAC) have become hotspots in terms of foreign investment inflows, accounting for 41% and 11% of global FDI inflows,



Figure 6-6 Global FDI Flows

Source: UNCTAD.

respectively, in 2018. In 2020, FDI flows to East Asia increased by 21% to \$292 billion, while that to China was \$149.3 billion, contributing 15 percent to the world total.

Adjustments of international direct investment structure. International direct investment has shifted mainly from mining and manufacturing industries to technology-intensive and service industries. After World War II until the 1980s, direct investment among the developed countries mainly flowed into manufacturing. Since the 1980s, direct investment in the services industry had gradually increased. The share of FDI stock in the services industry increased from about 25% in the early 1970s to more than 60% at present. The FDI stock in the primary sectors is only about 6% and manufacturing accounts for about 26%.

Prominent role of multinational companies. Statistics from UNCTAD show that the number of multinationals increased from 80,000 before the 2008 global financial crisis to about 100,000 after the crisis, and the value added they created increased from \$5.2 trillion to \$7.5 trillion, and its share in global GDP increased to more than 10%. In 2019, the world's top 100 multinationals accounted for 58% of the total overseas assets of all multinationals; the proportion was 60 percent in terms of overseas sales, and 51% in terms of the number of overseas employees. It is estimated that the top 100 multinationals currently hold about \$5 trillion in cash and are capable of providing \$0.5 trillion in investment, accounting for about one-third of global FDI flows.

3. Pushing forward economic globalization

As the number of countries participating in international trade and investment increases, the world economy continues to grow steadily and in a balanced manner. In most of the years since World War II, the growth rate of international trade has been about 3 percentages faster than that of the world economy. Since 1990, the growth rate of international trade has been about twice that of the world economy. The world Gini coefficient has steadily declined from a high of 0.787 in 2000 to hit 0.694 in 2013. The number of developing countries with high Gini coefficient has decreased. According to the World Bank's World Development Report, the Gini coefficient exceeded 0.6 in 4 countries in 2009, but now there is only one country with the coefficient higher than 0.6. In addition, international trade and investment have extended the global industrial, value, and supply chains. As a result, personnel exchanges have increased, so have exchanges among different civilizations; and economic and trade exchanges have become the ballast of international relations. In short, the development of international trade and investment has led to the interdependence of different countries and the deepening of interactions among different interests; promotion of economic globalization contributes to world peace and stability.

IV. New Progress in Promoting Trade and Investment Opening-up under the New Situation

At present, the openness cooperation in global trade and investment have entered a new stage. More and more countries are benefiting from openness cooperation. A higher level of openness has become the common pursuit of all countries. With the continuous emergence of new technologies and products, demand for openness cooperation in new areas has also been increasing.

1. Digital trade and new issues on e-commerce attracting attention

With the application of big data, cloud computing, internet of things, blockchain, and artificial intelligence, digital economy and digital trade have become a new growth point. The establishment of a global digital trade service supervision and openness rule system has become a common demand from almost all countries as they pursue openness cooperation in new areas. In 2019, 76 WTO members launched trade-related e-commerce negotiations. In regional bilateral negotiations, digital trade

and e-commerce have also become hot topics. However, the participating countries have been quite divided in interest distribution, and, therefore, progress in relevant negotiations has been limited. For example, there is no consensus among countries regarding the definition of digital trade. Another controversy is how to balance privacy protection and free flow of data. The United States stresses that personal privacy protection should give way to data flow, while the European Union attaches more importance to personal privacy protection. Then how to deal with cultural exceptions? The European Union and some developing countries require exceptions regarding digital trade rules, while cultural industry powers, such as the United States, disagree.

2. New rules cover more economic and social issues

The scope of areas that international trade and investment rules involve has continually expanded in recent years. Some new issues, such as environmental protection, have attracted increasing attention and become a focus of multilateral and bilateral economic and trade negotiations. For example, in the face of severe climate change, there has been very heated discussion on restricting carbon emission. The EU promoted the legislation of Carbon Border Adjustment Mechanism, and China announced that it would strive to achieve carbon peak in 2030 and carbon neutralization in 2060. The issue of carbon emission is closely related to a country's energy structure and economic growth patterns and involves the transformation of the country's national economic restructuring and future development space. Therefore, reactions of various countries have been mixed. Economic globalization has brought about job competition among different economies. In general, these new non-economic and trade issues, to an extent, reflect the new requirements brought about by the development of human society and scientific and technological progress. They have a different bearing on economies at different development stages. It is also necessary for all countries to cooperate and push forward a set of new rules that are relatively fair and equitable and cater to different levels of development.

Chapter VII History and Great Achievements of China's Opening-up

Openness brings progress, while closed-door policy is set to make a country lag behind. This is an objective law that has been verified by history at home and abroad. Since the founding of the new republic in 1949, China has been committed to developing mutually beneficial cooperation with foreign countries, opening its door to promote development, gradually achieving the great transition from a closed and semi-closed country to one adopting an all-round Opening-up policy.

China adheres to the concept of openness and development and pursues a mutually beneficial and win-win opening-up strategy, and has made important contributions to promotion of the common development of the world and improvement in the wellbeing of people globally.

Openness has become a distinctive label of contemporary China, a deeply entrenched memory of hundreds of millions of Chinese people, and the only way for the country to prosper and develop.

I. China's Road of Opening-up and Development

China has actively participated in economic globalization while taking into consideration its national conditions, promoted reform, development, and innovation through opening-up, closely coordinated inbound and outbound opening-up, and achieved benign interaction with the international community. In the practice of *crossing the river by feeling the stones*, China has explored and found out an opening-up path with Chinese characteristics.

1. China's opening-up moving forward amid difficulties and setbacks after the founding of the PRC (1949-1978)

The People's Republic of China was founded in 1949. On the basis of sticking to independence and self-reliance, China made efforts to break external blockade and actively carried out economic, trade and cultural exchanges with other countries under extremely difficult conditions. "The Chinese people wish to have friendly co-operation with the people of all countries and to resume and expand international trade in order to develop production and promote economic prosperity," Mao Zedong pointed out in 1949. In the 1950s, China actively cooperated with the "socialist camp" countries. It launched 156 major projects with the support from the Soviet Union, covering industrial sectors, especially the heavy industry sectors. It also carried out barter trade with countries in East Europe and members of the Council for Mutual Economic Assistance. Under the guidance of its openness policy, which includes introduction of large-scale equipment and technology, China saw its industrial development move forward at a fast pace, which laid the foundation for pushing the development of China's industrialization. The launch of the Canton Fair in 1957 opened a window to the outside world and promoted the development of its national economy and foreign cooperation. In the 1960s, China gradually started developing economic and trade exchanges with Western countries such as Japan, the United Kingdom, and France. In the 1970s, China restored its legitimate seat in the United Nations, and the Sino-US relations gradually became normalized while it began to establish diplomatic relations with Western countries. Meanwhile, the pace of opening-up has accelerated. At the same time, in line with its import substitution opening-up strategy, China has established a foreign trade management regime and implemented foreign trade monopoly, import and export licensing system, and unified foreign exchange management.

In general, in the 30 years after the founding the People's Republic of China, the country had, restricted by subjective and objective conditions, struggled in its exploration of the opening-up road in a relatively closed environment, which provided support for the building of socialism.

2. Openness expands amid globalization wave after the start of the Reform and Opening-up policy (1978-2012)

In the 1970s, amid the new wave of economic globalization, some newly

industrialized countries had developed rapidly, which was in sharp contrast with China as it had just experienced the catastrophic *Cultural Revolution* and was in dire need of economic reconstruction. On the basis of a calm analysis of the domestic and international environment, the Third Plenary Session of the 11th CPC Central Committee made a historic decision to implement reform and opening-up. As Deng Xiaoping has pointed out, "it is impossible to succeed in construction behind closed doors, and China's development cannot be separated from the world". The implementation of reform and opening-up is a historical turning point in the process of China's construction, development and modernization, and a key move to determine the future of contemporary China.

China first established four special economic zones in Shenzhen, Zhuhai, Shantou, and Xiamen, using special economic zones as a window and pilot projects, taking advantage of their location along the coast, especially adjacent to Hong Kong, SAR and Macao, SAR, to try new systems in foreign trade, use of foreign capital, use of foreign exchange, foreign economic and trade management systems. Subsequently, more regions have gradually been opened up — from coastal regions to those along the river and borders, and from the eastern regions, such as the Yangtze River Delta, the Pearl River Delta, and the Bohai Rim to the central and western regions; a regional opening-up pattern has largely taken shape. In 2001, after 15 years of difficult and tortuous negotiations, China successfully joined the World Trade Organization, and it started to implement an all-round, multi-layer, and wide-ranging ppeningup. China has made full use of the open legal rules and market orientation under the WTO framework to promote the integration of the socialist market economic system with international rules. Correspondingly, reform of opening-up institutions and mechanisms has accelerated. In 2004, the Foreign Trade Law was promulgated, and foreign trade operators began to subject to registration and filing management; and China has implemented strategies, such as winning by quality, market diversification, mega economy and trade, promotion of trade with science and technology, going out, and free trade area. The policy of attracting foreign investment has gradually expanded from focusing on "three plus one trading mix" (it refers to processing imported raw materials, manufacturing products in accordance with provided samples, assembling imported parts, and repayment of loans for imported equipment and technologies with products) to encouraging the entire manufacturing and service industries to utilize

foreign investment. Through opening up its mind and embracing the world, China has become a truly open major trading power.

At this stage, China seized the historical opportunity of economic globalization, gave full play to its comparative advantages, late-comer advantages and institutional advantages, gradually promoted opening-up and expanded its scope, and became an important participant, beneficiary of economic globalization as well as a major contributor.

3. The cause of opening-up has moved towards high-quality development amid opportunities and challenges since CPC's 18th National Congress (2012 till now)

In the face of major changes in the world that are *unseen in a century*, President Xi Jinping has repeatedly declared to the world that China "will not stop Reforms and Opening-up" and "China's door to opening-up will not be closed, but will only open wider and wider." China has established the concept of *openness-based development*, put forward the major proposal of jointly building the Belt and Road Initiative, accelerated the construction of a new open economic system, promoted the formation of a new pattern of all-round opening-up, and promoted the construction of an open world economy and a community with a shared future for mankind. China's opening-up has entered a new era.

Establishing new concept of openness and development. Attention has been paid to improving the level of opening-up to the outside world and the internal and external interaction of development. The scope and fields of opening-up have been expanded. The level of opening-up has been deepened. Efforts have been made to innovate methods, optimize planning, and improve quality of opening-up. And the formation of an opening-up pattern of internal and external interaction between land and sea routes and between eastern and western regions have been promoted to push forward high-quality development through high-level openness.

Promoting joint efforts to build the BRI. Guided by the Silk Road spirit of peaceful cooperation, openness and tolerance, mutual learning, mutual benefit and winwin results, efforts have been made to adhere to the principle of extensive consultation, joint contribution and shared benefits, and vigorously push forward cooperation to enhance policy, infrastructure, trade, financial and people-to-people connectivity. So that the Belt and Road Initiative can be built into a road of peace, prosperity, openness,

innovation, civilization, integrity, and green development, and become a Chinaproposed and globally shared international cooperation platform and public goods that provides a China vision in promoting common global development and building a community with a shared future for mankind. Up to now, China has signed more than 200 cooperation documents for the joint construction of the BRI with more than 170 countries and international organizations.

Promoting pilot free trade zones and exploring free trade ports. China has created a high-level opening-up platform, given the pilot free trade zone greater reform autonomy, and implemented a pre-establishment national treatment plus a negative list management system. Since 2013, a total of 21 pilot free trade zones have been established, and 278 institutional innovations have been replicated and spread across the country. They have played an effective role in comprehensively deepening reforms and expanding opening-up pilot fields. In 2018, China decided to explore the construction of a free trade port with Chinese characteristics in Hainan. In June 2020, *the Overall Plan for the Construction of Hainan Free Trade Port* was officially released and implemented, and the policy effect began to emerge. In 2020, Hainan's imports and expands combined to increase by 3% year-on-year, which was higher than the national average; 1,005 newly established foreign-funded enterprises, an increase of 197.3% year-on-year; and the introduction of 122,000 talents, an increase of 177%.

Hosting the China International Import Expo. China has proactively open its market to the world and continues to build a world-class expo, which has been held annually for three consecutive years, with the fourth to be held this year. The CIIE provides an open cooperation platform for all parties to jointly explore the country's large market, provides international public goods to help maintain the multilateral trading system and support economic globalization, and creates an effective carrier for promoting China's high-quality economic development and meeting the needs of the people for a better life.

Active participation in global economic governance. From the Boao Forum for Asia to the G20 and APEC, to the Belt and Road Forum for International Cooperation — China has fulfilled its international responsibilities and obligations, promoted dialogue and exchanges among countries around the world, and pushed forward the continuous improvement of the global governance system. Since 2020, with the global spreading

of the novel coronavirus pandemic, China has promoted the establishment of a human health community with a shared future for mankind, shared pandemic prevention experiences, provided assistance within its capacity, carried out international antipandemic cooperation, and made efforts to contribute to the stability of the world economy.

Leading development direction of globalization. At the 2017 annual meeting of the World Economic Forum, President Xi Jinping put forward the China plan on how to lead the world economy out of predicament. China has always championed economic globalization, consistently adhered to the rules of the World Trade Organization, supported an open, transparent, inclusive, and non-discriminatory multilateral trading system, and helped build an open world economy. China and other countries have strengthened coordination and improved governance, and jointly pushed forward the development of economic globalization in a more open, inclusive, sharing, balanced, and win-win-oriented direction. China and the international community have strengthened high-quality cooperation in the joint construction of the BRI and jointly promoted global connectivity to allow more people in more countries to share the fruit of development.

At this stage, China has made good use of the general development trend at home and abroad, implemented a more proactive opening-up strategy, developed a higherlevel open economy, supported the liberalization and facilitation of global trade and investment, and pushed forward economic globalization in a more open, inclusive, sharing, balanced and win-win-oriented direction.

II. Achievements and Contributions of China's Opening-up

When the day comes, the roc will go up with the wind and fly up to the highest sky.

China's continual expansion of opening-up to the outside world has promoted sustained and healthy economic and social development. As a result, China has developed from a poor and backward country into the world's second-largest economy, largest industrial power, largest trading country, and a major outbound investor and inbound investment destination. While achieving its own development, China has also vigorously promoted the development of the world economy, becoming an important promoter of global openness, a stable driving force for world economic growth, a vibrant market for other countries to expand their business opportunities, and an important contributor to the reform of the global governance system (Figure 7-1).



Figure 7-1 Ratio of China's Economic Scale to World Economy (1990-2020) Source: World Bank

1. Open economy continues to reach a new level, promoting a significant improvement in overall strength

Status of major trading power further consolidated. From 1978 to 2020, the average annual growth rate of China's import and export of goods was 13.8%, and its share in the world's total rose from 0.8% to 13.1%. The total trade in goods in 2020 was \$4.65 trillion. (Table 7-1) From 1982 to 2020, the average annual growth rate of China's service trade was 14.3%, and its global share increased from 0.6% in 1982 to 6.6% in 2019. China's total service trade in 2020 was \$661.7 billion.

Table 7-1 China's Foreign Trade Growth and Grobal Share (70), 1702-2020							
Period	Growth of Total Foreign Trade	Global Share (year)					
1982-1985	17.6	1.6	1985				
1986-1990	10.9	1.5	1990				
1991-1995	20.9	2.6	1995				
1996-2000	10.8	3.5	2000				
2001-2005	23.9	6.4	2005				
2006-2010	16.2	8.7	2010				

 Table 7-1
 China's Foreign Trade Growth and Global Share (%), 1982-2020

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(Continued)
Clobal Shara (year)

Period	Growth of Total Foreign Trade	Global Share (year)		
2011-2015	6.6	10.7	2015	
2016-2020	6.0	13.1	2020	

Source: WTO.

In the early days after the founding of the new republic in 1949, 80% of export commodities were primary products, and the proportion of industrial manufactured goods exports has now reached more than 90%. In the 1980s, the export of high-tech products accounted for only about 2% of China's total export; and the ratio reached 33% in 2020. The export of railway locomotives, communications, ships and other products has grown rapidly, becoming China's new export business card. The import and export of private enterprises are developing rapidly, and their share in total foreign trade in 2020 was 46.6%. New models of business, such as cross-border e-commerce and market procurement trade, have developed and expanded. China has dozens of trading partners in 1978 and now it has exceeded 230, and it has become a major trading partner of more than 120 countries and regions (Figure 7-2). The contribution of China's foreign trade to its national economy has increased; foreign trade directly or indirectly creates about 180 million jobs, accounting for more than 20% of the country's total employment. Tariffs, import value-added taxes, and consumption taxes have become important sources of national fiscal revenues.



Figure 7-2 Changes in Export and Import Proportions of China's Major Trade Partners in 1995 and 2020

Source: General Administration of Customs.

Quality of foreign capital utilization further improved. From 1978 to 2020, China attracted a total of \$2.3168 trillion in non-financial foreign direct investment, with more than 1 million foreign-invested enterprises established. China has been a global leader in terms of utilization of foreign capital for many consecutive years (Figure 7-3). In 2020, its utilization of foreign capital increased to \$149.3 billion. At present, the number of foreign-funded high-tech industrial enterprises accounts for about a quarter of the national total. Multinational companies have invested in more than 2,000 regional headquarters and R&D centers in China. On January 1, 2020, China's *Foreign Investment Law* formally came into force, which was its first unified basic law in the field of foreign investment. China's business environment continues to improve, and its attractiveness to foreign investment is increasing. A large amount of foreign investment in China has brought advanced production technologies and management expertise, promoted the transformation and upgrading of traditional industries and the development of emerging industries, and pushed forward China's industrialization, urbanization and modernization.



Figure 7-3 Changes in China's Actually Utilized Foreign Investment Source: Ministry of Commerce, National Bureau of Statistics.

Ability to allocate resources globally further improved. In the early 1980s, the flow and stock of China's foreign direct investment accounted for less than 0.1% of the global total. With the progress of the *Going Global* initiative, China's outbound direct investment has increased from \$2.9 billion in 2003 to \$132.9 billion in 2020 (Figure 7-4). China has actively participated in international industrial cooperation. In 2020, China's non-financial direct investment in countries involved in the BRI increased by 18.3% year-on-year despite the unfavorable global economic situation. Chinese enterprises have accelerated their *Going Global* pace, contributing to promotion of economic growth and expansion of local employment in the host country. As of the end of 2020, China had invested a total of 309.4 billion yuan in overseas economic and trade cooperation zones, creating 373,000 local jobs. A survey by the School of Oriental and African Studies at the University of London shows that local jobs account for 90% of the total jobs of Chinese companies that build construction sites and factories in some parts of Africa.



Figure 7-4 China's ODI Flow and Global Rankings

Source: Statistical Bulletin of China's Outward Foreign Direct Investment.

2. Level of participation in global openness cooperation continuously improved, contributing to common development of all countries

Bilateral cooperation continuing to deepen. From the establishment of cooperative and stable relations among major countries, to the diplomatic principle of

"amity, sincerity, mutual-benefit and inclusiveness" when dealing with its neighbors, to the policy principle of "sincerity, real results, amity and good faith" towards Africa — China actively develops and consolidates friendly cooperation with other countries. At present, China has signed bilateral investment protection agreements with more than 130 countries and regions, bilateral cooperation in various fields, such as economy and trade, is gradually advancing, and its convergence of interests with other countries has been constantly expanding.

Significant progress in regional cooperation. China has implemented a free trade zone promotion strategy and built a high-standard free trade zone network aiming to serve the whole world. By the end of 2020, China had reached 19 free trade agreements with 26 economies. It had successfully signed the *Regional Comprehensive Economic Partnership Agreement* (RCEP), becoming the world's largest free trade zone. It has completed the China-EU investment agreement negotiations. It has actively pushed forward a number of free trade negotiations, such as those on the China-Japan-Korea and the China-GCC free trade agreements; and it has promoted regional and sub-regional cooperative initiatives, such as the Lancang-Mekong River cooperation, the Greater Mekong River sub-regional cooperation, and the Grand Tumen Initiative cooperation.

Increasing contribution in terms of multilateral cooperation. China has a global perspective. It has the world in mind, and constantly seeks the convergence of interests of all countries that represent their greatest common divisor. It has firmly safeguarded the multilateral trading system and actively participated in the reform of WTO. It has actively participated in the United Nations, the G20, APEC, BRICS, SCO and other multilateral and regional mechanisms, and put forward its own plans and proposals. After the COVID-19 outbreak, China has supported the WHO playing a leading role in the fight against the pandemic, and called on the international community to increase political support and financial input for the WHO and improve the global public health governance system. While ensuring its domestic anti-pandemic needs, China has tried its utmost to export anti-pandemic materials to more than 200 countries and regions. China exported 1.08 billion nucleic acid testing kits to provide support for COVID-19 test work worldwide and 271,000 ventilators in 2020. From March 2020 to the end of 2020, China exported 224.2 billion masks, equivalent to providing nearly 40 masks for everyone outside China. It also exported 2.31 billion protective suits, 290 million pairs of goggles, 2.92 billion pairs of surgical gloves, 271,000 ventilators, 663,000 patient

monitors, 120 million infrared thermometers, and 1.08 billion novel coronavirus detection kits. By August 4, 2021, China had provided 770 million doses of vaccines to more than 100 countries and international organizations through various channels, such as assistance, export, and joint production, benefiting hundreds of millions of people and contributing enormously to international anti-epidemic cooperation and promotion of building a health community with a shared future for mankind.

3. New progress continuously made in collaborated opening-up in various fields, promoting cultural exchanges and mutual learning

Much headway made in scientific and technological cooperation. Since the beginning of Reform and Opening-up, China has successively signed intergovernmental science and technology cooperation agreements with France, the United Kingdom, and the United States. At present, China has established scientific and technological cooperation relations with more than 160 countries and signed more than 110 intergovernmental cooperation agreements. Since 2013, China has become the world's second-largest R&D investor, ranking first in the world for many consecutive years in terms of total number of R&D personnel and invention patent applications. According to the Global Innovation Index released by the World Intellectual Property Organization, in 2020, China ranks the 14th in the world in terms of national innovation capability, and it is the only middle-income economy to enter the top 30 list.

Cultural *Going Global* **initiative enhancing mutual trust**. Cultural trade and investment have grown rapidly. Since the Reform and Opening-up, China's cultural exchanges with other countries have continued to expand and deepen. In 2019, its import and export of cultural products totaled \$111.45 billion, its outbound investment in culture, sports and entertainment reached \$540 million, and its cultural exports to countries and regions involved in the Belt and Road Initiative was \$20.35 billion, which declined moderately in 2020 due to the impact of the pandemic. Its "soft power" of culture continues to improve. It has established a high-level people-to-people exchange mechanism with relevant countries. The cultural *Going Global* initiative, including cultural exchanges, cultural trade, and cultural investment, has helped promote the spreading of the Chinese culture to the other parts of the world.

Educational cooperation accelerated. The number of students studying in China has increased from more than 1,200 in 1978 to more than 490,000 in 2018. China has

become the largest Asian destination country for international students. The structure of international students in China has been continuously optimized. In 2019, the proportion of students studying in China with academic qualifications reached 54.6%; the proportion of international students from countries involved in the Belt and Road Initiative reached 54.1%. The number of Chinese students studying abroad increased from 860 in 1978 to 704,000 in 2019, with their accumulative number exceeding 6.56 million. In 2019, the total number of Chinese students who returned China after studying abroad exceeded 580,000, a year-on-year increase of 11.7%. In 2020, education cooperation was, to a certain extent, adversely affected by the pandemic, but two major trends — studying abroad and returning from abroad — have become popular, which is increasingly in line with the country's national strategy and industry demands.

III. Experiences and Lessons of China's Opening-up Development

Practice gives rise to wisdom, and history reveals the direction of the future. Through looking back at China's opening-up to the outside world, summing up its successful experiences, understanding and catering to the law of history, and detecting the future direction, the concerned parties will be able to better promote global openness cooperation and jointly build a community with a shared future for mankind.

1. Adhering to adapting to the general trend based on national conditions

Since the founding of the new republic more than 70 years ago, China has, after taking into consideration its own conditions, seized external opportunities to actively integrate into the world. At the beginning of the country's opening-up, a new round of industrial revolution and economic globalization had just begun. China made full use of its low-cost advantages in such factors as labor, land and resources to fully participate in the international division of labor, develop processing trade and labor-intensive industries, and gradually become the "world factory". In the new century, the trend of economic globalization is unstoppable. China took advantage of its strong industrial supportive capabilities and adequate infrastructure to undertake higher-level industrial transfers, such as high-end R&D and manufacturing and service outsourcing, and got more integrated into the world economic system. Since the 18th National Congress of the CPC, China has given full play to its new advantages, such as comprehensive strength, huge market,
innovation and entrepreneurship, and conformed to the general trend of deep integration with the world and common stake shared by all countries, and promoted the formation of a new pattern of comprehensive opening-up, high-quality joint building of the Belt and Road Initiative, and construction of an open world economy. China's opening-up to the outside world has always reflected the close integration of China's national conditions with the general trend of the world. And, through relentless exploration, it has embarked on a path of opening-up that suits its own conditions.

2. Persisting in opening-up to promote internal reforms and development

Looking back at the history of China's Reform and Opening-up, the reform and Opening-up initiatives have consistently reinforced each other so that they can both move forward as a whole. In a sense, reform means opening-up, and opening-up is also a reform; both aim to better serve the overall economic and social development. Every major breakthrough in China's opening-up to the outside world has accelerated the process of deepening domestic reforms. The first four special economic zones, which were China's first batch of areas adopting opening-up policies, along with coastal, riverside, and border opening-up initiatives, have strongly pushed forward the establishment of China's socialist market economy system. By joining the World Trade Organization, China has effectively aligned with multilateral rules and continually strengthened the role of the market, which helped accelerate the improvement in its socialist market economy system. In recent years, China has actively promoted trade liberalization and facilitation, and accelerated institutional innovation through carrying out stress tests in pilot free trade areas. The high degree of interaction and positive feedback between opening-up and reform, with opening-up pushing forward reforms, is behind China's sustained and rapid development, which is a valuable experience.

3. Adhering to maintaining security in expanding opening-up

China has unswervingly expanded opening-up and carried it out in a steady and orderly manner to promote the dynamic integration of opening-up and economic security. In the early stage of reform and opening-up, China established the special economic zones and economic development zones to bring out their leading and exemplary role in opening-up to accumulate experiences for other parts of the country. After joining the WTO, China has actively fulfilled its commitments. It has consistently and proactively promoted opening-up to the outside world, adhered to bottom-line thinking, gradually opened up the market, set a transition period, and effectively ensured industrial security. It is like someone opening the windows to breathe the fresh air and enjoy the sunlight, while installing screens to effectively prevent dust.

4. Adhering to self-development and benefiting the world

China's opening-up process proves that its development cannot be separated from the world, and the world's prosperity also needs contribution from China. China does not adopt any beggar-thy-neighbor or protectionist policies. It has always adhered to win-win cooperation, promoted common development, and shares its development opportunities and dividends with other countries through opening-up. China adheres to the principle of mutual benefit, develops economic and trade cooperation with other countries, and assists developing countries to the best of its ability. As the interaction between China and the world economy deepens, China has been committed to improving the system of international trade rules to support the common development of all countries. China has always closely integrated its own development with the common development of the world. It welcomes other countries aboard the *express train* of China's development for free, so that its development can benefit more countries.

IV. Prospect of Promoting High-level Opening-up to the Outside World

China's opening-up development now still faces some problems, such as largescale but not strong foreign trade, uneven development of regional opening-up, insufficient opening-up in the service sector, and insufficient global resource allocation capabilities. China needs to further increase opening-up and improve its quality. As it embarks on the new journey of building a socialist modern country in an all-round way, China will speed up the building of a new development pattern, carry out highlevel opening-up, and promote market connection, industry integration, innovation promotion, and regulation connectivity between China and the rest of the world, so that a virtuous cycle can come into being on the basis of higher level of openness to create more growth, innovation and development opportunities for the world.

1. More focus on comprehensiveness of opening-up

China will adhere to the principle of combining coastal opening-up and inland and border opening-up, and optimize the layout of all-round opening-up. It will also further liberalize the general manufacturing industry, expand the opening-up of the services industry and agriculture, and promote the opening-up of science and technology, education, culture, and so on. It will promote the transformation from the openness of commodity and factor flow to rule-based institutional openness, so as to create a more market-oriented, law-based, and international business-doing environment, and continue to build a higher-level open economy.

2. More focus on balance of opening-up

China will base its opening-up on a smooth domestic and international dual cycle, coordinate the promotion of a strong domestic market and high-quality development of trade, attract global resource factors with the domestic cycle, and actively promote the coordinated development of domestic and external demand, import and export, and inbound and outbound foreign investment. It will also adhere to the principle of combining multilateral and regional opening-up, safeguard the multilateral trading system with the World Trade Organization as the core, and promote economic globalization and regional economic integration.

3. More focus on inclusiveness of opening-up

China will adhere to the global governance concept of consultation, joint contribution and shared benefits, and actively advocate the principle of harmony amid differences, inclusiveness, and co-existence so that the diversities and differences of the world can be transformed into vitality and driving force for development. China will actively participate in global governance reform, provide more international public goods, strengthen economic and technological cooperation, promote inclusive trade and investment, enhance the capabilities of the international community to jointly respond to unexpected public emergencies. It will also adhere to inclusive and sustainable development, and build a community with a shared future for mankind.

4. More focus on security of opening-up

China will put focus on both openness development and openness security. It

will objectively look at the changing international environment and the new situation, problems, and challenges that it is encountering in its opening-up development, and make efforts to enhance its own competitiveness, openness supervision capabilities, and risk prevention and control abilities, so as to make itself capable of tackling risks. China will also adhere to the overall national security philosophy, accelerate the establishment of a scientific, efficient, rule-based, and orderly guarantee system for open economy security, and pursue a dynamic, higher-level economic security as it expands its openness.

In retrospect, China's economic development has been achieved under openeconomy conditions. In the future, China's high-quality economic development is set to move forward under more open conditions. China will continue to cater to the trend of economic globalization, fare well on its path of opening-up with Chinese characteristics, and work with the people of all countries to build a more open and better world.

Chapter VIII Fostering a New Development Paradigm through High-Level Opening-up

China accelerates the construction of a new development paradigm, with domestic cycle as the mainstay and domestic and international cycles reinforcing each other. It is China's strategic choice to tackle major changes *unseen in a century* and realize the great rejuvenation of the Chinese nation. It is a systematic and deep-level reform that concerns the nation's overall interest. It is another major theoretical achievement of Xi Jinping Economic Thought on Socialism with Chinese Characteristics for a New Era.

I. New Development Paradigm Set to Be the Choice in the New Development Phase

Since the 18th National Congress of the Communist Party of China, in accordance with the new situation that economic development has entered a stage of new normal, China has adhered to the new development concept of innovation, coordination, greenness, openness, and sharing, and promoted the supply-side structural reform. At present, facing the internal and international imperatives, China, based on the new development phase, fully, accurately and comprehensively implements the new development concept, and accelerates the construction of a new development paradigm. This is the progressive deepening of the supply-side structural reform. It is also the new version of previous development strategies after they are merged and upgraded. therefore, it carries great practical and far-reaching historical significance.

1. Inevitable requirement for building a modern socialist country

China has embarked on a new journey of building a modern socialist country in an all-round way and it is marching towards the second centenary goal. From an international perspective, it is a universal law for major economies that domestic demand is the main driving force for economic development. In 2020, the US' foreign trade dependency is only 18.2%. It is 25.6% in Japan. In China, it was 31.5%, still at a relatively high level compared with developed countries. From a domestic perspective, China's growth momentum is undergoing changes and is increasingly dependent on domestic demand. In 2020, China's final consumption rate is close to 55%, which is 11.2 percentages higher than the total capital formation ratio, but it is still about 20 percentages lower than the world average, and there is still much room for improvement. The supply of high-quality goods is insufficient in China. In 2019, Chinese residents' overseas consumption reaches 1.7 trillion yuan, but high-quality medical, education, and elderly care services cannot meet the demand. Therefore, it is in line with the objective laws of economic development and historically inevitable to accelerate the construction of a new development paradigm, increase the autonomy of economic development, and keep up with the times and raise the level of economic development.

2. Strategic choice for coping with major changes unseen in a century

The world today is undergoing major changes *unseen in a century*. **Uncertainty in external demand has increased.** After the 2008 global financial crisis, the external environment has changed for the worse. The growth rate of international trade was twice the economic growth rate of the world in the past; now it is lower than economic growth. International investment has been largely on the decline amid fluctuations. After the outbreak of the novel coronavirus pandemic in 2020, backlash against economic globalization has increased, and the momentum of the international cycle has significantly weakened. In 2020, the world economy shrank by 3.3%, global trade in goods dropped by 7.6%, trade in services fell by 19%, and foreign direct investment decreased by 42%.

International competitiveness needs to be continually enhanced. China's traditional advantages, such as population, land, and resources, have weakened. And it is yet to develop and have new advantages, such as innovation, management, and

standards.China faces an greater pressure of stabilizing the industrial and supply chains. The reshaping of the global industrial and supply chains has accelerated, the challenges brought by anti-globalization movement have increased, and the external environment is becoming complex and changeable. Therefore, it is more urgent to improve the resilience and security of the industrial and supply chains. China needs to accelerate the construction of a new development paradigm to help foster its new advantages in international cooperation and competition, increase leeway for economic maneuvers, and protect its economic security.

Box 8-1 Role of Standards in International Economic and Trade Cooperation

As the world's "universal language", standards are the passport of international trade. Countries in the world attach great importance to standardization cooperation and exchanges, as well as the application of standards to carry out international economic and trade exchanges, such as production capacity cooperation and technical exchanges.

China has actively promoted the adoption of international standards, especially in more than 40 industries such as machinery, chemical industry, light industry, and electronics. It has formed a relatively complete standard adoption system, which has effectively promoted the development of foreign trade. At the same time, it also actively participates in the formulation of international standards, especially in the fields of home appliances, UHV power transmission, information technology, traditional Chinese medicine, apparels, among others, actively submitting standard proposals to the International Organization for Standardization, and making its contribution to the improvement of international trade rules in relevant fields.

In order to promote the implementation of the BRI, China has engaged in extensive cooperation and exchanges with the International Organization for Standardization and standards organizations of countries involved in the BRI. By the end of 2019, China's Standardization Administration had signed 97 multilateral and bilateral standardization cooperation documents with 54 countries, regional standardization agencies and international organizations.

3. Only path to promoting the building of a community with a shared future for mankind

Human beings live in the same global village and are increasingly becoming an intimate community of a shared future where people engage in close interaction. The historical trend of economic globalization is irreversible. The world as a global village is highly interconnected, and the economies of all countries are deeply integrated and share a common future. It is impossible for any country to develop behind closed doors, which, from an objective perspective, requires the domestic and international dual cycles to reinforce each other. The international community has had significantly higher expectations towards China. China has a large economy and it is among the world's leaders in terms of major economic indicators. It is a major trading partner of more than 120 countries. The international demand for cooperation with China is even greater. China should take the opportunity to proactively push forward opening-up to promote a common future of the world, and expand the world's openness through China's own opening-up. As a single large market with a population of 1.4 billion, China should proactively expand opening-up and push forward free trade, which will help promote interaction between China and the rest of the world, so that close cooperation can lead to improving wellbeing of both China and other countries. China will accelerate the construction of a new development paradigm, promote win-win cooperation with the rest of the world, and demonstrate its responsibility instead of pursuing success without helping others to succeed. It is conducive to the world sharing China's development dividends and promoting common development.

II. Expanding Domestic Consumption to Foster A Powerful Domestic Market

Accelerating the cultivation of a complete domestic demand system is a major scientific judgment and strategic choice made by the Party Central Committee, which has profound insights into the general trend of domestic and international development. It highlights the importance and urgency of adhering to expansion of domestic demand. It is a must for China to form a powerful domestic market and shift to a development strategy based on the domestic cycle. On the one hand, the proportion of domestic demand, especially consumption, is too low. Domestic demand includes investment and consumption. The investment rate in China is generally very high, and its consumption rate is obviously low. At present, the ratio of retail sales to export value in major countries, such as the United States and Japan, has stabilized at 4:1 and 6:1, while in China, it is less than 2:1. Both retail sales and export value reflect the final commodity demand, and the low ratio largely points to an unbalanced domestic and foreign demand ratio in China, indicating that the role of domestic demand needs to be improved.

On the other hand, China has huge market potential. As it is moving towards a modern socialist country, China has seen its domestic market expand continually. According to McKinsey's research, by 2035, the scale of China's consumer market will exceed that of Europe and the United States combined. Implementing the strategy of expanding domestic demand and continually increasing consumption rate are conducive to bringing out the great advantage of domestic market and promoting long-term stable economic development.

At present, China's domestic consumer market is not fully developed, which is mainly reflected by the following factors.

Weak consumption capacity. The proportion of residential income in the primary distribution is low. In 2020, the monthly per capita disposable income of Chinese residents is 2,682 yuan, which is only 44.7% of per capita GDP. There is no solid foundation for expanding consumption. After the eruption of the 2020 pandemic, the instability of residential income increased, the recovery of consumption was relatively slow, and the total value of retail sales failed to register positive growth throughout the year.

Inadequate consumption momentum. China is facing such challenges as worsening aging and declining proportion of working population. The consumption of some major commodities, such as automobiles, is becoming saturated. Online consumption is actually the transfer of offline consumption, and efforts should be made to tap new and sustainable momentum of consumption.

Imbalance in urban-rural development. The rural population accounts for 36% of the nation's total, but rural retail sales accounts for only 14% of the national total. The overall consumption in China's urban areas is 3.7 times that in rural areas, and per capita consumption in the urban areas is twice that in rural areas.



Figure 8-1 Ratio of Per Capita Disposable Income to Per Capita GDP (%), 2013-2020 Source: National Bureau of Statistics.

Inadequate development of modern commerce and trade logistics. China's logistics cost as a percentage of GDP is 14.7%, which is 6-7 percentages higher than that of developed countries. China's logistics companies have a low level of internationalization. The number of stores of online retailer Suning is almost the same



Figure 8-2 Total Logistics Cost to GDP Ratio in China, the US and Japan (%), 1991-2019 Sources: China Federation of Logistics & Purchasing, Council of Supply Chain Management Professionals, Japan Institute of Logistics Systems.

with that of Wal-Mart stores, but Suning's overseas stores only account for 0.5% of its total, which is much lower than Wal-Mart's 60%. China suffers from low cold chain circulation rate and insufficient supporting capacity of infrastructure. The per capita possession of refrigerated and insulated vehicles is only about 8% of that of the United States and Japan.

Meanwhile, China has great potential in expanding domestic consumption. Its fundamentals of consumption that is expected to expand in the long run have not changed. China's total population and the size of its middle-income group rank first in the world, and its per capita GDP exceeds 10,000 US dollars. The implementation of the rural revitalization strategy and the acceleration of urbanization will lead to the rapid growth of rural consumption.

The overall trend of consumption upgrade has not changed. China's younger generation, represented by those born in the 1990s and 2000s, accounted for about one fourth of its total population, and the proportion is even higher among netizens; they have increasingly become the backbone of consumption. Individualized and diversified consumption has become the mainstream trend. New forms of consumption, such as unmanned sales and sharing economy, development-oriented and enjoyment-oriented consumption have continued to heat up, and people's service consumption in tourism, culture, entertainment, health, and ecology will continue to increase.

China has the foundation, condition and room for expanding consumption. China will hopefully become the largest consumer market of goods in the world. In the past ten years, China's final consumption rate has increased by an annual average of 0.5%. It is expected to reach about 62% by 2035, and the scale of consumption will increase by about 1.5 times.

While pursuing a new development paradigm, China must take the supply-side structural reform as the main focus, pay attention to demand-side management, and reach a higher level of dynamic balance in which demand drives supply and supply, in return, creates demand. It should continue to expand consumption and make more efforts to build a modern circulation system. It should sort out the blocked links in circulation, strengthen areas of weakness, improve both "hardware" (such as infrastructure) and "software" (such as management expertise), channels and platforms, so as to turn the strong domestic market into a huge "magnetic field" that attracts global factor resources.



Figure 8-3 China's Ficial Consumption Expenditure Ratio and Capital Formation Rate (%), 1978-2020

Source: National Bureau of Statistics.

Promoting consumption in an all-round way. China should further bring out the fundamental role of consumption in economic development and tap urban and rural consumer markets. It should promote commodity consumption, develop service consumption, expand rural consumption, promote the high-quality development of county-level commerce, establish and improve the rural commercial system, improve urban consumption, and promote the quality and upgrading of urban consumption.

Cultivating new patterns of consumption. China should cultivate a new pattern of consumption featuring information technology, multi-business aggregation, and multi-scenario coverage, develop new commodity consumption models, support consumer platform companies creating new digital consumption environment, strengthen the construction of intelligent service terminals, and foster an orderly environment for developing new forms of consumption.

Upgrading consumer platforms. China should take the lead in cultivating and building central cities for international consumption in Shanghai, Beijing, Guangzhou, Tianjin, and Chongqing. It should promote the differentiated development of urban commercial districts, and carry out high-quality renovation and upgrading of pedestrian streets. China should also foster a convenient life circle in the cities, where people can go to any major destinations within a quarter of an hour. Moreover, it should establish and improve the normalization mechanism for promoting consumption, and support

efforts by the China International Consumer Products Expo to build a global platform for displaying delicate consumer products.

Improving circulation system. China should improve backbone circulation networks, build an efficient urban and rural distribution system, improve the rural circulation system, raise circulation efficiency, and reduce circulation costs. It should cultivate modern circulation enterprises with global competitiveness, stimulate the vitality of small and medium-sized commercial enterprises, strengthen protection and growth of time-honored brands, promote the innovative development of the commodity market, and foster and expand e-commerce enterprises. It should also support the upgrading of physical commercial entities, accelerate the innovation and transformation of circulation, and strengthen the construction of commerce and trade circulation standard system.

III. Promoting An Internal-External Virtuous Cycle to Push Forward High-Quality Development

In the era of globalization, internal and external cycles are intertwined and it is impossible to clearly separate them. The new development paradigm is by no means a closed domestic cycle, but an open and mutually reinforcing dual cycles, including both domestic and international cycle. With the domestic cycle as the mainstay, it is by no means a closed-door operation. Instead, it aims to better connect domestic and foreign markets through leveraging the potential of domestic demand and better utilize resources of both domestic and international markets to achieve more robust and sustainable development.

From the perspective of external cycle promoting internal cycle, the smoother the external circulation is, the better the internal cycle will be in terms of quality and outcomes. China's development has always been inseparable from the outside world. International talents, technology, management, and data resources are the most fundamental production factors. Through the benign interaction between internal and external cycles, more high-quality global resource factors will be attracted, which can help meet domestic demand, improve the level of domestic industrial technology development, and form new advantages for China to participate in international economic cooperation and competition. **From the perspective of development space**, China's foreign demand still has potential to further expand. History shows that the share of international trade in the United States and Britain once reached more than 20%. In recent years, China's share has only been about 13%. China's per capita export value of goods and services is only one fourth of that of the United States, one fifth of Japan, and one tenth of Germany. China should promote the benign dual-cycle interaction, so as to be helpful to realize the coordinated development of domestic and external demand, imports and exports, inbound foreign investment and outbound foreign investment.



Figure 8-4 China's Trade Volume (\$100 Billion) and Ratio (%), 1978-2020 Source: World Trade Organization.

China also has some hidden worries as it implements its current domestic and international dual-cycle strategy. In the early stages of reform and opening-up, in order to give full play to the advantages of labor and other resource endowments, China participated in the international economic cycle by relying on the international market for raw materials and sales markets. The effect of relying on external cycle to promote development of the internal cycle was remarkable and it has become an important driving force for China's miraculous development. However, from an objective perspective, the dual-cycle also features the characteristics of internal and external separation and dual-track coexistence, and there are many blocking points in the smooth flow between the internal and external cycles.

The domestic and foreign markets need to be further integrated. Due to inconsistencies in domestic and foreign quality standards, inspection and quarantine, certification and approval, and sales channels, products produced by foreign trade companies can only be sold overseas, and domestic consumers have to resort to e-commerce platforms to buy China-made products from overseas markets.

The two resources need to be better utilized. China has adopted a gradualist approach in its opening-up. At present, the physical manufacturing industry has basically been fully liberalized, but there are still some access restrictions in the some fields. As of 2020, China's foreign investment stock and outbound investment stock had both been about 30% of that of the United States, and China's ability to utilize global resources needs to be improved.

The connection of rules needs to be further strengthened. The contents of international economic and trade negotiations have extended from *on-the-border* to *behind-the-border* issues. At the same time, the disputes over new topics such as cyber security, digital sovereignty, and data flow have become more intense. China still suffers from a low level of free trade area construction, and it is yet to deepen its participation in the formulation of high-level rules; and it still falls far behind the world's advanced levels.

Box 8-2 On-the-border Opening-up and behind-the-border opening-up

On-the-border opening-up refers to reduction of barriers to the flow of goods and capital and the realization of the flow of factors through the reduction of tariffs and non-tariff barriers and the implementation of preferential investment policies. It has been the main method for China to implement reform and opening-up for more than 40 years in the past.

Behind-the-border opening-up refers to domestic reforms to increase openness in intellectual property rights, fair competition, environmental protection, labor issues, consumer protection, among others, to achieve conformity with international rules, and attract more factor resources flowing. It is a higher-level opening-up.

To build a new development paradigm, it is necessary to not only smoothen the domestic cycle, but also promote the international cycle, and allow the two cycles to reinforce each other, like in the structure of a horizontal "8", where the internal cycle leads the external cycle, and the external cycle boosts the internal cycle, so as to form a virtuous circle of openness at a higher level. A virtuous cycle of market connectivity should be promoted, market access should be continually expanded, and a strong domestic market should be turned into the main engine of its own development and an accelerator for common development. A virtuous cycle of industrial integration should be promoted to create a more open, resilient, and dynamic industrial and supply chain in the global industrial structure. A virtuous cycle of innovation should be promoted and it is not about "decoupling", but about taking the path of openness innovation and deepening of international cooperation in innovation. A virtuous cycle of rules should be achieved to enhance the system, integrity, and coordination of openness.

— **Promoting the innovative development of foreign trade.** China should strengthen technological innovation, institutional innovation, model and business format innovation in the field of trade, and promote the coordinated development of imports and exports, trade in goods and services, trade and two-way investment, and coordinated development of trade and industry. It should optimize its trade structure, promote the high-end and sophistication-oriented development of imports and exports, and create a "China commodity" brand. It should improve the trading platform and give full play to the role of important exhibition platforms, such as the China International Import Expo. It should cultivate new momentum for trade development. And it should innovatively develop service trade and build a "China Service" brand.

— Improving quality of foreign capital utilization. China should fully implement the Foreign Investment Law and relevant implementation regulations, continue to optimize the market-oriented, law-based and international business doing environment, and focus on structure optimization, quality improvement, so as to attract high-quality global production factors with high-level openness. It should further shorten the negative list for foreign investment access. It should accelerate its pace to improve the new foreign investment management system, and improve the level of interim and ex-post supervision. It should also upgrade national economic development zones in an innovative way, enhance the level of foreign cooperation, and improve the quality of economic development.

Box 8-3 Implementation of China's Foreign Investment Law

The Foreign Investment Law of the People's Republic of China (hereinafter referred to as FIL) took effect on January 1, 2020, replacing the Sino-Foreign Equity Joint Ventures Law, the Foreign-funded Enterprises Law and the Chinese-Foreign Contractual Joint Ventures Law (referred to as "the three laws on foreign investment"). It is a new basic law in the field of foreign investment, which provides a more powerful systemic guarantee for further opening-up and actively and effectively using foreign capital under the new situation. The promulgation of the FIL marks a big step forward in China's institutional opening-up.

The FIL contains six chapters and 41 articles, which clarify the contents of foreign investment promotion, investment protection, investment management, among others, establish a pre-establishment national treatment plus a negative list system, and clearly stipulate that domestic and foreign investment should be treated equally and protection of foreign investment should be strengthened. The law also stipulates some systemic measures, such as the establishment and improvement of the foreign investment service system, and the national foreign investment information reporting system.

The FIL highlights the main theme of actively expanding opening-up and promoting foreign investment, adheres to the positioning of the law as a basic foreign investment legislation, and adheres to the convergence of Chinese characteristics and international rules. Foreign media have paid close attention to the FIL, saying that it has enhanced the confidence of foreign investors and the attractiveness of the Chinese market to foreign investors, and demonstrated China's determination and active efforts to further its opening-up.

— **Optimizing regional opening-up layout**. All provinces and regions are encouraged to expand opening-up based on their comparative advantages, effectively connect their opening-up with major regional strategies and regional coordinated development strategies, promote inter-regional opening-up linkages, and promote the establishment of an openness pattern featuring land-sea and domestic-foreign linkages, as well as mutual assistance between eastern and western regions. The leading role of the eastern regions in opening-up should be strengthened, the pace of openingup in central, western and northeastern regions should be accelerated, the opening-up of border areas should be strengthened, and the opening-up to, and cooperation with, Hong Kong, Macao and Taiwan should be deepened.

— Improving level of foreign investment and economic cooperation. Support should be provided for enterprises to participate in the reshaping of global industrial and supply chains; domestic and foreign industrial coordination should be promoted. Efforts should be made to promote steady and orderly development of outbound investment and cooperation, and encourage Chinese products, services, technologies, brands, and standards to go global. Outbound investment should be carried out in an innovative way. Efforts should be made to push transformation and upgrading of outbound contracted projects, promote the orderly development of outbound labor cooperation, and improve foreign investment cooperation policies and service systems.

IV. Always Adhering to Reform and Opening-up as A Strong Driving Force

History at home and abroad has made it clear that openness brings progress, and closure will inevitably lead to a country lagging behind. Opening-up is the fundamental way for a country to become prosperous and strong, as well as a key strategy for China's development. For more than 40 years of reform and opening-up, it is precisely because China persisted in pursuing its development through opening-up to the outside world and promoting reform, development and innovation through opening-up, the country has achieved the great transition from a closed and semi-closed state to a state of all-round opening-up, so that its overall national strength and international influence have improved. The wider China opens up, the better it develops, and the better it develops, the more open it is. The door to China's opening-up will not possibly be closed. China should further deepen reform and pursue higher-level opening-up to provide a strong impetus for building a new development paradigm.

At present, China's reform has entered the deep-water zone. The opening-up dividend of its WTO membership is disappearing, and it still faces severe challenges in carrying out reform and opening-up in some key areas and links. They have become institutional obstacles restricting high-quality development and high-quality life.

The unified domestic market needs to be improved. In recent years, China has

made great progress in breaking regional blockades and establishing a unified national market, but some market restrictions and local protectionism still exist.

The level of opening-up to the outside world needs to be improved. China has gradually opened up in areas where the cost of opening-up is low, the impact of opening-up is less significant, and it is relatively easy to build consensus. However, there is still huge room for further opening-up. At present, China's openness index is 0.74, ranking 40th in the world, which is significantly lower than rankings of developed countries; the openness of the service industry is obviously lagging behind.

The ability to coordinate openness and security needs to be improved. Over the past 40 years of Reform and Opening-up, China has strengthened its overall national strength and significantly improved its security maintenance capabilities in the process of expanding openness. The current international situation is more complex, with increasing external risks and challenges. China's ability to manage the complex situation of openness and security is yet to be able to adapt to the changing environment.

China's development is inseparable from the world, and China is also indispensable for the prosperity of the world. Since the Reform and Opening-up policy was launched, China has adhered to the basic national policy of opening-up to the outside world, leveraged its low-cost advantages of labor and other factors, seized the important opportunities of economic globalization, and actively participated in the international division of labor. By utilizing external markets to promote domestic development, China has achieved high-rate economic growth and the Chinese people have succeeded in building a moderately prosperous society. Previously, they cannot even sustain their basic life. Since the outbreak of the COVID-19 pandemic, major provinces such as Zhejiang, Jiangsu, and Shandong provinces, and cities such as Shenzhen and Suzhou, have obvious advantages in terms of complete industry chains. They also have greater awareness and ability to seek opportunities in crisis. As a result, compared with the nation's average level, they have performed better in terms of foreign trade and investment.

Practice has fully proved that opening-up enhances overall strength. The more open a place, the stronger its overall strength, the greater its economic resilience, and the higher its degree of security. Therefore, **full opening-up will bring great development and great development will bring high level of security**.

At the current critical stage, new economic development mode is replacing the old and new growth drivers are replacing the traditional ones. The domestic comprehensive deepening of domestic reforms has entered the deep-water zone; and the international uncertainties are increasing. It is more necessary, therefore, for China to promote the opening-up of the world through expanding its own all-round opening-up, contribute to the global economic recovery through promoting its domestic economic recovery, and unswervingly utilize opening-up to generate growth impetus and dividends.

— Unswervingly expand opening-up in an all-round way. It is necessary to comprehensively improve the level of opening-up to the outside world, and promote trade and investment liberalization and facilitation. A new higher-level open economy system needs to be built, efforts should be made to continue to deepen the openness of commodity and factor mobility. And it is necessary to steadily expand the institutional openness of rules, regulations, management, and standards to establish an institutional system and regulatory model that are in line with internationally accepted rules. A shift from *opening-up of factors* to *institutional opening-up* needs to be promoted, and efforts need to be made to push forward reinforcement and deep-level integration of the domestic and international dual cycles.

— **Building a new commanding height of reform and opening-up**. Through institutional innovation, a new reform and opening-up commanding height that play a leading and exemplary role should be established. Reforms should be deepened in an all-round way and action should be taken to implement high-standard market system construction. High-quality development of pilot free trade zones and ports should be promoted. The leading and exemplary role of pilot free trade zones should be brought out, greater reform autonomy should be allowed, opening-up stress tests should be strengthened, and the dividends of Reform and Opening-up should continue to be released continually. And it is necessary to steadily promote the construction of the Hainan Free Trade Port.

— Better participating in international economic and trade cooperation. China should adhere to the principle of extensive consultation, joint contribution and shared benefits to deepen the BRI economic and trade cooperation. It should actively participate in the reform of the WTO, push efforts to improve WTO rules, and improve the level of trade policy compliance. It should push forward improvement in global economic governance mechanisms, deepen cooperation with the United Nations and related agencies, support major economic governance platforms playing a larger role, and actively participate in the formulation of economic governance rules in emerging fields. It should optimize the layout of free trade areas, promote the signing of more high-standard free trade agreements, properly deal with CPTPP-related work, and speed up the negotiation process of the China-Japan-Korea free trade agreement. It should also promote coordination and cooperation among major countries, deepen economic and trade relations with neighboring countries, and strengthen solidarity and cooperation with developing countries.

— Effectively coordinating development and security. China should take a holistic view of national security; the more open, the more important it is for China to pay attention to security, and strive to strengthen its own competitiveness, openness supervision capabilities, and risk prevention and control capabilities, so as to improve its resilience. It should improve the industrial damage early warning mechanism, promote international industrial security cooperation, and maintain the security of the industrial and supply chains. It should adhere to opening-up to become more capable of preventing risks, and dynamically maintain national economic security at a higher level.

Chapter IX Pilot Free Trade Zone and Free Trade Port Mark New Heights of Reform and Opening-up

The construction of pilot free trade zones is an important strategic move of the Party Central Committee to promote Reform and Opening-up in the new era. The construction of a free trade port with Chinese characteristics in Hainan is a major reform and opening-up initiative that Xi Jinping, general secretary of the CPC Central Committee, has planned, deployed, and promoted. Since the establishment of the first pilot free trade zone in Shanghai in 2013, much headway has been made in the construction of free trade zones and ports, and they have become a pilot field and mark a new height for Reform and Opening-up in the new era.

I. Active Exploration of Opening-up to the Outside World in the New Era

General Secretary Xi Jinping stressed that it is necessary to take more forceful and down-to-earth measures to comprehensively deepen reforms and expand openingup to the outside world. The construction of free trade zone ports is, in a sense, a key step in revitalizing the grand game of reform and opening-up. It has important theoretical and practical significance for better promote reform and development through opening-up.

1. Important significance

Good first moves for promoting higher-level opening-up. The establishment of free trade zones and ports has further shown to the world China's clear attitude of all-round opening-up, which aims to accumulate experiences for exploring new

ideas, new systems, and new models of opening-up. *New engine* promoting highquality development. With institutional innovation as the core, the free trade zones and ports aim to remove the institutional and systematic barriers that hinder openingup to the outside world, and have played a demonstrative and guiding role for the quality, efficiency, and driving force evolution of the country's economic development. *Accelerator* promoting economic globalization. The establishment of free trade zones and ports is a move to proactively respond to changes in the global economic and trade situation. It promotes trade and investment liberalization and facilitation at a higher level in accordance with high-standard international economic and trade rules and common practices, injecting impetus into efforts to build an open world economy and push forward economic globalization.

2. Development characteristics

Increasing number of pilot free trade zones. In September 2013, the first pilot free trade zone was launched in Shanghai. Since then, China has successively approved a total of 21 free trade pilot zones in Guangdong, Liaoning, Hainan and other provinces and regions. It also approved the Lingang New Area of the China (Shanghai) Pilot Free Trade Zone and the expansion of the China (Zhejiang) Pilot Free Trade Zone. In 2018, China decided to explore the construction of a free trade port in Hainan. At present, there have been pilot free trade zones and ports in the eastern, western, southern, northern, and central regions.

Expanding coverage of pilot free trade zones. At the initial stage of the establishment of pilot free trade zones, they only covered 28.8 square kilometers. Then it was expanded several times in the following seven years. At present, the China (Shanghai) Pilot Free Trade Zone covers 240.22 square kilometers, the China (Hainan) Pilot Free Trade Zone covers the whole of the Hainan island, and the China (Zhejiang) Free Trade Pilot Zone has been expanded to cover a total of 239.45 square kilometers. The other 18 pilot free trade zones cover an area of nearly 120 square kilometers, which has created space for institutional innovation.

More diversified openness positioning. The pilot free trade zone has proactively carried out first-hand trials in accordance with high-standard international economic and trade rules. The tasks it undertakes include serving and integrating into the building of the BRI, the coordinated Beijing-Tianjin-Hebei development, the development of

the Yangtze River Economic Belt, the construction of the Guangdong-Hong Kong, SAR-Macao, SAR Greater Bay Area, the integrated development of the Yangtze River Delta, as well as initiatives such as the Western Development, the comprehensive revitalization of the Northeast region, and the rise of central region. The China (Hainan) Free Trade Port is responsible for leading China's new era of opening-up to the outside world with a clear banner and serving as an important opening-up forefront.

II. New Results of First Trials in Reform and Opening-up

In the construction of the free trade zones and ports, China has adhered to the principle of taking institutional innovation as the core task. It has, through bold trials and experiments, a number of high-level institutional innovations have been achieved and a number of world-leading industrial clusters have been built, making important contributions to high-quality development. There are more than 3,300 pilot reform tasks set for the relevant plans of the pilot free trade zones. The pilot reform tasks of the first 12 pilot free trade zones have been largely implemented. In the 6 pilot free trade zones established in 2019 and the Lingang New Area of the China (Shanghai) pilot free trade zone, more than 90 percent of the pilot reform tasks have been accomplished. The three pilot free trade zones established in 2020 and the expansion of the Zhejiang pilot free trade zone have been proactively making efforts to implement their pre-set pilot reform tasks.

1. Major change in investment management system, with negative list management as the core

Investment more freely. Foreign investment approval has changed from case-bycase approval to filing management, and the implementation of the pre-establishment national treatment plus negative list management mode has been adopted, which marks a historic change in foreign investment management system over the past 40 years of Reform and Opening-up. It is one of the most significant and effective innovative measures in pilot free trade zones. After 6 rounds of voluntary reductions, the number of items in the negative list governing foreign investment access in pilot free trade zones has been reduced from 190 initially to 30 in the 2020 version, a reduction of more than 80%.





Source: Ministry of Commerce of China.

Box 9-1 China's First Negative List for Foreign Investment Access to Domestic Market

Before the establishment of pilot free trade zones, China adopted a management mode combining case-by-case approval and industry guidance catalogs for foreign investment. The advantage of this mode is its clear guiding role in the direction of industrial development, but it has higher administrative and business costs.

In 2013, China's first negative list for foreign investment access was released in the China (Shanghai) Pilot Free Trade Zone, and foreign investment management was changed to filing-based mode, and the pre-establishment national treatment plus negative list management mode was implemented. This mode has been adopted by at least 77 countries in the world, reflecting the principle of "anything not prohibited by law can be done". In 2020, China officially promulgated the Foreign Investment Law. The establishment of foreign direct investment enterprises will no longer be subject to approval and filing management. The establishment of the foreign investment information reporting system means that China's investment environment is more open, stable and transparent.

Investment more convenient. China has made efforts to break the information island bottleneck in all departments and carry out business management-related procedural integration pilot reforms, such as integration of multiple certificates, oneform filing (only one form is needed in filing corporate information), one-window management (all business-related matters can be dealt with in one window), one license with one code (integration of licenses, with a unified social credit code, to facilitate license application), separation of license and certificate (an enterprise with business license will be subject to reduced certificate requirements), one-stamp approval (reduction of approval procedures), parallel approval (approval procedures by multiple regulatory departments proceed at the same time), commitment-based approval (approval based on commitment of applicant enterprises), and advance commission, so that applicant enterprises can go through their application procedures within a day. Xiangyang area of China (Hubei) Pilot Free Trade Zone has implemented the all-pass version of food and drug licensing, with nine licenses combined in one. Originally, applicants need to go through five links, which now have reduced to one (application received, examined and approved only by one department each, with only one license issued). The China (Jiangsu) Pilot Free Trade Zone has implemented a new credit plus commitment approval mode for construction projects, and construction permits for key projects can be obtained within 30 working days. The China (Yunnan) Pilot Free Trade Zone has launched a smart administrative affairs information platform to create a new service environment, in which one can easily and independently go through relevant procedures, without meeting officials, and one needs to go to the government only once.

Box 9-2 China's First License-certificate Separation Reform

License and certificate are the two keys for enterprises to enter the market. License refers to business license issued by the industry and commerce department; certificate refers to business certificate issued by relevant industry regulatory authorities. Previously, to start a company, one needs to obtain a business certificate before they can apply for a business license.

In December 2015, the China (Shanghai) Pilot Free Trade Zone took the lead in launching the pilot license-certificate separation reform, making "license before certificate" a reality regarding market access. That is, as long as one obtains a business license from the industry and commerce department, they can engage in general production and other business activities. If what they engage in requires a certificate, then they can apply to relevant regulatory departments for a certificate. The license-certificate separation system clarifies the relationship between the government and the market, innovates government management, and made it more convenient and efficient for enterprises to apply for certificates. In 2019, the State Council issued a document announcing to carry out pilot license-certificate separation reforms that cover all related matters in the pilot free trade zone. In 2021, the State Council issued a document to implement the license-certificate separation reform in all places and sectors all over the country.

2. Forming trade supervision system in line with internationally accepted rules based on breakthrough in single window reform in international trade

Creating *single window* for international trade. China has explored the building of a high-standard international trade *single window* system to cover function modules, such as cargo declaration, means of transport declaration, cross-border e-commerce, and logistics information. It connects departments such as customs, border inspection, maritime, commerce, and port, and extends it nationwide. As of July 2020, there had been more than 3.3 million registered users of the *single window* system nationwide, and the daily declaration has reached 10 million; the application rates of the three main businesses of cargo, manifests and means of transport had reached 100%.

Box 9-3 China's First International Trade Single Window

Building a *single window* for international trade is an important way to follow common international rules, reduce corporate costs, and improve trade facilitation.

In 2014, the China (Shanghai) Pilot Free Trade Zone, based on the local public information platform (electronic port) to take the lead in launching the construction of a *single window* for international trade. Currently, the *single window* for international trade has had 10 functional modules and 53 local applications, covering 22 departments and units at the central and local levels. Enterprises have had their declared data items reduced by 65% in the process of ship declaration and 24% in the process of cargo declaration. In the five years after its establishment, it has saved more than 2 billion yuan in costs for relevant enterprises; and it has become a service brand, which has been replicated and promoted throughout the country.

Innovating the customs clearance management mode. China has sped up exchange of port supervision information, mutual recognition of supervision, and mutual assistance in law enforcement, implemented the practice of *one declaration*, one inspection, one clearance in customs check, and steadily implemented the cargo supervision model (free entry of cargo from abroad and within the free trade zones but tax will be imposed if the cargo goes beyond the free trade zones). The China (Fujian) Pilot Free Trade Zone provides "one-stop" services for relevant businesses. Required documents are submitted electronically, with import and export goods declaration documents reduced by more than 40%, and the declaration time reduced by at least 5-10 minutes (previously, it was 4 hours). The China (Liaoning) Pilot Free Trade Zone has reformed the customs clearance process for key projects such as blended iron ore and large-scale export of refined oil, and adopted such practice as "inspection while unloading" and "pre-inspection". The China (Zhejiang) Pilot Free Trade Zone has realized "paperless" customs clearance in all procedures, with 150 pages of paper materials involving more than 70 items in 44 categories cancelled. The China (Guangxi) Pilot Free Trade Zone has implemented automatic one-stop clearance for port, bonded area, and cross-border e-commerce businesses at the same checkpoint, shortening customs clearance time by more than 80% and saving 200 million yuan in costs for companies each year.

Developing new bonded businesses. China has explored new types of bonded business, such as bonded processing, bonded remanufacturing, bonded logistics, and bonded services, to form a *bonded* + diversified bonded business mode. The China (Chongqing) Pilot Free Trade Zone develops bonded reparation services for aviation materials; the China (Shaanxi) Pilot Free Trade Zone carries out bonded exhibitions and auctions of cultural and art works. The China (Sichuan) Pilot Free Trade Zone develops aircraft engine bonded maintenance services. The China (Hainan) Pilot Free Trade Zone develops business of direct supply of bonded oil for international ships. The China (Henan) Pilot Free Trade Zone has led the country to launch the *1210 model* of cross-border e-commerce bonded imports.

3. Steadily promoting financial openness innovation, taking the free trade account as a model

Deepening financial reform and innovation. China has successively launched

opening-up measures, such as free trade account, international board for gold transaction, and cross-border two-way RMB cash pooling. The China (Shanghai) Pilot Free Trade Zone has taken the lead in creating a free trade account system integrating domestic and foreign currencies, explored the establishment of financial reform institutional arrangements, such as capital account convertibility, interest rate marketization, financial market opening-up, and RMB internationalization. Those moves have facilitated cross-border fund settlement and opened up a channel for overseas financing. At present, pilot free trade zones in Hainan, Tianjin, and Guangdong have also been approved to operate their online free trade account.

Innovative and special financial services. China has formulated free trade financial service plans with local characteristics to serve the development of the real economy. The China (Tianjin) Pilot Free Trade Zone has made arrangements to allow financial leasing SPV companies to share their parent company's foreign debt quota, financial leasing rent payment using foreign currency, and comprehensive financial supervision. Some pilot free trade zones, such as those in Chongqing, Sichuan, and Henan, have, based on the business needs of China-Europe freight business, innovated the financialization of railway consignment notes, and its proposal to resolve the issue of the nature of railway consignment notes has been incorporated into the working document of the United Nations Commission on International Trade Law.

Effectively preventing financial risks. China has improved the cross-industry and cross-market financial risk monitoring and evaluation mechanism, and there have been no major abnormal cross-border capital flows. It has promoted the integration of dynamic financial opening-up and risk prevention. Shanghai has established a financial court. By the end of 2020, a total of 16,000 cases had been accepted, with a total amount of 368.3 billion yuan involved. Zhejiang has established an information cross-checking platform in the Pilot Free Trade Zone. As a result, it has thwarted a total of 46 cases of account opening cheating, sent warnings about 142 telecommunication fraud, underground banking and other suspicious transactions, and greatly improved the effectiveness of anti-money laundering identification.

Box 9-4 China's First Risk Prevention List

The China (Fujian) Pilot Free Trade Zone has taken the lead in formulating the country's first risk prevention and control list, including 55 regulatory risk points and 88

prevention and control measures, as it responded to the possible risks that may arise from the promotion of institutional innovation and easing of industry access. The list covers multiple departmental functions and is systematic and holistic. It ensures that each pilot project has specific supportive policy documents, and each policy has its corresponding regulatory measures. It has constructed an interim and ex-post market supervision system that is compatible with high-standard international investment and trade rules.

4. Establishment of a modern governance system based on decentralization, regulation and service reforms

Making more efforts to streamline administration and delegating more power to lower-level governments. China has comprehensively decentralized the administrative power, reduced approval procedures, and improved approval efficiency. A total of nearly 4,000 provincial-level administrative powers have been delegated to the pilot free trade zones, making it unnecessary for enterprises and individuals to go beyond the free trade zones to have their problems solved and receive public services. Since its establishment, the China (Guangdong) Pilot Free Trade Zone has undertaken 134 provincial-level administrative authorities in three batches, and good results have been achieved. The Caofeidian area of the China (Hebei) Pilot Free Trade Zone approved a company's application for *a port operation permit* in the form of "notification and commitment approval", so that the company was put into operation three months earlier than originally planned.

Strengthen interim and ex-post supervision. China has explored ways to make a shift from ex-ante to interim and ex-post supervision, and build a supervisory system centered on credit management, so as those law-abiding enterprises will be encouraged while those violating laws are put under strict supervision. The China (Henan) Pilot Free Trade Zone has adopted the country's first real-name verification system for corporate registration and identity management, which fully covers online and offline real-name verification to ward off illegal activities, such as false registration and fraudulent use of identity information. The Yantai area of the China (Shandong) Pilot Free Trade Zone has put information of dishonest enterprises and individuals into the administrative approval system, covering 21 sectors, which constitutes a credit punishment mechanism featuring automatic comparison, interception, and supervision. **Improve efficiency of government services**. In terms of legal services, China has established intellectual property protection centers and intellectual property courts. It has also established international arbitration centers in pilot free trade zones, regional international commercial arbitration courts or circuit courts, and public legal service platforms. In terms of entry and exit services, the 12 facilitation policies has been extended to the whole country in 2019, covering visa, long-term residence permit and permanent residence application for foreign professionals. The Heihe area of the China (Heilongjiang) Pilot Free Trade Zone has formulated 21 customs clearance facilitation measures, including one-stop check for outbound self-driving tours.

5. Continually improving level of openness cooperation centered on serving major strategies

Serving major regional development strategies. Based on its own development conditions, China's free trade zones and ports dovetail with its major national strategies and inject impetus into high-quality economic development. The Lingang New Area of the China (Shanghai) Pilot Free Trade Zone docks with the Yangtze River Delta integrated development strategy, supporting industries with competitive edge expanding in Yangtze River Delta to form industrial clusters. The China (Guangdong) Pilot Free Trade Zone has been bold and become the vanguard in the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, actively exploring ways to innovate port customs clearance cooperation model, promote youth employment, and encourage legal service cooperation.

Serving the construction of the BRI. The free trade zones and ports have given full play to their location advantages and actively served the construction of the BRI and international exchanges. The China (Chongqing) Pilot Free Trade Zone has strived to promote the development of the rail freight between China (Chongqing) and Europe and the new western land-sea (rail-sea) transport. The main sources of goods have been extended to coastal provinces and cities, such as Shanghai and Jiangsu province. The China (Shaanxi) Pilot Free Trade Zone has built a platform to connect enterprises with the Silk Road Economic Belt and created a model of *internet plus cross-border RMB plus targeted poverty alleviation*.

Box 9-5 Building the Hainan Free Trade Port

Free trade port is the highest-level openness in the world today. There are more than 129 recognized free trade ports in the world, and more than 2,000 free trade zones with similar nature and functions.

In April 2018, in his important speech at the celebration of the 30th anniversary of the establishment of Hainan special economic zone, President Xi Jinping clearly proposed to support Hainan's gradual exploration and steady advancement of the construction of a free trade port with Chinese characteristics. In June 2020, the CPC Central Committee and the State Council issued the *Overall Plan for the Construction of Hainan Free Trade Port*. The Hainan Free Trade Port covers the entire island of Hainan. By 2025, China will establish a free trade port policy system centered on free and convenient trade and investment. By 2035, it will become a new commanding height for the country's open economy. In the middle of the century, a high-level free trade port with strong international influence will be established.

Over the past eight years, China's free trade zones have become a *cornucopia* of new industries, new business modes, and new models, which has promoted highquality economic development. In 2020, a total of 393,000 enterprises were established in the leading 18 pilot free trade zones, and the actual use of foreign capital was 176.38 billion yuan, and the total import and export volume was 4.7 trillion yuan. Covering about 0.4 percent of China's land area, those free trade zones account for 17.6% of the nation's total foreign investment and 14.7% of its imports and exports. All pilot free trade zones have made more efforts to explore ways of development, and replicated and promoted a total of 278 institutional innovations across the country, leading to a positive scenario in which reform dividends and opening-up benefits are shared among different regions.

III. Prospects of Development of Free Trade Zones and Ports

A time will come to ride the wind and cleave the waves; I'll set my cloud-like sail to cross the sea which raves.

In the future, the free trade zones and ports will fully implement the important

instructions of General Secretary Xi Jinping that we should be bold to test, experiment and reform, and continue to adhere to the principle of having global vision, catering to international standards, and maintaining Chinese characteristics. They will continue to enrich the contents of development, expand development space, and make greater efforts to plan and promote the high-quality development of the pilot free trade zones to create new commanding heights of reform and opening-up with a higher level of openness, a better business-doing environment, and a stronger ability to influence other regions, strive to become free trade zones with international influence and competitiveness, and make good use of their leading role as a pacesetter of reform and opening-up.

1. Expanding breadth and depth of opening-up

With regard to the openness based on the movement of commodities and factors, China will further shorten the negative list in pilot free trade zones, and the commitment-based market access system will be adopted in free trade ports, which will also make institutional arrangements for liberalization and facilitation of trade in goods featuring zero tariff and service trade liberalization and facilitation featuring qualification of both access and operation, so as to promote the orderly and free flow of people, logistics, capital, and information. Regarding institutional openness, the free trade zones and ports will make full use of the international and domestic markets and resources, design their economic and trade ruled based on relevant benchmark international high-standard rules, accelerate the integration of reform and innovation systems, coordinate openness and security, promote institutional openness, such as openness in rules, regulations, management, and standards, and build an institutional system and regulatory model that is in line with international high-standard economic and trade rules, laying a solid groundwork for participating in and guiding the revision of international rules.

2. Improving openness guarantee mechanism

Establishing a reform empowerment mechanism. The free trade zones and ports will be given greater reform autonomy, and promote the appropriate combination of top-down reform authorization and bottom-up system innovation. The incentive and fault-tolerant mechanism will be explored to stimulate pilot free trade zones'

self-motivation and enthusiasm in system innovation, and promote the formation of more groundbreaking and special innovations. An openness security mechanism will be established to strengthen ex-ante, interim and ex-post supervision, improve the foreign investment security review mechanism that is compatible with the negative list management model, properly manage the strength, pace and resilience of openness, and prevent major regional and systemic risks.

3. Unleashing openness development dividends

Adhering to the principle of carrying out openness practice in all aspects and multiple areas. The free trade zones and ports will take the lead in promoting the equal and orderly opening-up of the service industry to various market players, strengthen stress testing, and make more efforts to explore a path of opening-up in a wider field and at a higher level that is more compatible with the country's actual conditions.

The outcomes of opening-up should be replicable so that they can be spread to other regions. Institutional innovation will be carried out using high standards, like *plant nursery* standards, and multi-level, wide-ranging, and high-quality institutional innovation outcomes will be obtained through differentiated exploration, so as to serve the national strategy and lead to a scenario of benign interaction between experiments within the zones and replication and promotion outside of the zones.

The momentum of openness will be sustainable. Cross-regional and crossdepartmental major institutional innovations at different levels will be pushed forward, and efforts will be made to ensure the government and the market be in their right place. An open, transparent, and predictable world-class business-doing environment will be fostered to inject stronger impetus into global trade and investment cooperation and inclusive growth.

Chapter X

China's Practice of Participating in Multilateral and Regional Economic and Trade Cooperation

China firmly promotes global openness cooperation, actively integrates into the process of economic globalization, participates in mechanisms such as the United Nations, WTO, G20, APEC, and BRICS, accelerates the construction of free trade zones, promotes regional economic integration, and supports and promotes global trade and investment liberalization and facilitation, so as to contribute to the improvement of the global economic governance system, the construction of an open world economy, and the building of a community with a shared future for mankind.

I. Firmly Safeguarding Multilateral Trade System

This year marks the 20th anniversary of China's accession to the WTO. Over the past 20 years, China has firmly abided by and upheld WTO rules, supported a rulebased, open, transparent, inclusive, and non-discriminatory multilateral trading system, fully participated in the WTO's work, and sent out China's voice for the improvement of global economic governance. China has been a participant, defender, beneficiary, and contributors of the multilateral trading system.

1. Fully fulfilling the commitments to the WTO

China continues to improve the socialist market economy system, earnestly fulfills its commitments in the fields of open-up trade in goods and services, opens up 100 sub-sectors in 9 major service sectors, and strengthens intellectual property protection. It has significantly improved stability, transparency, and predictability of its openingup policy, making positive contributions to the effective operation of the multilateral trading system. China's fulfillment of its WTO commitments has been recognized by all parties. Former WTO Director-General Pascal Lamy, for example, gave a high score of "A+". China has also agree to receive WTO's trade policy review as required. Most WTO members hold that given its positive image in fulfillment of commitments, obeying of rules and openness, China has set a good example for other members.

2. Promoting the role of the multilateral trading system

China has actively promoted trade and investment liberalization and facilitation, comprehensively participated in the negotiations on various topics of the Doha Round, made important contributions to the conclusion of the expansion of the *Trade Facilitation Agreement* and the *Information Technology Agreement*, and earnestly fulfilled relevant agreed commitments. It has thoroughly participated in trade policy review, seriously accepted trade policy supervision of WTO members, and urged other members to abide by multilateral trade agreements. It has provided full support for the integration of developing countries into the multilateral trading system, implemented zero tariffs on 97% of tax items on goods from least developed countries that have established diplomatic relations with China, and set up special projects to help these countries joining the WTO.

3. Supporting necessary WTO reforms

China supports and promotes the resolution of the existing crisis facing the WTO, enhances its authority and effectiveness, and allows the WTO to play a greater role in openness expansion and promoting development.

Clarifying overall position. In November 2018, China issued a document, titled *China's Position Paper on WTO Reform*, which puts forward three principles and five propositions, emphasizing the need to maintain the WTO's main role as the main channel for pushing global trade and investment liberalization and facilitation, and safeguard non-discrimination, openness and other core values of the multilateral trading system, create a stable and predictable competitive environment for international trade. It is also urged that the development interests of developing members should be guaranteed, the "development deficit" in WTO rules should be addressed, the difficulties of developing members in integrating into economic globalization should
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be solved, and efforts should be made to help achieve the UN 2030 Sustainable Development Agenda goals.

Making specific suggestions. In May 2019, China submitted a document, titled *China's Proposal on WTO Reform*, to the WTO, proposing reform proposals on four key action areas and 12 specific topics. China holds that the main areas of action for WTO reform include the followings. First, to resolve key and urgent issues that endanger the survival of the WTO, such as breaking the deadlock in the selection of members of the Appellate Body. Second, to increase the relevance of the WTO in global economic governance, such as promotion of negotiations and discussion of such topics as e-commerce and investment facilitation. Third, to improve the operational efficiency of the WTO, such as strengthening the implementation of member notification. Fourth, to enhance the inclusiveness of the multilateral trading system, such as respecting developing members' rights to special and differential treatments.

Strengthening communication and cooperation with other members. In July, 2018, China and the EU agreed to establish a joint working group at the deputy ministerial level for WTO reform. The two sides held three joint working group meetings to exchange views on reform issues. In November 2019, China hosted a small-scale WTO ministerial meeting in Shanghai; 33 ministers or ministerial representatives from the European Union, Russia, India, and other countries exchanged views on the designing of the outcomes of the 12th WTO Ministerial Conference and WTO reforms, and pushed 92 WTO members, including those participating in the meeting, issued the *Joint Ministerial Statement on Investment Facilitation for Development*.

Participating in relevant negotiations actively. China and some developing members have jointly established the Friends of Investment Facilitation for Development mechanism and initiated structural discussions and negotiations on investment facilitation in the WTO. China has actively implemented the decisions made at the 11th WTO Ministerial Conference, and put forward many its own proposals on the negotiation of fishery subsidies. It has participated in negotiations on trade-related e-commerce issues with more than 80 members, including the United States and the European Union, signed a joint statement to promote negotiations on domestic regulatory issues with more than 60 members, including the European Union, and pushed negotiation on investment facilitation with more than 100 members, including

the European Union. It has also established a multi-party interim appeal arbitration arrangement with more than 40 members, including the European Union.

II. Accelerating Construction of Free Trade Areas

In 2002, the Framework Agreement on Comprehensive Economic Cooperation between ASEAN and China was signed, starting China's process of building free trade area. In 2007, China for the first time put forward the implementation of free trade area strategy. After more than a decade of hard work, China's free trade area construction has developed rapidly, the number of free trade partners has continued to increase, and the contents of relevant agreements have become increasingly substantial. As a result, it has largely built a high-standard free trade area network that is based on neighboring regions, connected with the Belt and Road Initiative, and aimed at the whole world, thus making positive contributions to global openness development.

1. Positive progress made in the construction of free trade areas

China's free trade circle of friends is getting wider and wider. In recent years, the construction of China's free trade areas has accelerated, and free trade agreements have been reached with Iceland, Switzerland, South Korea, Australia, Georgia, Maldives, Mauritius, Cambodia, among others. Among them, the free trade agreements it signed with Iceland and Switzerland mark a major breakthrough in the establishment of free trade areas with European countries; the free trade agreements it signed with South Korea and Australia are important in the sense that it has signed such agreements with major advanced economies. The agreement it signed with Georgia marks the first such agreement it has signed with a Eurasia country. And the agreement it signed with Mauritius marks the first such agreement with an African country. In November 2020, the Regional Comprehensive Economic Partnership Agreement (RCEP) was officially signed by its participating members, marking the formal launch of the free trade area with the largest population, the largest economic and trade scale and the most development potential in the world in which China has participated. By the end of 2020, China had signed 19 free trade agreements with 26 countries and regions, with free trade partners covering Asia, Africa, South America, Oceania and Europe.

Level of liberalization continues to improve. In terms of trade in goods, through

the negotiation and signing of free trade agreements, the level of tariffs on goods flowing between China and its free trade partners has been greatly reduced, and the rati0 of zero-tariff items to total taxed has exceeded 90%, so has the ratio of import value of zero-tariff products to total import value, marking a new height of opening-up in the field of trade in goods. In the field of service trade, on the basis of fulfilling its WTO commitments, China has opened up nearly 20 more service sectors in accordance with relevant WTO free trade rules, and the level of openness of the originally promised sectors has been further improved.

Box 10-1 China Raises Level of Openness in Trade in Goods through Free Trade Agreements

First, new breakthroughs have been made in China's level of liberalization of trade in goods. In 2017, negotiations on upgrading the China-Chile Free Trade Area were completed, raising the level of liberalization of trade in goods to 97.5%.

Second, a moderate opening of more sensitive products is achieved. For example, the China-Switzerland Free Trade Agreement covers some tariff reductions for machine tools, and the China-Australia Free Trade Agreement opened up dairy products, while the China-Korea Free Trade Agreement covers reduction of tariffs on some chemical products and LCD displays.

Third, the level of facilitation of trade in goods is raised. For the first time, the China-Switzerland and China-Australia free trade agreements include the clause of self-declaration of certificate of origin and enterprises can directly enjoy preferential tax rates of the free trade areas after submitting invoices and other materials.

Box 10-2 China Achieves New Progress in Service Trade Openness through Free Trade Agreements

China is opening-up to its free trade partners at a higher level in banking, insurance, value-added telecommunications, tourism, transportation, medical care, management consulting and other service sectors. In the China-Singapore Free Trade Agreement, China persuaded Singapore to agree to issue full chartered banking license to Chinese banks in Singapore for the first time. In the China-Switzerland, China-New Zealand, and China-Maldives free trade agreements, China has persuaded them to agree to make opening-up commitments regarding the entry of traditional Chinese medicine practitioners and

the incorporation of traditional Chinese medicine into their respective medical insurance coverage.

Negotiation topics expanded continually. In terms of negotiation of free trade area rules, China has taken into consideration the actual situation and explored ways to gradually expand its topics to competition, e-commerce, and environment, among others. It has promoted rule negotiation and regulatory cooperation in an all-round and multi-angle manner, and promoted the appropriate integration of the two parties' regulatory systems, procedures, methods, and standards through more flexible information exchange, mutual recognition of standards and qualifications, and technical cooperation. For those free trade agreements that were signed earlier, it has made them more responsive to the actual needs of economic and trade development through signing of supplementary agreements or upgrading of free trade agreements.

Box 10-3 China Realizes New Expansion of Rule Negotiation through Free Trade Agreements

The China-Iceland Free Trade Agreement, signed in 2013, for the first time includes a chapter on competition. The China-Switzerland Free Trade Agreement for the first time has a chapter on environment, and the free trade agreements China signed with Korea and Australia in 2015 for the first time established an e-commerce chapter.

Judging from the ongoing free trade negotiations, the issue of rules has become one of the important contents. China-Japan-Korea, China-Gulf Cooperation Council (GCC), China-Israel, and China-Norway free trade agreement negotiations all involve rule issues. In the second phase of the China-Japan-Korea Free Trade Agreement and the China-Korea Free Trade Agreement negotiations, service trade and investment negotiations were conducted on a unified negative list, making them in line with high-standard international practices in terms of negotiation mode.

2. Good results achieved in free trade area implementation

Bilateral trade expanded. In 2020, the import and export volume between China and its free trade partners (excluding Hong Kong, SAR, Macao, SAR and Taiwan region) increased by 3.2%, 1.3 percentages higher than the global import and export growth rate. It accounts for about 35% of China's total foreign trade. The signing of

free trade agreements has further released the potential of bilateral trade. Take the China-ASEAN Free Trade Are. In 2020, the volume of trade in goods between the two sides reached \$684.6 billion, which is more than double that in 2010, when the free trade area was fully accomplished, or up by 9% annually on average.

Box 10-4 China Shares Development Opportunities and Results with Its Free Trade Partners

Research by the Korea Institute for International Economic Policy (KIEP) shows that in the first year after the China-Korea Free Trade Agreement came into effect in December, 2015, the diversity of trade commodities between China and Korea had improved; the types of Korean products exported to China increased by 26, and the valued of agricultural, livestock, and aquatic products exported to China increased by 7.8%.

According to statistics of New Zealand, since the implementation of the China-New Zealand Free Trade Agreement in 2008, the country's export of milk, eggs, honey and other edible animal products to China had increased tenfold in just five years. In 2018, New Zealand's exports to China increased by 12.2%, accounting for 24.2% of its total exports. Its trade surplus with China was \$990 million.

Consumer wellbeing increases. By reducing tariff barriers, free trade agreement lowers market prices of products on which the involved countries have a comparative advantage and enriches choices of consumers. For example, thanks to the China-ASEAN Free Trade Area, tropical fruits from ASEAN countries enter the Chinese market, and their prices are becoming more and more affordable. Meanwhile, fruits that are grown in northern China can also be quickly transported to those ASEAN countries and placed on the table of their consumers. After the implementation of the China-Chile, China-Korea and China-Australia free trade agreements, cherries from Chile, household chemicals and appliances from Korea, and dairy products and wine from Australia have all had access to the Chinese market.

Box 10-5 China-ASEAN Free Trade Area Enriches Consumer Choices

Tropical fruits such as durian, dragon fruit and mango from ASEAN countries can quickly enter supermarkets in China through Guangxi's ports. Apples, pears, cantaloupe, and grapes from northern China can also quickly enter the ASEAN consumers through Guangxi's ports. China is the world's largest producer of apples, with an annual output of 30 million tons. In recent years, China has exported large quantities of apples to the ASEAN markets through the Pingxiang Port in Guangxi. Xianyang city in Shaanxi is 2,600 kilometers away from Pingxiang and it takes about 30 hours for products to be transported from Xianyang to Pingxiang by highway. It is the most convenient land route to ASEAN. ASEAN has become the largest market for fruit sales in Shaanxi province.

Important platform for global openness cooperation. China regards the construction of a free trade area as an important platform for the active participation in international economic and trade cooperation and global economic governance. It has continuously improved the contents of free trade area construction, balanced flexibility and pragmatism, and innovated cooperation modes, which have been recognized and supported by its free trade partners. The cooperation concepts it has raised, such as openness, inclusiveness, balance, and mutual benefit, have been identified by more and more countries.

III. Actively Participating in Various Economic Governance Mechanisms

China adheres to the global governance concept of extensive consultation, joint contribution and shared benefits. It is a staunch defender, supporter and practitioner of multilateralism. It carries out policy coordination and pragmatic cooperation with all parties in a constructive way through multilateral and regional cooperation platforms, such as the United Nations, G20, APEC, and BRICS, so as to promote a more mature global economic governance system.

1. Actively pushing forward economic governance through the platform of UN

China resolutely defends the international order and regime with the United Nations as the core and the philosophy and principles of the Charter of the United Nations as the foundation. It promotes the integration of global governance concepts of extensive consultation, joint contribution and shared benefits into important United Nations meetings, resolutions, and documents, and supports raising the representativeness and voice of developing countries in global economic governance. It also supports efforts to improve global economic governance mechanisms. It enhances cooperation with UNCTAD and the International Trade Center. From personnel training and technical consultation at the early stage to joint research, policy analysis, co-organizing conferences, and helping other developing countries to carry out capacity building, China has actively supported and promoted global cooperation in dealing with challenges and difficulties in the economic and trade field.

It promotes a mutually beneficial cooperative relationship with the United Nations Industrial Development Organization (UNIDO). Since 2013, China's cooperation with UNIDO has entered a new stage. The two sides have strengthened exchanges and cooperation, raised level of cooperation, actively shared China's industrialization development experiences and practices with other developing countries, and promoted inclusive and sustainable industrial development.

It expands cooperation with United Nations development agencies. China has strengthened tripartite cooperation with the United Nations Development Programme, UNICEF, and UNFPA, and shared its solutions and wisdom to help other developing countries achieve a lasting, inclusive, and sustainable economic growth.

2. Making efforts to improve functions of multilateral governance mechanism, such as G20 and APEC

China has always attached great importance to and actively participated in G20 cooperation. Since the 18th National Congress of the Communist Party of China, President Xi Jinping has attended all G20 summits and delivered a series of important speeches on improving global economic governance, which left a deep impression and imprint on the G20 stage and demonstrates China's wisdom, breadth of mind and sense of responsibility as a responsible major country. In particular, in 2016, the G20 Leaders Hangzhou Summit was successfully held, pioneering a permanent mechanism for trade and investment; participants also agreed the world's first multilateral programmatic document on investment policy — the G20 Guiding Principles for Global Investment, and approved the G20 Strategy for Global Trade Growth and many other proposals as the outcomes of the summit, effectively pushing forward the transition of the G20 from crisis response to a long-term governance mechanism.

It pushes forward APEC cooperation, with new progress made. Since joining the APEC in 1991, China has actively promoted regional economic integration and successfully hosted two APEC leaders' meetings. In 2014, it pushed forward the endorsement of the Beijing Roadmap for APEC's Contribution to the Realization of the Free Trade Area of Asia-Pacific at the 22nd APEC informal leaders meeting, held in Beijing, put forward the APEC Interconnectivity Blueprint, and proposed a series of practical initiatives, such as establishment of an Asia-Pacific model electronic port network. In 2019, it proposed to "build an Asia-Pacific community with a shared future that featuring openness and inclusiveness, innovative growth, interconnectivity, and win-win cooperation", which opened up a new horizon for deepening economic and trade cooperation in the Asia-Pacific region.

Box 10-6 China Actively Participates in Mechanism Cooperation, such as G20 and APEC

At the G20 Hangzhou Summit in 2016, China promoted the pioneering of a permanent mechanism for trade and investment, and helped reach major achievements and initiatives, such as the G20 Guiding Principles for Global Investment and the G20 Strategy for Global Trade Growth. The summit also for the first time placed development in a prominent position in the global macro policy framework, and approved the G20 Action Plan on the 2030 Agenda for Sustainable Development and the G20 initiative on Supporting Industrialization in Africa and LDCs, injecting new impetus into efforts to achieve a strong, sustainable, balanced and inclusive global economic growth. In 2020, in the face of the impact of the pandemic, China proposed to strengthen international cooperation in the fight against the pandemic at the G20 special summit, which received positive responses from concerned parties.

At the APEC Beijing Summit in 2014, China promoted the formulation of the APEC Strategic Blueprint for Promoting Global Value Chains Development and Cooperation, which becomes the world's first global value chain guidance document, and established ten pillar areas, such as trade value added statistics, integration of developing economies into global value chains, and small and medium-sized enterprises development.

3. Strengthening construction of regional governance mechanisms, such as **BRICS** and **SCO**

China actively promotes regional economic cooperation and continues to deepen cooperation and strategic alignment with the BRICS countries and developing countries in Asia, Africa and Latin America. It promotes the stability and long-term development of the BRICS cooperation mechanism. As a founding member of the BRICS mechanism, China actively advocates for all parties to strengthen macro-policy coordination, enhance strategic mutual trust, and promote the institutionalization, systematization and solidification of economic and trade cooperation. In 2017, the BRICS leaders met in Xiamen, Fujian province, and adopted the Xiamen Declaration, reaffirming the BRICS spirit of openness, tolerance, and win-win cooperation. In 2018, which marks the tenth anniversary of BRICS leaders meeting, China advocated the establishment of a new industrial revolution partnership to enhance the competitiveness of developing countries.

Deepening SCO regional economic cooperation. Based on the Shanghai Spirit of mutual trust, mutual benefit, equality, consultation, respect for diverse civilizations, and seeking common development, China and other SCO member states have increased openness cooperation to promote complementary advantages, mutual benefit and winwin results. In 2018, the Qingdao Summit was held, and 23 cooperation documents, including the Qingdao Declaration, were reviewed and approved to deepen all-round cooperation in economy and trade, finance, agriculture, connectivity, and people-to-people exchanges.

4. Bringing out its positive role in World Bank and International Monetary Fund

China advocates the reform of the World Bank and IMF quotas and voting rights should be accelerated to enhance the representativeness and voice of developing countries. It promotes the adoption of the reform plan of the IMF and helped increase the overall voting power of developing countries in the World Bank to 47.2%. It promotes a fairer, more equitable, more reasonable and orderly global governance system. At the same time, it actively promotes efforts to improve the efficiency of international financial governance and pushes forward the establishment of new international financial institutions, such as the Asian Infrastructure Bank and the New Development Bank to continually improve the global economic governance structure.

IV. Pushing Forward Efforts to Improve Global Economic Governance System

China will adhere to the principle of extensive consultation, joint contribution and

shared benefits, participate in global economic governance in a constructive way, play an active guiding role in implementing the global economic agenda, firmly support the multilateral trading system, actively participate in WTO reforms, and promote trade and investment liberalization and facilitation, so as to make greater contributions to improvement of global economic governance.

1. Increasing the authority and effectiveness of WTO

China is willing to work with all WTO members to frankly exchange views and take joint actions to promote the necessary reforms of the WTO. While strengthening communication and cooperation with all parties and continuing to bring out the role of multi-party provisional appeal and arbitration arrangements, China strives to restore the operation of the Appellate Body as soon as possible and maintain a two-level dispute settlement mechanism. It supports efforts to guarantee the development interests of developing members, allow the developing members the flexibility and policy space they need to achieve economic development, and narrow the North-South gap. It actively participates in WTO negotiations, completes negotiations on issues such as fishery subsidies in accordance with the requirements of the United Nations Sustainable Development Goals, participates in the formulation of investment facilitation, digital economy and other rules in a constructive manner, and promotes relevant negotiations on new topics to produce substantial results to make the WTO rules system keep up with the times.

2.Pushing forward high-level free trade network construction

China adheres to open regionalism, improves the global layout of free trade area construction, promotes the RCEP entering into force at an earlier time, and speed up negotiations on free trade areas, such as the China-Japan-South Korea and the China-GCC free trade areas. It increases the level of trade in goods openness, improves two-way market access, and continues to expand the opening-up of the service industry. It constantly enriches the contents of free trade areas, pushes forward negotiation of new topics, such as e-commerce, while appropriately expanding negotiations to cover topics such as industrial cooperation, development cooperation, and global value chains.

3. Enhancing the role of multilateral economic governance platforms

China adheres to the principle of equal consultation, mutual benefit and win-win results, promotes the role of the G20 in international economic cooperation, strengthens the pillar role of trade and investment in G20 cooperation, and fosters a free, open, inclusive, and orderly international economic environment. It deeply participates in APEC cooperation and pushes forward trade in goods, services, and investment to make them more open. It enhances the effectiveness of cooperation between the BRICS and other mechanisms, and promotes cooperation in trade and investment facilitation, intellectual property rights, and e-commerce, to achieve new results. It also strengthens international macroeconomic policy coordination, makes efforts to reduce the impact of the novel coronavirus pandemic, and promotes global economic stability.

4. Promoting openness cooperation, innovation and sharing

China seeks development through openness, and deepens exchanges and cooperation in political, economic, cultural, social, ecological and other fields. It resolutely opposes protectionism and continually reduces trade barriers. It enhances innovation cooperation in the fields of digital economy and artificial intelligence, and promotes the deep integration of technology and economy. It implements the UN 2030 Agenda for Sustainable Development, so that its development results can benefit more countries and regions. And it strengthens communication and consultation and expands consensus on opening-up to make the world economy more open and inclusive.

Chapter XI China International Import Expo Serving as International Public Goods in Openness Cooperation

China has been exploring innovative ways of opening-up, and the China International Import Expo (hereinafter referred to as the CIIE) is an important and ground-breaking initiative.

Since 2018, the CIIE has been successfully held for three times, attracting worldwide attention and achieving rich results. It has established an openness cooperation platform for countries around the world to explore the Chinese market, provided an important window for the implementation of the strategy of expanding domestic demand and building a new development pattern.

And it has provided international public goods for safeguarding free trade and multilateral trading system and played its role in building an open world economy and a community with a shared future for mankind, which is exceptionally valuable for our time.

I. CIIE as A Ground-Breaking Initiative to Expand Opening-up in the New Era

The hosting of the CIIE is a major decision made by China focusing on promoting a new round of high-level opening-up to the outside world, and a major move by China to actively open its market to the outside world.

1. Inheriting and carrying on China's openness philosophy

The road of national rejuvenation must be one of opening-up. Having

experienced the glory of the open, inclusive, and prosperous Tang Dynasty, as well as the backwardness and sufferings as a result of its closed-door policy (in the Qing Dynasty), China knows better that "opening-up leads to a prosperous age, while closeddoor policy causes decline". In 1957, China launched the Canton Fair, which opened a window to the outside world and became a vivid epitome of China's opening-up to the outside world. As it enters the new era, China's interaction with the outside world has become more comprehensive and profound. Faced with rising anti-globalization and protectionism, President Xi Jinping announced that China will hold the CIIE from 2018, marking China's proactive opening-up of its large market to the outside world and demonstrating its sense of responsibility as a major country. It is milestone in China's opening-up history, just like its establishment of the Canton Fair more than 60 years ago and its accession into the WTO 20 years ago. It is also a major groundbreaking move in the history of international trade development, enabling the Chinese people to better understand the world from within China and better understand China from an outside perspective. Through its opening-up, China can see the differences and become more confident. Meanwhile, it has also seen the gap and become more conscious of the right direction towards which it should strive. As the opening-up process goes on, China has been more open, prosperous and confident.

Table 11-1	China's Foreign Trade						
	1957	2001	2018	2020			
GDP (billion yuan)	107.1	11,086.3	91,928.1	101,598.6			
GDP per capita (yuan)	168.0	8,717.0	65,534.0	72,000.0			
Total export (\$billion)	1.6	266.1	2,486.7	2,590.6			
Total import (\$billion)	1.5	243.6	2,135.7	2,055.6			
Total export & import (\$billion)	3.1	509.7	4,622.4	4,646.3			
Trade-GDP ratio (%)	9.8	38.1	33.2	31.6			

Sources: National Bureau of Statistics of China.

2. Promoting the development of free trade

Innovation of new international free trade theories. From mercantilism to new international trade theories — there has never lacked theories that encourage exports, restrict imports, and develop the domestic economy. The CIIE is the world's first State-level import-themed exhibition. It is an open platform hosted by China, participated

by all countries, and shared by the world, facilitating ordering and selling from every corner of the world and benefiting dealers and consumers from all over the world. It is a major innovation in the concept of international free trade development and it is unique in the history of world trade. China's proactive expansion of imports is not a stopgap measure, but a long-term plan aimed at promoting its future development and the common development of all countries in the world. Considering that economic globalization has come to a crossroads at present, China's proactive opening-up is particularly valuable. It is a theoretical innovation that transcends mercantilism, equally emphasizes import and export, and promotes free trade. It constitutes the China solution that promotes not only China's growth but growth of other countries, achieve common development, and builds an open world economy.

Boosting new momentum for free trade. In 2020, China's imports are valued at \$2 trillion. It is estimated that in the next 10 years, China's cumulative imports of goods may exceed \$22 trillion. The Chinese market, with a population of 1.4 billion and more than 400 million people of middle-income groups, is an important engine for international trade. China has used its own opening-up, marked by its proactive expansion of imports, to drive the world's opening-up, which will greatly raise the level of global trade liberalization, create new demand for, and inject new impetus into, the world's openness development.



Source: WTO.

3. Promoting the development of China's openness

Meeting people's needs for a better life. China's middle-income groups continue to expand, the consumption structure upgrading is accelerating, and demand for diversified consumption is increasing. Over the past ten years, overseas consumption has grown by double digits every year. In 2020, the import value of consumer goods increased by 8.2% year-on-year, which is 8.6 percentages faster than the overall import growth rate. Sales of Hainan duty-free shops increased by 1.27 times, and sales of some mid- to high-end brands increased by more than 30%. The hosting of the CIIE and the reasonable expansion of import of high-quality goods and services are conducive to enriching domestic consumption choices, optimizing consumption structure, promoting consumption upgrading, meeting people's individualized, diversified and differentiated consumption needs, and better materializing the people-centered development philosophy.

Exploring new path of China's opening-up. The CIIE, domestically, helps meet the domestic requirements of high-quality economic development, deepen the supply-side structural reforms, and boost efforts to promote the formation of an open and integrated major market, trade, and circulation network. Externally, it has become a new platform for China to promote higher-level openness. President Xi Jinping has announced China's measures to expand its opening-up at the opening ceremony of the CIIE for three consecutive years, indicating that China is expanding its market to the world with a more confident and more positive attitude, and developing an open economy on a larger scale, in broader fields, and at a deeper level.

Enhancing capabilities to coordinate both internal and international imperatives. A strong trading power is bound to be a major importer. It is imperative for China to adhere to both import and export and integrate domestic and international markets in order to achieve high-quality development of trade and enhance the competitiveness of the trade sector. The CIIE attaches importance to both traditional markets, such as the developed countries, but also the emerging markets, such as the developing countries, thus strengthening the influence of the large domestic market and improving common bond of interest linking China with other countries. The CIIE has become the *barometer* of China's opening-up, demonstrating the shift from opening-up as a requirement from the top to self-initiated opening-up, from opening-up by myself to common opening-up, from opening-up of factors to institutional opening-up, and

from opening-up itself to quality of opening-up.

4. Pushing forward the development of global openness

Major action to build an open world economy. In recent years, the global economic growth momentum has become weak, the anti-globalization sentiment has surged, and trade and investment protectionism has intensified, which have combined to pose a challenge to the multilateral trading system. The CIIE fully embodies China's consistent position of supporting the multilateral trading system and promoting free trade, and sends a clear and positive message of opposing protectionism and building and maintaining an open world economy.

A real action to promote the building of a community with a shared future for mankind. The CIIE provides a new comprehensive public platform for international cooperation, and China said other countries are welcome to take the *express train* and *hitchhike* of China's development for free. The participation of countries involved in the BRI in the CIIE has helped to deepen and solidify the joint building of the initiative. All relevant parties discuss ways of common development and problemsolving through consultations, which is conducive to guiding economic globalization towards being more open, inclusive, balanced and inclusive. While goods and serves



Figure 11-2 World GDP and Trade Growth (%), since 2000

Note: At the level of the world as whole, the export bahaves as a mirror of the import. So, it is the import measured by c.i.f price rather than the sum of export and import that is used here as a proxy indicator to world trade.

Source: World Bank, World Development Indicators, online dataset.

are exchanged through the CIIE, the expo is also a channel for exchanges of cultures and ideas. It showcases some valuable ideas of the Chinese civilization, such as *helping others to succeed while seeking one's own success, treating people well although they are far away and do not think the same way*, and *all nations living in harmony*. It also demonstrates the unique charm of other civilizations. The CIIE has reflected the charm of civilizations by promoting a benign economic and people-to-people exchanges and revealing the profound connotations of *humanity first* and a community with a shared future for mankind.

II. CIIE as A Comprehensive and Open Platform Shared Globally

The CIIE combines exhibition, forum, diplomacy, and people-to-people exchanges. Its attribute as international public goods has continually been strengthened, and the comprehensive spillover effect of the four platforms (international procurement, investment promotion, people-to-people exchange, and openness cooperation) has become more and more apparent.

1. International procurement platform promoting foreign trade

The CIIE, as a platform for transactions between Chinese and foreign dealers from all over the world, has become a world-class exhibition and broadened the channel for global enterprises to enter the Chinese market and carry out international cooperation.

Scale of exhibition continues to expand. A total of 151 countries and regions participated in the business exhibition at the first CIIE, with 3,617 exhibiting companies. A total of 3,893 companies from 155 countries and regions participated in the second CIIE. The number of buyers significantly exceeded that of the first one, involving 39 trading groups, nearly 600 sub-groups, and 506,000 professional visitors. The cumulative intentional transactions totaled \$71.13 billion, an increase of 23% over the first session. Against the backdrop of the global spread of the COVID-19 pandemic, the third CIIE still had companies from 124 countries and regions participating in the event. The number of exhibitors is largely the same as that of the second expo, and nearly 400,000 buyers participated in the exhibition. The value of intentional deals reached \$72.62 billion, an increase of 2.1% year-on-year. The exhibition area covers nearly 360,000 square meters, 30,000 square meters larger than the second session. The

3rd CIIE combines online and offline transactions and is the world's largest exhibition in 2020, with the largest number of participating countries and regions. It fully reflects the powerful influence of the international procurement trading platform.

Box 11-1 Global Debut in China ? State-of-the-Art Products at the CIIE

The 3rd CIIE has become the main display platform for global innovative products. 411 new products, technologies and services were launched, of which 73 were exhibited for the first time globally. Industry leaders actively participated in the exhibition. For example:

The most "dry" paper machine — Epson, uses the world's first dry fiber technology to recycle waste paper into environmentally friendly new paper without using water, while ensuring the complete destruction of confidential information.

The most intelligent "building brain" — Johnson Controls openBlue digital platform, which integrates customized and embedded AI technology to integrate internal and external data of buildings and create the highest-standard smart buildings.

The most advanced autopilot system — the fifth-generation L4-level autopilot software and hardware system of Pony.ai, which realizes standardized production and verification process and lays the groundwork for large-scale production in the future.

Many enterprises have taken this opportunity to debut their latest technologies and products. It shows that competition in the Chinese market is fierce and an enterprise needs to showcase its most competitive products if it aims to be recognized by the Chinese market.

Quality of exhibition continues to improve. The CIIE has attracted a large number of world-renowned companies, exhibiting a wealth of new products, technologies, and services. 220 of the world's top 500 companies and industry leaders, a large number of low-profile enterprises are leaders in certain niche markets, and small but competitive small and medium-sized enterprises participated in the first CIIE. At the second CIIE, 288 Fortune 500 and industry-leading companies participated in the event, and more than 400 new technologies, services and products were debuted. A total of 274 Fortune 500 companies and industry-leading companies participated in the third CIIE, including the world's top ten pharmaceutical and industrial electrical companies, top six construction machinery companies, top seven vehicle groups, and

the big-four accounting firms. The number of exhibited new products, technologies and services reached 411.

2. Investment promotion platform boosting foreign investment in China

The CIIE has demonstrated the great charm of the Chinese market. While promoting trade, it has also made the Chinese market more attractive to cross-border investors and promoted investment cooperation, leading to more active interaction between trade and investment activities.

Become a new platform for local governments to usher in investment. China's local authorities have made use of the CIIE platform to carry out a large number of investment and project promotion activities. For example, at the second CIIE, contracts involving 33 projects were signed at the Zhejiang China-Europe Digital Economy and High-Tech Matchmaking Conference. Shanghai Unicom held a city promotion conference and reached cooperation agreements with a number of companies, such as Sweden's Atlas Copco and Belgium's Renson Group; Shandong Unicom successfully signed contracts with Ericsson and Hexagon; and Lecheng of Boao, Hainan province signed contract with US-based Pfizer. The large-scale trade and investment matchmaking meetings of the third CIIE have successfully led to enterprises reaching 861 intentional cooperation agreements.

Box 11-2 Some Investment Cooperation Agreements Signed at the CIIE

750MW Photovoltaic Project in Hungary

PowerChina International signed memorandum of cooperation with a Turkish corporation on a 750MW photovoltaic project in Hungary. It is PowerChina International's first project in the Hungarian market, and company executives said that in the future, it will make full use of PowerChina International's advantages in integrating domestic and foreign capital, technologies and human resources, and join hands with project owners to ensure the success of the project.

Cocoa Agricultural Complex Project in Ghana

The Cocoa Agricultural Complex Project Framework Agreement marks the largest-scale single cooperation between China and Ghana in the agricultural field. It covers feasibility study, planning and design, farmland irrigation, storage, processing, construction of supporting facilities, product sales and comprehensive services, such as related technological cooperation. It will help promote long-term cooperation between China and Ghana in the field of agricultural products.

China-Iran Energy Cooperation Project

Zhenhua Oil and Iraq's State Organization for Marketing of Oil, or SOMO, signed a joint-venture cooperation agreement, and Zhenhua Oil and the Tianjin Economic and Technological Development Zone Management Committee signed a strategic cooperation framework agreement. According to the agreement, Zhenhua Oil and SOMO jointly funded the establishment of a joint venture in the China (Tianjin) Pilot Free Trade Zone, and plan to develop it into a platform for Iraq's Basra oil to integrate investment in such industries as trading, warehousing, and transportation of crude oil, refined oil and natural gas in China. After the project is launched, it is estimated that 8 million tons of oil will be imported from Iraq annually, and the annual trade volume will reach 26 billion yuan.

A new window for global enterprises to invest in China. Many international organizations and multinationals said that the CIIE provides opportunities for cooperation between foreign capital and domestic entities as the former enters China and look for investment projects. For example, Hexagon will invest 2 billion yuan to build its East China headquarters in Qingpu District, Shanghai; Kao Chemical Corporation Shanghai will invest an additional 430 million yuan in the second-phase construction of its project; Lego will invest \$550 million to build the Legoland Resort in Shanghai; AstraZeneca announced to upgrade its R&D platform in Shanghai to a global R&D center; Leading Italian aviation company Leonardo Corporation invested 12.8 billion yuan in Pinghu, Zhejiang, to ensure investment is made in the year of the 1st CIIE (2018), production is launched in the year of the 3rd CIIE (2020).

3. People-to-people exchange platform promotes mutual learning among civilizations

The CIIE is not only an international exhibition for commodity trading, but a platform for global cultural integration and a colorful stage for mutual learning among different civilizations, with rich content of people-to-people exchanges.

The Country Exhibition section of the CIIE presents diversity of civilizations.

The Country Exhibition is a highlight of the CIIE and has become an important platform for the display of development achievements, economic cooperation, tourism promotion and cultural exchanges of relevant countries. A total of 82 countries and 3 international organizations participated in the Country Exhibition of the 1st CIIE. At the 2nd CIIE, a total of 64 countries and 3 international organizations participated, including 24 Asian countries, 8 African countries, 17 European countries, 12 countries from America, and 3 countries from Oceania. At the 3rd expo, 6 countries, including Russia, held online country theme promotion. Italy displayed 55 World Heritage projects in video, and Nepal displayed Thangka works. The Country Exhibition covers food and wine tasting and special cultural performances, and it is very attractive to the audiences since the overall quality and visual atmosphere of the exhibition have continually improved, fully demonstrating the characteristics and colorful cultures of the five continents.

Box 11-3 Country Exhibition Opens a New Door to World Culture

Cambodia showcases development and opportunities

The Cambodian Pavilion has strong national cultural characteristics. The entire pavilion "copies" the Cambodian Royal Palace, and pictures of Angkor Wat and other famous Cambodian temples can be seen everywhere. Cambodian participants are more enthusiastic, displaying special local products, such as cassava, pepper, cashew nuts, palm sugar, fish sauce, coffee, and handicrafts in the pavilion that attracted many visitors.

Jamaica eagerly awaits Chinese investment

The bar in the Jamaica Pavilion is very crowded, with a long queue of spectators waiting to taste Jamaican Blue Mountain coffee and rum. The entire Jamaica Pavilion is filled with the tempting aroma of coffee and wine.

Popular Russia Pavilion

Through modern media technology and artistic performance, the Russian Pavilion allows all visitors to enjoy the works of great Russian composers and appreciate the amazing scenery of Russia. At the same time, they can also learn about many of the most advanced scientific and technological and cultural achievements. The Russian Pavilion is designed in a gallery style, with eye-catching red as the main color. It has combined open galleries and a series of art installations to present a unified panorama of Russia — My Broad Motherland. The overall shape of structure is similar to a pavilion or pagoda. In terms of the philosophy and meaning of design, it is hoped to create an entertaining and relaxing area, so that the audience can feel like they are received by Russians at home.

Interaction between exhibition and performances — a pageant of the Five Continents. China's provinces, autonomous regions and municipalities have thoughtfully designed intangible cultural heritage and Chinese time-honored brands exhibitions and interactive activities. For example, at the second CIIE, exhibitions such as the Shaanxi shadow puppet show, Zhejiang Longquan kiln porcelain, Fujian Shoushan stone carving, and Shanghai Gu embroidery have presented the great charm of the Chinese civilization and helped enhance cultural exchanges and understanding. At the 3rd CIIE, a total of 81 Chinese Time-honored Brands, 12 National Pilot Pedestrian Streets and 100 Intangible Cultural Heritage items were exhibited with interactive activities, and 25 provinces, autonomous regions and municipalities launched special *local comprehensive image displays*; and 49 free cultural performances were staged, which promoted the combination of economy and people-to-people exchanges.

Box 11-4 Intangible Heritage and Time-Honored Brands Highlight Cultural Integration at CIIE

The CIIE has set up a cultural exhibition themed Intangible Cultural Heritage and Chinese Time-honored Brands. While commodities from all over the world enter China, it also provides a rare opportunity for Chinese culture to go global, aiming to create a display platform that spreads the Chinese culture to other parts of the world.

Shanghai has made use of its exhibition to display new products of its traditional brands, intangible cultural heritage stories, artisan performances, and sales of souvenirs, which fully demonstrated the cultural and urban characteristics of the city. The National Intangible Heritage Shikumen lanes was reproduced at the expo, with the typical Shanghai-style guest rooms and book rooms to show the daily life of ordinary people and reveal the splendor of intangible cultural heritage in routine daily life. The cheongsam with dragon-and-phoenix design hangs in the corner, the delicate crochet vase is put in the corner to decorate the room, with the butterfly-brand sewing machine beside it, the Shanghai style bonsai trees are placed on the coffee table, and the Shanghai style paper-cut products featuring old Shanghai figures hang on the wall — everything is reflective of

the Shanghai style.

Entering the Shaanxi exhibition area, one can see the design is based on three traditional Chinese colors — red, classical yellow, and cloud white. It borrows and uses the architectural design elements of Chang'an city in Han Dynasty (206 BC - 220 AD) and Tang Dynasty (618-907), representing Shaanxi's brilliant history reflected by the prosperity in Han Dynasty and Tang Dynasty and its modern cultural development results. It also highlights the glamor of Shaanxi as it engages in economic and cultural exchanges through the Silk Road Economic Belt in the new era.

4. Openness cooperation platform promoting common prosperity

The CIIE has built an international public platform to support economic globalization and safeguard the multilateral trading system, and served as a stage for the chorus of openness cooperation among all countries.

Sending the message of multilateral cooperation. The Hongqiao International Economic Forum has advocated multilateralism. It has become an high-end platform for international dialogue, exchange of ideas, and consensus-building as well as a commanding height for promoting multilateralism. 1,500 people participated in the first forum and nearly 3,000 people were present at parallel forums and the international media forum. More than 20 foreign politicians and government officials delivered speech, and more than 30 well-known entrepreneurs, think tank experts and heads of international organizations participated in the discussion and interactive activities. At the second forum, four foreign heads of state and government, one foreign minister, and one international organization chief delivered speech, and 50 representatives of Fortune 500 companies and Nobel Prize winners in economics were present as guests. The main forum was attended by 1,500 people. More than 3,000 people participated in the 5 sub-forums, and more than 4,000 people from the media were present. Participants with different backgrounds conducted exchanges on the frontier issues of global economic and trade development, and called for opposing trade protectionism and unilateralism, and building more consensus. At the third forum, eight foreign heads of state and government and four heads of international organizations delivered speech, calling for supporting the WHO playing a better role, firmly safeguarding the multilateral trading system, and promoting international governance reform, sending a strong message of supporting global solidarity in fighting the pandemic and openness

cooperation in the new era.

Promoting common development of the world. The CIIE provides more opportunities for enterprises in developing countries to get aboard the express train of China's development and accelerate their integration into globalization. Take countries involved in the Belt and Road Initiative. Through the CIIE, companies from other countries have found opportunities to meet their trade and investment needs, have access to the Chinese market, enjoy China's development dividends, and expand the cake of common development. At the same time, the CIIE also helped the least developed countries to participate in the expo. There were 35 least developed countries participating in the first session and 40 in the second session. Organizers provided each country with two free booths and other necessary supports. In addition to the supportive policies for the least developed countries in the previous two sessions, organizers of the 3rd CIIE also established a new public health and pandemic prevention area covering 11,000 square meters in response to the global pandemic, where 48 companies displayed their internationally advanced pandemic-prevention products and technologies, such as the 15-minute nucleic acid detection system and the world's first new-generation ECMO (artificial lung). It marks China's efforts to carry out substantial steps to boost international anti-pandemic cooperation.

Box 11-5 Creating Opportunities for Companies from Countries Involved in BRI to Expand Their Market Presence

At the first CIIE, exhibits from countries involved in the BRI not only included local traditional competitive industries, but also featured good-quality products and services that have broken breakthroughs in recent years. The participating companies from countries involved in the BRI said they all hope to seize the opportunity to showcase their image, build their brand, and discover business opportunities, as they enter China and other parts of the world.

At the second CIIE, logistics company DHL announced its launch of the fastest rail freight service connecting Xi'an, China with Hamburg and Neuss in Germany, shortening the 17-day journey required for traditional transportation to 10-12 days. DHL also set up an interactive wall on its booth at the CIIE to introduce to the audience its development under the BRI in recent years.

The third CIIE attracted the participation of major port service institutions from

countries involved in the BRI, including Dubai Ports World and Singapore's PSA International. Those ports and logistics service institutions said they hope to use the BRI interconnectivity to find new development opportunities on the CIIE platform. The same-frequency resonation of the two major international public goods, namely, the CIIE and the BRI, brings confidence to the industry and enterprises in their development.

III. Jointly Improving the Quality of CIIE

President Xi Jinping stressed that the CIIE is an event that should be held on an annual basis and feature good performance, good results and continued success. The CIIE has been successfully held for three years, and has established its image and status as a world-class exhibition. Looking at the future, China will start from a new stage of development, implement new development thinking, focus on "continued success", and ensure "exhibits can become commodities and exhibitors can become investors"; China will continue to amplify the comprehensive effects and spillover effects of the CIIE, and give full play to the CIIE's model role in global resource allocation, promotion of industrial cooperation and innovation exchanges, expansion of institutional openness, so as to promote market connection, industry integration, innovation promotion, and regulation connectivity of domestic and foreign markets at a higher level of openness, and better serve the purpose of building a new development pattern.

1. Ensuring major powers keep their openness commitments to do-what-they-say

The CIIE has become a platform for China to showcase its openness to the outside world, and, to a certain extent, it plays the role of demonstrating the ratcheting effect of opening-up. The five measures to expand China's opening-up announced by President Xi Jinping at the first CIIE have been largely implemented. At the second CIIE, President Xi Jinping solemnly announced that China will continue to expand market openness, continue to improve the opening-up pattern, optimize the business-doing environment, deepen multilateral and bilateral cooperation, and promote the joint construction of the BRI. At the third CIIE, President Xi Jinping announced that it is necessary to build new commanding heights of opening-up, promote the innovative development of foreign trade, continue to improve the business-doing environment, and deepen bilateral, multilateral, and regional cooperation. China promotes the openness

of the world through its own opening-up, and ensures openness can benefit countries all over the world. The Chinese government has actively promoted the implementation of the above measures as soon as possible, and kept its opening-up commitments in accordance with the principle of "honoring promises with concrete actions", which can effectively enhance the brand value of the CIIE as a "window of China's openness".

2. Promoting all countries sharing opportunities of opening-up and cooperation

China is both the world factory and the world market. According to McKinsey's research and forecast, the scale of China's consumer market will exceed that of Europe and the United States combined in 2035. China adheres to the path of openness, integration, mutual benefit and win-win outcomes, upholds the concept of the right relationship between justice and interest, and will share its huge market with other countries through platforms such as the CIIE. It will also strengthen the bond of mutual interest and continue to expand the circle of friends in international cooperation. On the one hand, China will continue to give full play to its home diplomacy advantage and the guiding role of the head of state diplomacy, implement the important economic and trade outcomes as a result of consensus reached by President Xi Jinping and the leaders of relevant countries, and deepen multilateral and bilateral economic and trade cooperation. On the other hand, by actively expanding imports, China will ensure more countries share its large market and development dividends, resolve trade differences and frictions, promote basic trade balance, promote coordination and cooperation among major countries, and deepen economic and trade relations with neighboring countries.

3. Improving function of CIIE as an international public platform

The CIIE not only provides opportunities for goods and services transactions, but also carries multiple functions, such as national image display and discussion of major global issues. It is necessary to uphold the global governance concept featuring extensive consultation, joint contribution and shared benefits and make better use of the four major platform functions of the CIIE to create a more inclusive new platform for international cooperation. For example, the Hongqiao International Economic Forum should be better organized and utilized and its level of internationalization should be improved, so that all parties can use the platform to push necessary reforms of the WTO, support multilateralism, fully reflect the interests and appeals of all players involved in world economics and trade, and lead the economic globalization in the right direction. Another example is the BRI. More efforts should be made to better match the trade and investment needs between China and countries involved in the BRI to promote jointly to push the high-quality development of the initiative.

4. Continually build a world-class expo

The CIIE is not a solo by China, but a chorus of various countries. The CIIE shall, on the basis of seriously summing up experience and extensively listening to various opinions, adhere to the principle of openness cooperation and innovative development to ensure that its quality can be continually improved. It is necessary to adhere to the mode of government guidance combined with market- and business-oriented operation. The organization of the expo should be improved, and the comprehensive effect of the expo should be amplified. The quality of the Hongqiao International Economic Forum should be improved in terms of functions, themes and agenda, operating mechanism, and outcomes. Its international influence should be expanded. It is necessary to make consistent efforts to build a world-class expo and forum and make the CIIE a *one-hundred-flower garden*, where all countries can showcase their best products and services.

Chapter XII BRI is the China Plan for Jointly Building a Community with a Shared Future for Mankind

In September and October, 2013, when President Xi Jinping visited Kazakhstan and Indonesia, he successively proposed major initiatives to jointly build the Silk Road Economic Belt and the 21st Century Maritime Silk Road.

The joint construction of the Belt and Road Initiative is a major strategic decision made by the Party Central Committee with Comrade Xi Jinping at the core after taking into consideration the overall political, diplomatic, and economic and social development. It is a master plan for opening-up in the new era and a China plan for building a community with a shared future for mankind.

With the joint efforts of all parties, the joint building of the BRI has evolved from *freehand brushwork* at the stage of planning into *delicate painting*, which features focus on details and fine strokes, at the stage of implementation. It expands horizons for China's openness development and provides a new alternative for building an open world economy, thus injecting new impetus into the building of a community with a shared future for mankind.

I. The BRI Starts A Chorus of Openness Cooperation

The joint construction of the BRI is rooted in history and aims at the future. It is not only a concept but also an action. It originated in China and belongs to the world. It has built an international public good of openness cooperation.

1. Reflecting combination of history and future

It has profound historical and humanistic origins. The ancient Silk Road stretches

for thousands of miles and had last for thousands of years. It creates wealth, embodies friendliness, promotes exchanges among civilizations, opens a window for friendly exchanges among countries, and ultimately forming the Silk Road spirit featuring such main characteristics as peace and cooperation, openness and tolerance, mutual learning, mutual benefit and win-win outcome.

It adds modern contents to the ancient Silk Road. As we jointly build the BRI to face squarely the real problems that have frequently challenged mankind, we have put forward a "seven-road" solution through which those problems could be solved — road to peace, road to prosperity, road to openness, road to green growth, road to innovation, road to civilization, and road to clean government — to give a serious answer to the question of "What's been wrong with the world and what shall we do?" so that the ancient Silk Road can regain its vitality.

It depicts a promising picture of future common development. The joint construction of the BRI focuses on the common aspiration of mankind to pursue peace and development, advocates the concept of open development, common development and prosperity, and countries "meeting each other halfway", which is in line with the general direction of human civilization and progress.

2.Reflecting combination of concept and action

It enriches governance philosophy. The BRI adheres to the principle of extensive consultation, joint contribution and shared benefits, and inherits the essence of traditional culture, such as "helping others to succeed while seeking one's own success", "keeping a balance between justice and interests", "putting justice before interests", and "harmony despite difference". It does not have high entry threshold, and it refrains from engaging in clique politics; and it abandons zero-sum thinking and advocates multilateralism, which reflects the spirit of equality and mutual benefit and provides new thinking for global governance.

It has produced vivid experiences. In the joint construction of the BRI, practical measures have been taken to promote the building of a community with a shared future for mankind, which has been closely integrated with the implementation of the United Nations 2030 Agenda for Sustainable Development. It has actively promoted balanced and inclusive global development and produced vivid experiences for promoting the construction of an open world economy.

Real benefits have been achieved. The construction of the BRI is not an empty slogan, but a practical move that is visible and tangible. Many countries have actively participated. The interconnecting structure that is composed of "six corridors, six routes, multiple countries and multiple ports" has been largely completed, with a large number of cooperation projects having been well-established; and the outcomes during the two summit forums have been successfully implemented, bringing tangible benefits to relevant countries.

3. Reflecting China's integration with the rest of the world

It dovetails with development requirements of participating countries. In the joint construction of the BRI, participates advocate openness and inclusiveness, focus on inter-connectivity, deepen pragmatic cooperation, and all parties are welcome aboard the *express train* of China's development for free, which caters to the needs of countries seeking to accelerate their development.

It responds to the expectations of people of countries involved in the initiative. The joint construction of the BRI is to integrate the Chinese dream with the dreams of the people of all countries involved in the BRI, so as to improve the productivity of relevant countries, make life of their people more convenient, and bring a sense of gain and happiness to the local people.

It provides an answer to the question of how the world can achieve development. In today's world, issues such as development imbalances, distribution gaps, digital divides, and governance predicaments urgently need to be resolved. The joint construction of the BRI focuses on the fundamental issue of development, strengthens strategic alignment and cooperation with other countries, promotes infrastructure connectivity, and expands economic and trade cooperation and cultural exchanges, thus constituting new driving force for promoting prosperity and development of the world (Box 12-1).

Box 12-1 World Bank Report: BRI Promotes Inclusive Global Growth

In June, 2019, the World Bank issued a report, titled by Belt and Road Economics: Opportunities and Risks of Transport Corridors, which pointed out that the joint construction of BRI has following positive effects on infrastructure construction, international trade and cross-border investment, and inclusive and sustainable growth of countries and regions involved in the initiative.

Decline in transportation times. The completed and planned BRI transportation projects will shorten the freight times of economies involved in the initiative by up to 12%, and the global shipping times by an average of 3%.

Increase in trade and investment. The newly-built transportation networks due to the BRI will increase trade of economies involved in the initiative by 2.8%-9.7%, and global trade by 1.7%-6.2%; foreign direct investment flowing into low-income countries is expected to increase by 7.6%.

Boosting economic growth. The joint construction of the BRI will increase the real incomes of economies involved in the initiative by up to 3.4% and global incomes by 2.9%. It will help 7.6 million people out of extreme poverty (with an average daily income of less than \$1.9), and help 32 million people get rid of moderate poverty (with an average daily income of less than \$3.2).

II. Remarkable Results Achieved in Carrying Out BRI

In the past eight years, the cause of jointly building the BRI has advanced through explorations. It has developed and improved; and it has grown amid cooperation, becoming a popular international public good. The BRI has been written into important outcome documents, such as UN Security Council resolutions, Forum on China-Africa Cooperation, and Shanghai Cooperation Organization. Its circle of friends has continued to expand and remarkable results have been achieved.

1. Win-win version of economic globalization

The joint construction of the BRI has built a platform for deepening international trade and investment cooperation, provided opportunities for coordinated development of relevant countries, and made a positive contribution to promotion of economic globalization.

Scale of trade has grown steadily. The joint construction of the BRI has improved the level of trade facilitation, and the "pie" of trade has become bigger and bigger. From 2013 to 2020, China's trade in goods with countries involved in the BRI has accumulated to \$9.2 trillion, and the proportion of its trade in goods with those countries to its total foreign trade in 2020 increased by 4.1 percentages from 2013.

The country has seen more than 300 overseas warehouses established in countries and regions involved in the BRI and supported enterprises to build 1,595 international marketing networks. China has actively expanded imports, shared opportunities in the Chinese market with countries involved in the BRI, and made bilateral trade more balanced (Figure 12-1).



Figure 12-1 China's Trade in Goods with Countries Involved in BRI Source: Ministry of Commerce of China, General Administration of Customs of China.

Bilateral investment gaining momentum. The investment cooperation between China and countries involved in the BRI has continually deepened, which has promoted development of industrialization. From 2013 to 2020, Chinese companies directly invested \$136 billion in countries involved in the BRI, and investors from countries involved in the BRI established 27,000 foreign-funded enterprises in China, with an actual investment of nearly \$60 billion. Chinese enterprises have invested more than \$37.6 billion in overseas economic and trade cooperation zones of countries involved in the BRI, with taxes and fees paid to host countries amounting to \$3.8 billion, creating 330,000 local jobs (Box 12-2).

Box 12-2 Industrial New Zone Established in Sihanoukville, Cambodia

The Sihanoukville Special Economic Zone is located on the eastern coast of

Sihanoukville, Cambodia, adjacent to Sihanoukville, the largest sea port in Cambodia. Under the joint development of China and Cambodia, the zone has developed from a hilly plain with no roads, water, electricity, or internet to a vibrant new city accommodating hundreds of companies from various countries and tens of thousands of employees.

At present, the industrial output of the special economic zone contributes more than 50% to the economy of Sihanoukville, becoming the local "golden rice bowl". The living standards of people in the surrounding areas have continually improved, with their annual per capita income reaching \$3,358, which is much higher than the nation's average level. The zone has actively assumed social responsibilities. It has made efforts to improve the teaching environment and help poor students from the local area. Since 2015, the special economic zone has cooperated with China's medical aid teams to carry out free medical checks and treatments in the zone for five times, with nearly 8,000 local patients diagnosed and treated. More and more local people are studying, working and living happily in the zone.

Major projects launched. Chinese enterprises have carried out project construction in countries involved in the BRI to inject impetus into local economic development. From 2013 to 2020, the value of newly signed contracts by Chinese enterprises in countries involved in the BRI increased from \$71.9 billion to \$141.5 billion, with an average annual growth rate of 10%; their completed turnover increased from \$65.4 billion to \$91.1 billion, with an average annual growth rate of 4.8% (Table 12-1). The successive launches of major projects have improve the interconnectivity and economic development level of countries involved in the BRI (Box 12-3).

	2013-2020						
		Value of new contracts			Completed turnover		
Year	Number of new contracts	Value (\$ billion)	YOY change (%)	YOY change (%)	Value (\$ billion)	YOY change (%)	YOY change (%)
2013	2,999	71.9	-	42	65.4	-	48.0
2014	3,517	86.2	20.0	44	64.3	-2.0	45.0
2015	3,987	92.6	7.0	44	69.3	8.0	45.0
2016	8,158	126.0	36.0	52	76.0	10.0	48.0

Table 12-1Projects Contracted with Chinese Enterprises in Countries Involved in BRI in
2013-2020

(Continued)

Year	Number of new contracts	Value of new contracts			Completed turnover		
		Value (\$ billion)	YOY change (%)	YOY change (%)	Value (\$ billion)	YOY change (%)	YOY change (%)
2017	7,217	144.3	15.0	54	85.5	13.0	51.0
2018	7,721	125.8	-13.0	52	89.3	4.0	53.0
2019	6,944	154.9	23.0	60	98.0	10.0	57.0
2020		141.5	-8.7	55	91.1	-6.9	58.0

Source: Ministry of Commerce of China.

Box 12-3 Piraeus Port: Enabling Greece's Economic Growth

The debt crisis broke out in Greece in 2010, and the port of Piraeus (referred to as Piraeus) was hit hard, and its operation encountered serious setbacks. After China COSCO Shipping Corporation Ltd started to take over the management of the port, the company and its local employees rebuilt and expanded the port to improve its operational efficiency, tap the international market, and take advantage of the advantages of the port to launch the China-Europe land-sea express transport and connect it with the rail networks in Greece and Europe; through those measures, the port has reversed its decline and regained its vitality.

In 2019, the Piraeus port's revenue increased by 12.3% to 150 million euros. Its net profit increased by 27.1% to 35.4 million euros. The annual container throughput was more than 6 times that of 2010, once again making the port the largest in the Mediterranean Sea area. In 2020, despite the influence of the novel coronavirus pandemic, the decline in cargo freight at the port is still smaller than that of ports in northern Europe and the Mediterranean Sea area.

Tangible results achieved in assistance in people's livelihood. Since the first Belt and Road Forum for International Cooperation in 2017, China has provided 2 billion yuan in emergency food assistance to developing countries involved in the BRI, made an additional contribution of \$1 billion to the Assistance Fund for South-South Cooperation and launched 100 "Happy Home" projects, 100 poverty alleviation projects and 100 health care and rehabilitation projects in countries involved in the BRI. There have been interesting stories every day related to BRI projects. When

the Ebola epidemic broke out in West Africa, China took the lead in sending medical teams to provide support and assistance to the governments and people of the recipient countries. In the BRI Brightness Initiative, free surgeries have been provided for local cataract patients and become a "gold-lettered signboard", or most valued program, of China's foreign aid. After the outbreak of the novel coronavirus pandemic, China and the countries involved in the BRI have helped each other, faced the challenge together, carried out in-depth cooperation in pandemic prevention and control and vaccination, and further solidified people-to-people bonds. In 2020, despite its huge demand for pandemic prevention materials, China still exported 224.2 billion masks, which is equivalent to 40 masks per person in the other parts of world. It also exported 2.3 billion protective suits and 270,000 ventilators, which demonstrated China's sense of responsibility as a major country.

2. China version of international public good

Under the BRI international cooperation framework, some public goods with international influence have emerged, which have served as solutions and contribution from China to help improve the global economic governance system.

The Belt and Road Forum for International Cooperation. The BRI summit forums were held in May 2017 and April 2019, respectively, in Beijing, and they have become an institutionalized platform for participating countries and international organizations to deepen exchanges, enhance mutual trust, and strengthen links (Figure 12-2). The hosting of the annual China International Import Expo, or CIIE, which was announced at the first BRI summit forum, has been held successfully for three consecutive years, and the fourth CIIE will be held soon, marking the trend that it has



Figure 12-2 Comparison between the Two BRI Summit Forums

Source: www.yidaiyilu.gov.cn.

been held more and more successfully. The second BRI summit forum was attended by heads of State and government of 38 countries, and more than 6,000 representatives from more than 150 countries and 90 international organizations also attended the forum, which resulted in 283 items of practical outcomes in 6 categories.

Asian Infrastructure Investment Bank. The AIIB was officially established in January 2016, when it formally started operation. It provides an important supplement to the international financial system. By the end of 2020, the number of member countries of the Asian Infrastructure Investment Bank had grown to 103, with a total of 108 loan projects approved, and a cumulative approved investment of more than \$22 billion dollars, involving 21 countries and regions and covering such fields as transportation, energy, telecommunications, and urban development. The Silk Road Fund actively promotes cooperation with domestic and foreign financial institutions. Its invested industries include infrastructure, resources development, and industrial cooperation, among others, and its investment projects cover many countries involved in the BRI.

3. Guiding version of all-round openness

The joint construction of the BRI focuses on the coordinated opening-up of China's eastern, central and western regions, and promotes the formation of a new pattern of all-round opening-up, which is conducive to deepening China's cooperation with other countries and promoting the construction of an open world economy.

Promote coordinated opening-up of coastal and inland regions. The joint construction of the BRI has opened up China's major international corridors to the West. The China-Europe railway, the new land-sea corridor, and the "Air Silk Road" have promoted the opening-up of China's inland regions and related landlocked countries. By June, 2021, the accumulative number of China-Europe freight trains had exceeded 40,000, reaching 168 cities in 23 countries. In 2020 alone, the freight trains between China and Europe recorded 12,400 trips, delivering a total of 1.135 million TEUs of goods, with a total value of \$50 billion, up by 50%, 56%, 43%, respectively, year-on-year. In the first half of this year, the number of freight trains between China and Europe reached 7,377, delivering 707,000 TEUs of goods, an increase of 43% and 52%, respectively, year-on-year (Figure 10-3). And the number of rail-sea freight trains in the western intermodal land-sea transport corridor reached 4,607 in 2020, up by 105% year-on-year (Box 12-4).


Figure 12-3 Number of China-Europe Freight Trains from 2013 to June, 2021 Source: China State Railway Group.

Box 12-4 Construction of Western Land-Sea New Corridor Accelerates

The new western land-sea corridor is located in the hinterland of China's western region, connected to the Silk Road Economic Belt to the north, and the 21st Century Maritime Silk Road to the south. It is also connected to the Yangtze River Economic Belt and, therefore, has an important strategic position in the layout of coordinated regional development. The 14th Five-Year Plan (2021-05) and the Long-Range Objectives Through the Year 2035 have both set the new western land-sea corridor as one of the major projects oriented to serve the country's major development strategies.

Much headway has been achieved in the construction of the new land-sea corridor. It has provided important support for the economic and social development and openingup of the western region, and become an important engine for driving the region's economic and social development. During the construction of the new land-sea corridor in the western region, the ports and corridors connecting land transport and sea transport have been continuously improved, and logistics services and operational efficiency have significantly improved, gradually leading to a development pattern featuring two-way economic and trade interaction.

Promoting policy connection and mechanism cooperation in the BRI framework. China has so far signed more than 200 cooperation documents with more than 170 countries and international organizations on the joint construction of the BRI. It has promoted the implementation of the WTO's Trade Facilitation Agreement and continuously improved the network of free trade zones. The *Regional Comprehensive Economic Partnership Agreement* (RCEP) has been successfully signed by participating countries. China has signed free trade agreements with 13 countries involved in the BRI, and also signed bilateral investment agreements with 56 countries involved in the BRI. It has also signed economic and trade cooperation agreements with the Eurasian Economic Union.

Importance attached to both traditional and emerging markets. In the joint construction of the BRI, China has increasingly opened up to the emerging markets and developing countries. From 2013 to 2020, the ratio of China's trade with ASEAN to its total trade increased from 10.7% to 14.7%; in 2020, ASEAN became China's largest trading partner; the ratio of its trade with central and eastern Europe to its total trade increased from 1.3% to 2.2%; and the share of its trade with Latin American countries to its total trade increased from 6.3% to 6.8% (Figure 12-4). In the past eight years, China's accumulative investment in Africa has amounted to about \$27 billion, which has promoted the development of Africa's industrialization.



Figure 12-4 Ratio of China's Trade with Emerging Markets to Its Overall Foreign Trade Sources: Ministry of Commerce of China, National Bureau of Statistics.

4. Cooperation version of high-quality development

Countries involved in the BRI have different resource endowments, and their economies are highly complementary. In the joint construction of the initiative, focus has been put on such concepts as openness, greenness, and integrity; and attention has been paid to improving the independent development capabilities of relevant countries and sustainable development.

Promoting market integration. China and related countries have opened up their markets to each other, which has promoted business exchanges and brought greater markets and opportunities for all participants. China's mechanical and electrical products, food, and clothing, among others, have crossed the oceans to arrive at overseas markets, and agricultural products, such as milk of Belarus, Kazakh wheat, and Chilean cherries, have become popular among the Chinese people.

Deepening project cooperation. The joint construction of the BRI allows the economic development needs of relevant countries to dovetail with China's advantageous industries, which has strongly promoted local industrialization, urbanization, and modernization. Kazakhstan's Kyzylorda special cement plant, invested by Chinese investors, has filled a gap in the country's special cement production. The Kareta Hydropower Station undertaken by a Chinese company in Guinea has turned West Africa's "water tower" into an "electric tower". And the opening of the Mombasa–Nairobi Standard Gauge Railway has promoted the development of related industries in related countries and injected impetus into local economic growth. (Box 12-5).

Box 12-5 Mombasa-Nairobi Railway and the Future of Kenya

The Mombasa-Nairobi Standard Gauge Railway is Kenya's flagship project that aims to help it realize its national development agenda in 2030. It is the first railway built since its independence. It is one of the railways with the highest standards, the best quality and the best cost-effectiveness on the African continent and, therefore, is called "Centenary Railway" by Kenyans. The railway connects Nairobi, the capital of Kenya, with Mombasa, the largest port in East Africa. It has a total length of 480 kilometers and it takes 4.5 hours at the fastest to travel between the two places. Prior to this, what was linking the two important cities was an old railway built by the British a hundred years ago, with a speed of only 30 kilometers per hour at the fastest.

Since its launch, the Mombasa-Nairobi Railway has brought tremendous changes to Kenya's economic and social development. The transportation time between the two places has been shortened by 4 hours, logistics costs reduced by 40%, 46,000 jobs created, more than 45,000 local employees trained, and Kenya's economic growth raised by 1.5%. At the same time, the Mombasa-Nairobi Railway was constructed in accordance with high-standard environmental protection requirements, and 14 large-scale wild animal passages were constructed, leading to the harmonious coexistence of the railway and wild animals.

Promoting technological innovation. The exchanges and cooperation between China and countries involved in the BRI have continually deepened in the fields of digital infrastructure, mobile payment, and cross-border e-commerce. The Pakistan-East Africa submarine optical cable will build a digital economic highway for Africa and Central Asia. The Beidou satellite navigation application products provide accurate and comprehensive space-time information services for relevant countries. And a batch of Chinese internet companies have expanded cooperation with local enterprises in Southeast Asia and other places to help local areas improve their e-commerce level.

Promoting sustainable development. The participation of Chinese companies in Pakistan's Sachal wind power and other clean energy projects have made positive contributions to the local green and low-carbon development (Box 12-6). Chinese enterprises have strengthened personnel training, focused on ecological and environmental protection, and actively fulfilled their social responsibilities in countries involved in BRI. They carried out a series of activities, such as donating to schools, building bridges and repairing roads, and improving medical care (Box 12-7).

Box 12-6 Cooperation among China, Italy and Brazil to Provide Sustainable Source of Clean Energy

Chinese companies and Enel, Italy's national power company, have carried out innovative tripartite cooperation, integrating the superior production capacity of Chinese companies and the advanced expertise of Italian companies, plus the advantages of Chinese and European financial institutions. It is a model of "joint development, benefit sharing, and risk sharing", which provides Brazil with costeffective new energy solutions to achieve a win-win situation for all parties.

In January 2016, Chinese financial institutions signed a tripartite cooperation framework agreement with Enel, providing the Italian company and its subsidiary - a green energy company - with a financing insurance line of \$1 billion to support them carrying out their projects in Latin America through Chinese equipment or contractors.

By the end of 2018, Chinese companies had raised \$330 million as financing for a series of Brazil-based renewable energy projects of Enel's green energy subsidiary. Some of the power-generating projects have started operation after being connected to the local power grids, bringing sustainable source of clean energy to local Brazilians.

Box 12-7 Not Cold again in Dushanbe's Winter

Tajikistan has abundant hydropower resources but insufficient hydropower generation capacity. It is because, when the rivers are frozen in the dry season, many small hydropower stations can only be temporarily shut down. The Dushanbe No. 2 thermal power plant project undertaken by a Chinese enterprise has met 60% of the electricity demand in Dushanbe, the capital of Tajikistan by providing heating for more than 700,000 local residents in the winter. Since then, days have gone when the local people had to bear the cold and power-deficient winter.

Advanced process standards and environmental protection technology have been adopted in the system design of the project to ensure ultra-clean industrial exhaust emissions. The 200,000-ton hermetic coal storage reduces environmental pollution and the use of plasma ignition technology truly achieves zero fuel consumption.

A large number of professionals have been trained in the No. 2 thermal power plant for the development of Tajikistan's thermal power industry. During the construction and operation of the project, 150 Tajik technicians went to China for training and their skills have improved; 300 Tajik operational staff have, under the guidance of Chinese experts, have mastered professional knowledge and been able to independently operate power plant operation equipment.

III. Stable and Long-term Success in the Joint Construction of the BRI

"Numerous tiny streams converge to make a vast ocean, and countless radiant stars illuminate the Galaxy." Looking forward, the principles of extensive consultation, joint contribution and shared benefits and the concepts of openness, greenness, and integrity will be adhered to in the joint construction of the BRI; and efforts will be made to strive to achieve high standards, improve people's livelihood, and achieve sustainable goals to continue to move forward towards high-quality development.

1. Practical policy consultation.

On the basis of mutual respect and equal treatment, the interests and concerns of all parties shall be fully accommodated, strategic alignment shall be strengthened, complementary advantages shall be deepened, and opportunities and benefits shall be shared amid openness to achieve mutual benefit and win-win results. Policy coordination should be strengthened, cooperation mechanisms should be improved, and more pragmatic cooperation agreements and action plans should be signed, so as to amplify the effect of "one plus one becomes greater than two" in openness cooperation.

2. Promoting infrastructure connectivity

Great efforts should be made to improve global interconnectivity and improve the interconnectivity networks led by economic corridors and framed by mega-corridors and information highways. High-quality, sustainable, risk-resistant, reasonable price-based, inclusive and accessible goals should be integrated into all aspects of infrastructure projects to produce more visible results. The boosting effect of the new land-sea transport should be further improved and efforts should be made to promote the orderly development of the China-Europe freight trains; and the construction of the Digital Silk Road should be accelerated.

3. Improving smoothness of trade

Trade and investment liberalization and facilitation should be promoted, the multilateral trading system should be upheld, a clear-cut stand should be taken in the fight against protectionism, and high-standard free trade zones should be jointly built

with interested countries to promote the construction of an open world economy. The construction of overseas economic and trade cooperation zones and major projects should be promoted, and third-party cooperation should be strengthened to achieve win-win results for multiple parties and expand the convergence of interests.

4. Stable financing

The role of the Asian Infrastructure Investment Bank and the Silk Road Fund should be better utilized, and multilateral and financial institutions from various countries should be guided and encouraged to invest in and provide financing for the joint construction of the BRI. Cooperation between government and social capital should be encouraged and a diversified financing system and a multi-level capital market should be established to form a stable, sustainable, and risk-controllable financial service system. Support should be provided for the construction of the Green Silk Road to jointly protect the earth.

5. Closer people-to-people exchange

Cooperation in the fields of education, science, culture, sports, tourism, and health should be enhanced, and exchanges between political parties, parliaments, think tanks, and media outlets should be strengthened, The way of exchange should be made more innovative, and dialogue channels should be increased to actively build bridges for mutual learning among different civilizations.

"All good principles should adapt to changing times to remain relevant." It is the general trend that interests of all countries are increasingly integrated and their wellbeing is more and more interconnected. It is the common expectation of people of all countries to continue to live a better life. Over time, the joint construction of the "Belt and Road" will further demonstrate strong vitality and creativity, and make greater contributions to the building of an open world economy and a community with a shared future for mankind.

Global Openness Prospect

Mankind goes forward in the long river of history, and civilization develops in the changing times. The prosperity of human civilization is inseparable from openness, tolerance, pursuit of common ground amid differences, and mutual learning. **Openness renders human civilizations meet and collide with each other, absorb the best of others, and regenerate, and thus become the driving force for the regeneration of civilizations.** Openness allows circulation of production factors, information exchanges, free flow of products, and market connectivity, cleaning the blood of economic globalization.

The world today is undergoing major changes that are *unseen in a century*. The novel coronavirus pandemic has accelerated the adjustment and evolution of the world's landscape. The openness consensus of various countries has significantly weakened, unilateralism and protectionism have been on the rise, the momentum of economic globalization has weakened, resistance has been strengthened, and uncertainties and risks have increased.

The world economy is once again facing the major historical question of *where to go*. "Those who recognize the trend are clear-headed people, those who follow the trend are wise people, and those who ride the trend win."

The desire of mankind to pursue peaceful development has not fundamentally changed, the mega-trend of technological innovation and industrial upgrading has not fundamentally changed, and the fact that the in-depth integration of various economies has not fundamentally changed. If the world wants to resolve the current development predicament and reverse the anti-globalization trend, it needs to grasp the future development trend based on the benign *self-fulfilling prophecy*. So that **the international community can have greater openness consensus, greater openness**

momentum, and greater openness sharing.

The openness of the world in the future requires better ideas. Thinking is the precursor of action. A more open and inclusive world needs to go beyond zerosum game, prisoner's dilemma, and extreme thinking, and move towards mutual consultation and sharing, mutual benefit and *golden mean* thinking. Relevant countries should go beyond ideas such as clash of civilizations, civilization center, and inevitable hegemony of a country as a result of its growing prowess, and should instead move towards exchanges, equality, and appreciation of each other's values. They should transcend the law of the jungle, discard the mentality of prioritizing their own interests, and move towards *pursuing success while helping others to succeed*, balance between righteousness and benefits, and priority of humanity.

The openness of the world in the future requires deeper mutual trust. Trust has always been a scarce good in relations between major countries. Lack of leadership and motivation, and lack of trust are the main obstacles that the world faces today. *Without confidence there is no friendship*. By enhancing mutual trust and avoiding the emergence of an *economic iron curtain*, the world economy can break through the *adverse waves* and create a brave new world; if all countries can face their differences and contradictions, and strive to minimize the negative impacts for the common good, our human society will go farther and faster.

The openness of the world in the future requires greater cooperation. Seen from the perspective of *domestic priority*, the world is small and crowded, and there is always *fierce competition*. But seen from the perspective of shared future, the world is large and broad, and there are opportunities for cooperation everywhere. To make the *ship of openness* go steadily and far, it is necessary to make better use of the role of cooperation as a ballast stone, expand the convergence of interests amid competition, and jointly make efforts to meet each other the half way in solving global problems. *Alone, one goes fast; walking in a group, one goes far*. The right direction of development should feature close interaction among people, international exchanges that feature equal dialogue and pursuit of common ground amid differences, and a commonly observed order of mutual consultation, tolerance and mutual benefit.

The openness of the world in the future requires more sharing. Development together is true development, and sustainable development is good development. Given such problems as unfair distribution and wealth disparity, the world must follow

the right path of harmony, symbiosis, and unity when it expands openness. It should transcend barriers through exchanges, transcend conflicts through mutual learning, transcend chasms through win-win outcomes, and share the *pie of interests* in a fair way. So that the light of openness can shine on every corner of the earth to realize the symbiosis, coexistence and development of different regions, different countries and different peoples.

Looking forward, a new era has begun. The global economy will eventually continue to advance while its openness expands. Human civilization will eventually shine brightly amid expanding openness. And the future of the world will eventually embrace new glory as its openness grows.

Appendix

I. World Openness Rankings

The Openness index rankings of the 129 economies are shown in the following table. The changes in the last two columns refer to the 2019 reading relative to that in 2008.

(Sorted by the 2019 rankings)														
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Change in place	in indev
Singapore	1	1	1	1	1	2	2	2	2	2	2	2	+1	2.5
Germany	2	3	3	3	4	4	4	4	4	4	3	3	+1	3.8
Hong Kong, SAR	3	2	2	2	2	3	3	3	3	3	4	4	+1	3.4
Ireland	4	4	4	4	6	5	7	7	8	8	9	11	+7	7.3
United Kingdom	5	6	5	6	9	7	6	6	5	5	5	5	0	2.2
Switzerland	6	5	6	5	8	6	5	5	6	7	7	10	+4	4.1
The Netherlands	7	9	8	8	7	9	8	8	7	10	8	8	+1	1.8
France	8	7	9	9	10	11	10	11	10	11	10	9	+1	1.8
Canada	9	8	11	10	11	10	9	10	9	9	11	7	-2	1.0
Malta	10	10	14	12	12	12	12	12	11	6	6	6	-4	-1.0
Italy	11	11	13	13	13	13	13	13	13	13	14	15	+4	2.6
Belgium	12	12	15	14	15	14	14	15	14	14	17	16	+4	2.1
Israel	13	13	16	16	17	16	15	14	15	15	18	17	+4	2.6
Korea	14	15	17	19	22	19	28	36	41	43	50	51	+37	11.4
Cyprus	15	16	28	32	32	30	51	40	19	18	19	19	+4	2.9

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Openness Index Rankings, 2008-2019 (Sorted by the 2019 rankings)

														Change
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Change in place	in index %
Australia	16	14	12	11	14	17	18	21	22	22	25	25	+9	3.8
Sweden	17	21	21	22	20	18	20	18	17	17	20	22	+5	3.0
Spain	18	17	18	17	19	20	21	22	20	19	22	20	+2	2.7
Czech Republic	19	18	19	20	21	24	24	23	23	24	26	27	+8	4.1
Luxembourg	20	31	7	15	5	8	11	9	27	23	15	41	+21	7.8
Japan	21	28	25	26	16	15	16	16	12	12	12	12	-9	-1.5
United States	22	19	10	7	3	1	1	1	1	1	1	1	-21	-17.8
Austria	23	20	22	24	23	22	19	19	18	20	21	21	-2	2.7
Denmark	24	23	24	23	24	23	23	20	21	21	24	23	-1	3.2
Hungary	25	26	26	21	26	25	26	26	26	27	27	26	+1	3.5
Norway	26	22	20	18	18	21	17	17	16	16	16	13	-13	-0.5
Estonia	27	25	27	28	27	27	22	24	24	28	29	29	+2	4.5
New Zealand	28	24	23	25	25	26	25	25	25	25	13	14	-14	-0.4
Latvia	29	27	29	27	29	28	29	28	30	31	35	36	+7	5.4
Costa Rica	30	29	31	30	33	59	43	43	43	59	57	58	+28	10.6
Lithuania	31	30	30	36	50	47	47	52	45	42	39	37	+6	5.1
Finland	32	32	32	31	31	29	27	27	29	29	28	28	-4	2.7
Portugal	33	34	35	33	34	31	31	31	31	30	30	30	-3	2.9
Uruguay	34	37	39	39	39	36	33	32	35	34	31	31	-3	2.9
Chile	35	33	36	40	37	37	36	33	28	26	23	18	-17	-0.7
Nicaragua	36	36	38	37	36	44	42	41	42	39	40	40	+4	4.7
Macao, SAR	37	40	43	48	47	42	44	50	44	44	46	48	+11	5.9
Panama	38	38	34	35	30	35	37	37	34	36	36	34	-4	2.6
Peru	39	35	37	47	46	53	49	49	51	61	58	60	+21	8.7
China	40	42	41	42	43	43	45	47	53	58	61	62	+22	9.6
Bahrain	41	39	40	38	38	34	30	29	40	38	37	39	-2	4.1
Slovakia	42	41	42	41	40	40	38	39	39	41	41	47	+5	4.8
Poland	43	44	45	44	45	58	57	57	57	54	56	57	+14	7.3
Georgia	44	47	58	58	60	56	58	62	99	99	87	78	+34	11.5
Trinidad and Tobago	45	45	44	29	28	38	35	34	36	40	47	49	+4	5.8
Guatemala	46	43	46	43	41	51	48	51	49	45	45	46	0	4.0
Oman	47	48	47	45	42	45	41	44	47	50	51	52	+5	6.3
Malaysia	48	46	48	46	44	39	55	56	58	55	42	24	-24	-1.2
Greece	49	51	55	55	56	33	32	30	32	33	33	33	-16	0.8
Iceland	50	49	49	62	78	73	73	76	75	79	80	83	+33	11.4
Bulgaria	51	52	33	34	35	32	34	35	33	32	34	35	-16	0.4
Croatia	52	53	56	56	58	54	56	58	59	56	52	53	+1	4.8

	(Contin													
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Change in place	Change in index %
Cambodia	53	50	50	49	48	57	59	60	64	68	76	81	+28	10.4
Mexico	54	54	53	54	55	52	50	48	48	46	43	42	-12	1.5
Slovenia	55	57	57	57	57	55	54	54	50	47	44	38	-17	0.8
Antigua and Barbuda	56	56	54	52	53	50	53	53	52	52	67	71	+15	8.2
Jordan	57	55	52	50	49	41	40	38	38	37	32	32	-25	-1.0
Mauritius	58	58	51	53	52	49	52	45	37	35	38	44	-14	0.6
Salvador	59	59	59	60	59	61	60	59	56	51	48	43	-16	0.2
Kuwait	60	60	61	63	62	62	61	68	69	67	66	72	+12	5.7
Botswana	61	62	63	61	61	60	63	55	55	49	53	59	-2	2.3
Guyana	62	61	62	51	51	48	46	42	46	48	55	55	-7	1.2
Romania	63	63	64	64	65	63	67	67	67	72	72	77	+14	5.5
Russia	64	64	60	59	54	46	39	46	54	57	62	69	+5	4.0
Colombia	65	65	67	69	81	90	98	103	102	102	100	92	+27	8.8
Argentina	66	71	76	80	87	88	89	90	78	78	77	79	+13	4.6
Ecuador	67	66	65	66	64	87	88	86	84	62	54	54	-13	-0.7
Saudi Arabia	68	67	66	65	63	68	65	66	66	65	68	64	-4	1.5
Mongolia	69	70	69	70	70	72	71	70	80	83	86	80	+11	3.7
Zambia	70	69	68	67	67	64	62	61	61	63	63	66	-4	1.7
Dominica	71	68	70	78	75	70	70	65	62	60	73	76	+5	2.5
Paraguay	72	72	74	72	74	76	75	74	71	69	60	61	-11	-0.8
Uganda	73	74	71	75	71	71	72	71	73	74	75	74	+1	1.0
Barbados	74	73	77	71	76	82	81	82	82	88	96	100	+26	9.0
Vietnam	75	75	72	76	80	81	82	84	87	86	88	90	+15	4.5
Indonesia	76	76	82	79	79	79	78	79	85	66	70	67	-9	-0.2
North Macedonia	77	78	75	74	73	77	77	73	77	77	71	73	-4	0.2
Honduras	78	77	81	83	84	91	90	93	91	91	79	56	-22	-4.0
Armenia	79	80	79	81	69	67	68	69	68	70	65	68	-11	-0.7
Philippine	80	79	78	77	77	75	94	92	96	93	85	88	+8	2.6
Albania	81	81	80	82	82	83	80	75	76	87	99	102	+21	7.9
Papua New Guinea	82	82	86	87	68	66	64	64	65	76	82	89	+7	2.3
Thailand	83	83	83	85	85	85	86	87	90	96	93	82	-1	-0.1
India	84	84	87	86	86	86	85	89	89	89	92	94	+10	4.3
Gambia	85	86	84	84	83	80	79	81	83	81	81	86	+1	0.3
Ukraine	86	85	98	98	104	107	106	106	106	108	109	99	+13	5.4
Jamaica	87	87	85	68	66	65	66	63	63	64	59	50	-37	-6.5
Morocco	88	88	88	89	91	92	91	91	92	90	91	93	+5	2.3

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	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Change in place	Change in index %
Kyrgyzstan	89	91	91	91	108	104	104	97	74	73	74	70	-19	-3.5
South Africa	90	89	95	95	94	93	92	94	94	94	89	91	+1	0.3
Turkey	91	93	73	73	72	74	76	77	81	80	83	85	-6	-1.2
Egypt	92	90	89	105	103	103	100	83	60	53	49	45	-47	-9.5
Lebanon	93	92	90	88	89	69	69	72	72	71	64	63	-30	-4.9
Moldova	94	94	94	93	96	98	115	118	119	117	112	107	+13	5.5
Belize	95	95	93	92	92	94	95	95	95	100	105	105	+10	5.2
Kenya	96	97	92	94	90	89	87	88	86	84	84	87	-9	-1.7
Bolivia	97	96	96	90	88	84	83	85	88	85	78	75	-22	-4.3
Lesotho	98	99	102	101	106	105	102	107	104	101	101	106	+8	4.4
Brazil	99	98	97	96	93	78	74	78	79	75	69	65	-34	-6.3
Tunisia	100	101	100	99	95	95	93	96	98	92	97	96	-4	0.5
Samoa	101	103	105	106	105	109	109	109	107	107	106	109	+8	3.9
Laos	102	102	101	100	101	99	103	104	110	113	117	119	+17	5.8
Azerbaijan	103	104	99	97	100	101	101	102	103	112	116	101	-2	1.7
Cape Verde	104	105	120	129	128	128	127	128	128	127	127	126	+23	11.7
Zimbabwe	105	108	104	103	98	114	117	99	93	97	115	117	+12	4.9
Bosnia and Herzegovina	106	100	103	102	99	97	84	80	70	82	90	84	-22	-5.3
Mozambique	107	106	108	107	111	106	105	105	114	114	110	114	+7	3.3
Sudan	108	109	109	122	122	121	124	125	127	128	129	125	+17	9.6
Kazakhstan	109	111	107	110	113	112	111	113	113	116	111	112	+3	3.0
Fiji	110	107	106	104	102	100	96	100	101	103	103	103	-7	0.5
Bangladesh	111	110	110	108	107	108	107	108	105	105	104	104	-7	1.0
Nigeria	112	112	111	109	109	102	99	101	100	98	98	98	-14	-0.5
Namibia	113	113	114	113	112	113	112	114	115	109	114	118	+5	3.6
Belarus	114	114	113	114	120	123	116	116	117	118	118	115	+1	2.8
Algeria	115	115	112	111	110	110	108	110	108	104	102	108	-7	0.7
Madagascar	116	116	115	116	97	96	97	112	111	111	95	97	-19	-2.0
Mali	117	118	117	112	115	116	113	117	118	115	113	113	-4	1.1
Ghana	118	119	124	121	119	120	121	120	112	110	108	111	-7	0.6
Pakistan	119	117	116	115	114	111	110	111	109	106	107	110	-9	0.6
Sri Lanka	120	120	118	117	116	117	119	98	97	95	94	95	-25	-4.3
Republic of Congo	121	121	119	119	118	122	122	122	121	121	119	120	-1	1.9
Malawi	122	122	121	120	121	119	120	126	125	125	124	123	+1	2.3
Ethiopia	123	123	123	123	123	118	118	119	120	120	121	122	-1	1.1
Tanzania	124	124	122	118	117	115	114	115	116	119	120	116	-8	-1.1
Cote d'Ivoire	125	125	126	125	125	125	123	121	122	122	122	121	-4	0.3

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009			
Nepal	126	126	125	124	124	124	128	123	123	123	123	129	+3	84.7
Burundi	127	127	127	126	126	126	126	124	124	124	125	124	-3	0.9
Gabon	128	128	128	127	127	127	126	127	126	126	126	127	-1	2.8
Central African Republic	129	129	129	129	129	129	129	129	129	129	128	128	-1	0.7

Note: Those in bold black type refer to G20 members. Unless otherwise specified, the following shall be the same.

II. World Openness Index

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World Openness Index, 2008-2019

(Sorted by 2019 reading)

		2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	
	World	0.7480	0.7462	0.7492	0.7494	0.7591	0.7655	0.7658	0.7621	0.7692	0.7711	0.7712	0.7790	
1	Singapore	0.8646	0.8630	0.8536	0.8501	0.8557	0.8587	0.8571	0.8546	0.8499	0.8411	0.8357	0.8438	
2	Germany	0.8552	0.8508	0.8394	0.8352	0.8350	0.8365	0.8350	0.8259	0.8297	0.8251	0.8236	0.8243	
3	Hong Kong, SAR	0.8503	0.8580	0.8467	0.8471	0.8494	0.8579	0.8542	0.8486	0.8475	0.8392	0.8212	0.8221	
4	Ireland	0.8371	0.8249	0.8266	0.8276	0.8272	0.8196	0.8054	0.7978	0.7946	0.7879	0.7842	0.7802	
5	United Kingdom	0.8171	0.8080	0.8147	0.8026	0.8054	0.8036	0.8055	0.8063	0.8036	0.8035	0.7997	0.7998	
6	Switzerland	0.8133	0.8173	0.8100	0.8111	0.8071	0.8047	0.8078	0.8084	0.8021	0.7909	0.7845	0.7814	
7	Netherlands	0.7997	0.7865	0.7916	0.7939	0.8072	0.7920	0.8000	0.7870	0.7947	0.7801	0.7844	0.7856	
8	France	0.7986	0.7985	0.7904	0.7877	0.7862	0.7872	0.7864	0.7837	0.7833	0.7797	0.7806	0.7848	
9	Canada	0.7953	0.7867	0.7878	0.7848	0.7846	0.7896	0.7888	0.7864	0.7876	0.7806	0.7791	0.7874	
10	Malta	0.7838	0.7809	0.7748	0.7751	0.7731	0.7849	0.7738	0.7745	0.7797	0.7951	0.7915	0.7921	
11	Italy	0.7814	0.7805	0.7754	0.7725	0.7729	0.7734	0.7728	0.7674	0.7716	0.7687	0.7651	0.7618	
12	Belgium	0.7777	0.7765	0.7706	0.7711	0.7679	0.7701	0.7704	0.7652	0.7701	0.7612	0.7571	0.7618	
13	Israel	0.7772	0.7746	0.7672	0.7654	0.7646	0.7662	0.7654	0.7653	0.7667	0.7595	0.7567	0.7575	
14	Korea	0.7718	0.7695	0.7630	0.7577	0.7549	0.7572	0.7406	0.7279	0.7220	0.7080	0.6973	0.6928	
15	Cyprus	0.7696	0.7681	0.7527	0.7418	0.7420	0.7399	0.7065	0.7216	0.7544	0.7488	0.7517	0.7481	
16	Australia	0.7681	0.7722	0.7855	0.7761	0.7685	0.7643	0.7567	0.7500	0.7491	0.7432	0.7410	0.7397	
17	Sweden	0.7674	0.7643	0.7583	0.7571	0.7565	0.7580	0.7550	0.7513	0.7557	0.7492	0.7482	0.7453	
18	Spain	0.7669	0.7668	0.7611	0.7585	0.7577	0.7569	0.7546	0.7494	0.7534	0.7478	0.7453	0.7466	
19	Czech Republic	0.7668	0.7661	0.7591	0.7575	0.7562	0.7543	0.7501	0.7491	0.7485	0.7410	0.7357	0.7367	

e00													(00)	ntinued)
14 15 16 0.753 0.753 0.7647 0.7648 0.7643 0.7710 0.7780 0.7732 12 1611000 0.7666 0.7660 0.7630 0.7890 0.8607 0.8607 0.8628 0.8785 0.9084 0.9145 0.7353 0.7354 0.735			2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
12 Wited States 0.7666 0.7683 0.7984 0.8379 0.8607 0.8681 0.8628 0.8875 0.9084 0.9145 0.9328 23 Austia 0.7644 0.7644 0.7582 0.7564 0.7564 0.7564 0.7564 0.7564 0.7564 0.7564 0.7564 0.7564 0.7574 0.7574 0.7564 0.7564 0.7574 0.7574 0.7574 0.7574 0.7574 0.7574 0.7574 0.7574 0.7574 0.7574 0.7581 0.7581 0.7574 0.7574 0.7581 0.7581 0.7574 0.7574 0.7581 0.7581 0.7574 0.7574 0.7581 0.7581 0.7581 0.7581 0.7581 0.7581 0.7581 0.7581 0.7581 0.758 0.7581	20	Luxembourg	0.7667	0.7503	0.7925	0.7675	0.8289	0.8013	0.7856	0.7868	0.7427	0.7411	0.7603	0.7115
21 States 0.7666 0.7094 0.7989 0.8307 0.8607 0.8667 0.8675 0.8875 0.988 0.9145 0.9328 23 Austia 0.7664 0.7644 0.7582 0.7581 0.7581 0.7581 0.7581 0.7541 0.7441 0.7441 0.7424 0.7424 24 Denmak 0.7622 0.7537 0.7571 0.7540 0.7581 0.7581 0.7541 0.7540 0.7541 0.7540 0.7541 0.7540 0.7541 0.7540 0.7541 0.7540 0.7541 0.7540 0.7541 0.7540 0.7541 0.7561 0.7541 0.7561 0.754<	21	Japan	0.7666	0.7593	0.7554	0.7533	0.7647	0.7677	0.7643	0.7631	0.7750	0.7713	0.7689	0.7782
12 12<	22		0.7666	0.7653	0.7904	0.7985	0.8370	0.8607	0.8681	0.8628	0.8875	0.9084	0.9145	0.9328
14.14.16.763216.753716.753716.753016.753116.754116.743016.745116.745	23	Austria	0.7664	0.7644	0.7582	0.7561	0.7548	0.7561	0.7552	0.7505	0.7545	0.7464	0.7453	0.7459
Norway 0.7632 0.7635 0.7582 0.7587 0.7581 0.7564 0.7587 0.7584 0.7597 0.7312 0.7309 0.7312 0.7312 0.7312 0.7312 0.7329 New 0.7610 0.7595 0.7493 0.7502 0.7410 0.7427 0.7390 0.7375 0.7384 0.7217 0.7121	24	Denmark	0.7662	0.7634	0.7563	0.7566	0.7547	0.7546	0.7536	0.7501	0.7511	0.7447	0.7426	0.7424
Image 0.7628 0.7628 0.7528 0.7499 0.7487 0.7546 0.7472 0.7400 0.7310 0.7312 Rew Zealand 0.7622 0.7624 0.7536 0.7538 0.7537 0.7518 0.7484 0.7470 0.7444 0.7381 0.7624 0.7639 0.7535 0.7384 0.7384 0.7384 0.7287 0.7184 0.7287 0.7184 0.7287 0.7384 0.7287 0.7284 0.7287 0.7284 0.7287 0.7217 0.7124 0.7217 0.7134 0.7384 0.7287 0.7217 0.7124 0.7231 0.7235 0.7384 0.7287 0.7217 0.7124 0.7231 0.7234 0.7384 0.7281 0.7217 0.7134 0.7231 0.7217 0.7134 0.7231 0.7217 0.7131 0.7121 0.7121 0.7121 0.7121 0.7121 0.7121 0.7121 0.7121 0.7131 0.7131 0.7131 0.7131 0.7131 0.7131 0.7131 0.7131 <th0.733< th=""> <th0.733< th=""> 0.7331</th0.733<></th0.733<>	25	Hungary	0.7632	0.7597	0.7537	0.7574	0.7530	0.7521	0.7479	0.7443	0.7457	0.7366	0.7323	0.7374
new caland0.76220.76240.75680.75380.75370.75180.74840.74700.74640.73810.76840.766412Latvia0.76100.75950.74930.75020.74400.74270.73900.73750.73840.72870.72170.721030Costa Rica0.75950.75890.74850.74430.74930.71720.71310.7050.7180.72820.68520.686331Lithuania0.75580.75800.74400.74200.71430.7090.71710.71160.71340.73230.73140.73510.73510.7320.73140.73930.73140.73510.73530.73530.73530.73530.73510.73530.73510.73510.73510.73510.73530.73510.73530.7351 <td>26</td> <td>Norway</td> <td>0.7632</td> <td>0.7635</td> <td>0.7585</td> <td>0.7582</td> <td>0.7579</td> <td>0.7567</td> <td>0.7581</td> <td>0.7564</td> <td>0.7597</td> <td>0.7547</td> <td>0.7600</td> <td>0.7666</td>	26	Norway	0.7632	0.7635	0.7585	0.7582	0.7579	0.7567	0.7581	0.7564	0.7597	0.7547	0.7600	0.7666
28 Zealand 0.7622 0.7624 0.7538 0.7538 0.7538 0.7548 0.7484 0.7470 0.7464 0.7381 0.7684 0.7484 0.7484 0.7400 0.7384 0.7381 0.7384 0.7381 0.7384 0.7381 0.7384 0.7381 0.7384 0.7381 0.7384 0.7381 0.7331 0.7331 0.7321 0.7311 0.7312 0.7321 0.7313 0.7321 0.7313 0.7321 0.7313 0.7321 0.7313 0.7321 0.7313 0.7311 0.7311 0.7311 <td>27</td> <td>Estonia</td> <td>0.7628</td> <td>0.7621</td> <td>0.7528</td> <td>0.7498</td> <td>0.7499</td> <td>0.7487</td> <td>0.7546</td> <td>0.7472</td> <td>0.7472</td> <td>0.7360</td> <td>0.7312</td> <td>0.7296</td>	27	Estonia	0.7628	0.7621	0.7528	0.7498	0.7499	0.7487	0.7546	0.7472	0.7472	0.7360	0.7312	0.7296
30costa Rica0.75950.75890.74880.74430.74130.69630.72170.71670.71860.68620.68620.68820.686331Lithuania0.75680.75880.74750.73830.72200.71720.71310.70950.71110.71160.71340.720232Finland0.75230.75010.74420.74210.74220.74330.73390.73200.74110.74200.732333Portugal0.74950.74850.74110.74000.73220.73230.73200.73200.73200.74260.72960.72520.727434Urguay0.74850.74900.74500.73500.73500.73500.73200.73200.73110.73200.73110.73110.73200.74130.72900.72500.72530.735335Chile0.74850.74900.74500.73500.73500.73200.73200.73100.73200.74100.74500.72530.735336Nicaragu0.74590.74500.73200.73200.73200.71200.71200.71100.71200.71200.71600.71600.71600.71700.72000.72500.72530.735337Macao SAR0.74590.74500.73200.72400.72500.72600.72600.72600.72600.72600.72600.72600.72600.72600.72600.72600.72600.72600	28		0.7622	0.7624	0.7568	0.7538	0.7537	0.7518	0.7484	0.7470	0.7464	0.7381	0.7684	0.7656
31Lithuania0.75680.75680.74750.73830.72200.71720.71310.70950.71710.71160.71320.73220.732332Finland0.75230.7500.74420.74410.74210.74230.74340.73980.74100.73050.73020.73130.73120.73120.73130.73120.73120.73130.73120.73130.73120.73130.73120.73130.73130.73130.73130.73130.73130.73120.73130	29	Latvia	0.7610	0.7595	0.7493	0.7502	0.7440	0.7427	0.7390	0.7375	0.7384	0.7287	0.7217	0.7220
32 Finland 0.7523 0.7501 0.7442 0.7441 0.7427 0.7434 0.7398 0.7401 0.7350 0.7322 0.7320 0.7350 0.7322 0.7367 0.7360 0.7326 0.7326 0.7360 0.7326 0.7367 0.7360 0.7326 0.7367 0.7360 0.7320 0.7310 0.7360 0.7320 0.7310 <td>30</td> <td>Costa Rica</td> <td>0.7595</td> <td>0.7589</td> <td>0.7458</td> <td>0.7445</td> <td>0.7413</td> <td>0.6963</td> <td>0.7217</td> <td>0.7167</td> <td>0.7186</td> <td>0.6862</td> <td>0.6852</td> <td>0.6868</td>	30	Costa Rica	0.7595	0.7589	0.7458	0.7445	0.7413	0.6963	0.7217	0.7167	0.7186	0.6862	0.6852	0.6868
33Portugal0.74950.74850.74110.74000.73820.73830.73730.73250.73670.72960.72850.728634Uruguay0.74880.74840.73650.73580.73550.73510.73450.73200.73200.73010.72060.72850.724235Chile0.74850.74910.74040.73510.73500.73250.73100.73000.73000.73000.73000.73000.73100.71010.71010.71020.71130.71280.71390.71280.71390.71280.71390.71280.71390.7130.	31	Lithuania	0.7568	0.7568	0.7475	0.7383	0.7220	0.7172	0.7131	0.7095	0.7171	0.7116	0.7134	0.7202
Marca Orass Orass <th< td=""><td>32</td><td>Finland</td><td>0.7523</td><td>0.7501</td><td>0.7442</td><td>0.7441</td><td>0.7421</td><td>0.7427</td><td>0.7434</td><td>0.7398</td><td>0.7401</td><td>0.7350</td><td>0.7322</td><td>0.7321</td></th<>	32	Finland	0.7523	0.7501	0.7442	0.7441	0.7421	0.7427	0.7434	0.7398	0.7401	0.7350	0.7322	0.7321
35Chile0.74850.74910.74040.73510.73590.73420.73070.73200.74130.73710.74030.735336Nicaragua0.74590.74550.73800.73770.73650.72250.72180.71900.72160.71630.71280.712837Macao, SAR0.74560.74280.73220.72430.72500.72150.71920.71020.71800.70780.70420.703838Panama0.74270.74400.73170.73890.72500.72110.71220.71410.73800.71620.72740.72730.73130.72030.71960.723339Peru0.74200.73200.73490.72990.72680.72480.71880.71070.70880.68830.67470.686441Bahrain0.74170.73100.73490.72980.72550.73680.73880.73470.72300.72660.71920.72480.72180.72180.71280.71280.72180.71070.68420.68290.686341Bahrain0.74170.7430.73490.73280.72550.69650.69730.69410.69570.69660.61870.69490.61870.64280.616742Slovakia0.73530.73450.71310.71070.69870.69710.69770.62490.61870.64280.667644Georgia0.73570.73870.72460.	33	Portugal	0.7495	0.7485	0.7411	0.7400	0.7382	0.7383	0.7373	0.7325	0.7367	0.7296	0.7285	0.7286
36Nicaragua0.74590.74550.73800.73770.73650.72250.72180.71990.72160.71630.71280.712837Macao, SAR0.74560.74280.73220.72330.72500.72510.71920.71020.71800.71800.70780.703838Panama0.74270.74400.74170.73890.72500.72510.71250.71040.70100.72800.72300.72300.72330.73130.72300.7	34	Uruguay	0.7488	0.7454	0.7365	0.7358	0.7355	0.7351	0.7345	0.7325	0.7308	0.7246	0.7252	0.7274
Macao, SAR 0.7456 0.7428 0.7322 0.7243 0.7250 0.7251 0.7192 0.7102 0.7180 0.7078 0.7042 0.7038 38 Panama 0.7427 0.7440 0.7417 0.7389 0.7250 0.7362 0.7274 0.7233 0.7313 0.7230 0.7313 0.7230 0.7313 0.7230 0.7313 0.7230 0.7313 0.7230 0.7313 0.7230 0.7231 0.7230 0.7231 0.7230 0.7231 0.7230 0.7230 0.7230 0.7230 0.7230 0.7230 0.7230 0.6842 0.6829 0.6826 40 China 0.7420 0.7392 0.7299 0.7268 0.7368 0.7380 0.7310 0.712 0.7230 0.7230 0.6843 0.6747 0.6768 41 Bahrain 0.7413 0.7397 0.7328 0.7315 0.7268 0.7328 0.7313 0.712 0.7230 0.7230 0.7230 0.7230 0.726 0.7160 0.7113 0.7128 <td>35</td> <td>Chile</td> <td>0.7485</td> <td>0.7491</td> <td>0.7404</td> <td>0.7351</td> <td>0.7359</td> <td>0.7342</td> <td>0.7307</td> <td>0.7320</td> <td>0.7413</td> <td>0.7371</td> <td>0.7450</td> <td>0.7535</td>	35	Chile	0.7485	0.7491	0.7404	0.7351	0.7359	0.7342	0.7307	0.7320	0.7413	0.7371	0.7450	0.7535
37 SAR 0.7456 0.7428 0.7428 0.7250 0.7251 0.7192 0.7102 0.7102 0.7108 0.7078 0.7088 0.7184 0.7107 0.7088 0.7184 0.7131 0.7078 0.7088 0.7188 0.7117 0.7018 0.7078 0.6842 0.6842 0.6842 0.6842 0.6842 0.6842 0.6842 0.6843 0.6717 0.7238 0.7313 0.7313 0.7328 0.7315 0.7348 0.7345 0.7343 0.7313 0.7312 0.7315 0.7328 0.7313 0.7314 0.7313 0.7313 0.7313 0.7313 0.7313 0.7313 0.7313	36	Nicaragua	0.7459	0.7455	0.7380	0.7377	0.7365	0.7225	0.7218	0.7199	0.7216	0.7163	0.7128	0.7122
39Peru0.74230.74560.73940.72500.72510.71130.71250.71040.70700.68420.68290.682640China0.74200.73200.73920.73990.72990.72680.71880.71880.71070.70280.68830.67470.676841Bahrain0.74170.74310.73640.73760.73560.73560.73680.73890.73890.73280.72280.73890.72280.72300.72280.71310.71280.713142Slovakia0.74130.73770.73280.73150.72880.72660.69730.69410.69570.69060.68530.687643Poland0.73730.73750.73280.71310.71070.69870.69730.69410.69570.69060.68560.687644Georgia0.73730.73750.73120.71310.71070.69870.69730.69110.69570.61010.64280.661645Trinidad and Tobagi0.73730.73750.73120.71270.69870.61710.67170.71280.71280.71550.616146Guatemala0.73560.73390.72940.72970.72720.71290.71270.71200.71300.71190.70770.70600.707347Oman0.73560.73300.72770.72610.72800.69950.69440.69470.69060.1240.7422	37	· · ·	0.7456	0.7428	0.7322	0.7243	0.7250	0.7251	0.7192	0.7102	0.7180	0.7078	0.7042	0.7038
40China0.74200.73920.73920.73990.72990.72680.72480.71880.71070.70280.68830.67470.676841Bahrain0.74170.74310.73640.73760.73560.73680.73890.73470.72300.72260.71200.712342Slovakia0.74130.73770.73280.73150.72660.72660.72460.72380.72380.71510.71280.701743Poland0.73730.73760.72980.72520.69650.69730.69410.69570.69690.69570.69690.69570.69690.69730.72880.71550.70280.69690.696940Guatemala0.73570.73890.72940.72690.71290.71290.71200.71200.71510.70790.70200.707947Guatemala0.73560.73690.72990.72790.72700.72200.72310.71000.71190.70790.70200.712348Malaysia0.73660.73600.72790.72600.72890.69950.69440.69970.69690.69670.69670.69670.6967 <td< td=""><td>38</td><td>Panama</td><td>0.7427</td><td>0.7440</td><td>0.7417</td><td>0.7389</td><td>0.7426</td><td>0.7362</td><td>0.7274</td><td>0.7273</td><td>0.7313</td><td>0.7230</td><td>0.7196</td><td>0.7237</td></td<>	38	Panama	0.7427	0.7440	0.7417	0.7389	0.7426	0.7362	0.7274	0.7273	0.7313	0.7230	0.7196	0.7237
41 Bahrain 0.7417 0.7431 0.7364 0.7376 0.7356 0.7368 0.7389 0.7347 0.7230 0.7226 0.7169 0.7123 42 Slovakia 0.7413 0.7397 0.7328 0.7315 0.7368 0.7366 0.7228 0.7230 0.7226 0.7169 0.7123 43 Poland 0.7380 0.7376 0.7298 0.7282 0.7255 0.6965 0.6973 0.6941 0.6957 0.6906 0.6856 0.6876 44 Georgia 0.7373 0.7345 0.7131 0.7107 0.6987 0.6971 0.6977 0.6249 0.6187 0.6428 0.6610 45 Trinidad and Tobago 0.7368 0.7375 0.7312 0.7441 0.7307 0.7315 0.7151 0.6187 0.6428 0.6617 46 Guatemala 0.7357 0.7387 0.7272 0.7129 0.7127 0.7100 0.7119 0.7077 0.7060 0.7274 47 Oman <td< td=""><td>39</td><td>Peru</td><td>0.7423</td><td>0.7456</td><td>0.7394</td><td>0.7250</td><td>0.7251</td><td>0.7113</td><td>0.7125</td><td>0.7104</td><td>0.7070</td><td>0.6842</td><td>0.6829</td><td>0.6826</td></td<>	39	Peru	0.7423	0.7456	0.7394	0.7250	0.7251	0.7113	0.7125	0.7104	0.7070	0.6842	0.6829	0.6826
42 Slovakia 0.7413 0.7397 0.7328 0.7315 0.7288 0.7266 0.7246 0.7288 0.7238 0.711 0.7128 0.7011 43 Poland 0.7380 0.7376 0.7298 0.7285 0.6965 0.6973 0.6941 0.6957 0.6906 0.6984 0.6917 0.6917 0.6906 0.6187 0.6918 0.6187 0.6187 0.6187 0.6187 0.6964 0.6971 0.6797 0.6249 0.6187 0.6943 0.6187 0.6943 0.6101 44 Georgia 0.7373 0.7345 0.7131 0.7107 0.6987 0.6971 0.6797 0.6249 0.6187 0.6428 0.6610 45 Trinidad and Tobago 0.7368 0.7375 0.7312 0.7469 0.7411 0.7307 0.7315 0.7157 0.7157 0.7024 0.6944 46 Guatemala 0.7356 0.7300 0.7279 0.7272 0.7129 0.7120 0.7116 0.7119 0.7077 0.696	40	China	0.7420	0.7392	0.7349	0.7299	0.7268	0.7248	0.7188	0.7107	0.7028	0.6883	0.6747	0.6768
43 Poland 0.7380 0.7376 0.7298 0.7282 0.7255 0.6965 0.6973 0.6941 0.6957 0.6906 0.6886 0.6876 44 Georgia 0.7373 0.7345 0.7131 0.7107 0.6987 0.6984 0.6971 0.6797 0.6249 0.6187 0.6428 0.6610 45 Trinidad and Tobago 0.7368 0.7375 0.7312 0.7469 0.7441 0.7307 0.7310 0.7110 0.6797 0.6249 0.6187 0.6964 46 Guatemala 0.7357 0.7387 0.7214 0.7262 0.7127 0.7127 0.7100 0.7119 0.7077 0.7060 0.7073 47 Oman 0.7356 0.7330 0.7294 0.7277 0.7262 0.7231 0.7156 0.7151 0.6989 0.6957 0.6923 48 Malaysia 0.7336 0.7361 0.7275 0.7163 0.7124 0.7232 0.7351 0.6944 0.6947 0.6906 0.7124	41	Bahrain	0.7417	0.7431	0.7364	0.7376	0.7356	0.7368	0.7389	0.7347	0.7230	0.7226	0.7169	0.7123
44 Georgia 0.7373 0.7345 0.7131 0.7107 0.6987 0.6984 0.6971 0.6797 0.6249 0.6187 0.6428 0.6610 45 Trinidad and Tobago 0.7368 0.7375 0.7312 0.7469 0.7441 0.7307 0.7310 0.7315 0.7285 0.7155 0.7024 0.6964 46 Guatemala 0.7357 0.7387 0.7294 0.7284 0.7272 0.7129 0.7127 0.7100 0.7119 0.7077 0.7060 0.7073 47 Oman 0.7356 0.7330 0.7294 0.7277 0.7224 0.7231 0.7156 0.7151 0.6989 0.6997 0.6944 48 Malaysia 0.7336 0.7277 0.7261 0.7289 0.6995 0.6944 0.6947 0.6906 0.7124 0.7423 49 Greece 0.7300 0.7275 0.7163 0.7197 0.7375 0.7351 0.7328 0.7328 0.7249 0.7249 0.7234 0.7244	42	Slovakia	0.7413	0.7397	0.7328	0.7315	0.7288	0.7266	0.7246	0.7228	0.7238	0.7151	0.7128	0.7071
45 Trinidad and Tobago 0.7368 0.7375 0.7312 0.7469 0.7441 0.7307 0.7310 0.7315 0.7285 0.7155 0.7024 0.6964 46 Guatemala 0.7357 0.7387 0.7294 0.7284 0.7272 0.7129 0.7100 0.7119 0.7077 0.7060 0.7073 47 Oman 0.7356 0.7361 0.7294 0.7277 0.7224 0.7127 0.7100 0.7119 0.7077 0.6963 48 Malaysia 0.7336 0.7361 0.7277 0.7260 0.7289 0.6995 0.6944 0.6947 0.6906 0.7124 0.7244 0.7325 0.7144 0.7424 0.7283 0.6944 0.6947 0.6906 0.6917 0.6923 48 Malaysia 0.7330 0.7277 0.7261 0.7260 0.7289 0.6995 0.6944 0.6947 0.6906 0.7124 0.7423 49 Greece 0.7300 0.7275 0.7163 0.7116 0.7377	43	Poland	0.7380	0.7376	0.7298	0.7282	0.7255	0.6965	0.6973	0.6941	0.6957	0.6906	0.6856	0.6876
45 and Tobago0.73680.73750.73120.74690.74410.73070.73100.73150.72850.71550.70240.696446Guatemala0.73570.73870.72940.72840.72720.71290.71270.71000.71190.70770.70600.707347Oman0.73560.73300.72940.72770.72720.72240.72310.71560.71510.69890.69570.692348Malaysia0.73360.73610.72770.72610.72600.72890.69950.69440.69470.69060.71240.742249Greece0.73000.72750.71630.71990.71160.73720.73510.73280.73280.72490.72340.723450Iceland0.72960.73200.72410.69530.66140.66500.66750.66220.66710.65670.65400.654751Bulgaria0.72610.72520.74330.73970.73750.73790.73330.73010.73210.72520.72190.7232	44	Georgia	0.7373	0.7345	0.7131	0.7107	0.6987	0.6984	0.6971	0.6797	0.6249	0.6187	0.6428	0.6610
47 Oman 0.7356 0.7330 0.7294 0.7277 0.7272 0.7224 0.7231 0.7156 0.7151 0.6989 0.6957 0.6923 48 Malaysia 0.7336 0.7361 0.7277 0.7261 0.7289 0.6995 0.6944 0.6947 0.6906 0.7124 0.7422 49 Greece 0.7300 0.7275 0.7163 0.7160 0.7151 0.6949 0.6947 0.6906 0.7124 0.7422 49 Greece 0.7300 0.7275 0.7163 0.7116 0.7372 0.7351 0.7328 0.7328 0.7249 0.7234 0.7423 50 Iceland 0.7296 0.7320 0.7241 0.6953 0.6614 0.6650 0.6675 0.6622 0.6671 0.6567 0.6547 51 Bulgaria 0.7261 0.7252 0.7433 0.7397 0.7379 0.7333 0.7301 0.7321 0.7252 0.7219 0.7232	45		0.7368	0.7375	0.7312	0.7469	0.7441	0.7307	0.7310	0.7315	0.7285	0.7155	0.7024	0.6964
48 Malaysia 0.7336 0.7361 0.7277 0.7261 0.7260 0.7289 0.6995 0.6944 0.6947 0.6906 0.7124 0.7422 49 Greece 0.7300 0.7275 0.7163 0.7139 0.7116 0.7372 0.7351 0.7328 0.7328 0.7249 0.7243 0.7243 50 Iceland 0.7261 0.7252 0.6614 0.6650 0.6675 0.6622 0.6671 0.6567 0.6540 0.6540 0.6547 51 Bulgaria 0.7261 0.7252 0.7397 0.7375 0.7379 0.7333 0.7301 0.7252 0.7219 0.7232	46	Guatemala	0.7357	0.7387	0.7294	0.7284	0.7272	0.7129	0.7127	0.7100	0.7119	0.7077	0.7060	0.7073
49 Greece 0.7300 0.7275 0.7163 0.7139 0.7116 0.7372 0.7351 0.7328 0.7328 0.7249 0.7243 0.7243 50 Iceland 0.7296 0.7320 0.7241 0.6953 0.6614 0.6650 0.6675 0.6622 0.6671 0.6567 0.6540 0.6547 51 Bulgaria 0.7261 0.7252 0.7433 0.7397 0.7379 0.7333 0.7301 0.7321 0.7252 0.7219 0.7232	47	Oman	0.7356	0.7330	0.7294	0.7277	0.7272	0.7224	0.7231	0.7156	0.7151	0.6989	0.6957	0.6923
50 Iceland 0.7296 0.7320 0.7241 0.6953 0.6614 0.6650 0.6675 0.6622 0.6671 0.6567 <td>48</td> <td>Malaysia</td> <td>0.7336</td> <td>0.7361</td> <td>0.7277</td> <td>0.7261</td> <td>0.7260</td> <td>0.7289</td> <td>0.6995</td> <td>0.6944</td> <td>0.6947</td> <td>0.6906</td> <td>0.7124</td> <td>0.7422</td>	48	Malaysia	0.7336	0.7361	0.7277	0.7261	0.7260	0.7289	0.6995	0.6944	0.6947	0.6906	0.7124	0.7422
51 Bulgaria 0.7261 0.7252 0.7433 0.7397 0.7375 0.7379 0.7333 0.7301 0.7321 0.7252 0.7219 0.7232	49	Greece	0.7300	0.7275	0.7163	0.7139	0.7116	0.7372	0.7351	0.7328	0.7328	0.7249	0.7234	0.7243
	50	Iceland	0.7296	0.7320	0.7241	0.6953	0.6614	0.6650	0.6675	0.6622	0.6671	0.6567	0.6540	0.6547
52 Croatia 0.7257 0.7246 0.7150 0.7118 0.7081 0.7057 0.6991 0.6940 0.6942 0.6903 0.6922 0.6923	51	Bulgaria	0.7261	0.7252	0.7433	0.7397	0.7375	0.7379	0.7333	0.7301	0.7321	0.7252	0.7219	0.7232
	52	Croatia	0.7257	0.7246	0.7150	0.7118	0.7081	0.7057	0.6991	0.6940	0.6942	0.6903	0.6922	0.6923

		2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
53	Cambodia	0.7248	0.7280	0.7223	0.7236	0.7242	0.6981	0.6934	0.6888	0.6813	0.6742	0.6598	0.6563
54	Mexico	0.7222	0.7242	0.7192	0.7161	0.7123	0.7128	0.7117	0.7106	0.7130	0.7075	0.7103	0.7114
55	Slovenia	0.7219	0.7211	0.7131	0.7115	0.7090	0.7057	0.7023	0.6997	0.7083	0.7070	0.7095	0.7162
56	Antigua and Barbuda	0.7204	0.7212	0.7177	0.7191	0.7172	0.7150	0.7030	0.7021	0.7058	0.6937	0.6714	0.6659
57	Jordan	0.7197	0.7217	0.7197	0.7234	0.7221	0.7260	0.7238	0.7235	0.7249	0.7228	0.7234	0.7273
58	Mauritius	0.7137	0.7141	0.7216	0.7161	0.7177	0.7153	0.7041	0.7117	0.7276	0.7232	0.7136	0.7092
59	Salvador	0.7119	0.7137	0.7045	0.7023	0.7007	0.6856	0.6854	0.6900	0.6958	0.6967	0.7017	0.7101
60	Kuwait	0.7039	0.7050	0.6974	0.6943	0.6892	0.6853	0.6828	0.6742	0.6738	0.6758	0.6718	0.6658
61	Botswana	0.7012	0.7029	0.6888	0.6981	0.6944	0.6932	0.6808	0.6949	0.7003	0.7010	0.6905	0.6853
62	Guyana	0.7000	0.7030	0.6941	0.7224	0.7195	0.7160	0.7169	0.7169	0.7157	0.7036	0.6858	0.6915
63	Romania	0.6980	0.6959	0.6878	0.6859	0.6827	0.6815	0.6769	0.6743	0.6766	0.6713	0.6647	0.6614
64	Russia	0.6947	0.6953	0.7016	0.7069	0.7153	0.7223	0.7241	0.7113	0.7004	0.6898	0.6735	0.6678
65	Colombia	0.6940	0.6946	0.6790	0.6732	0.6574	0.6392	0.6227	0.6189	0.6153	0.6127	0.6109	0.6379
66	Argentina	0.6880	0.6787	0.6643	0.6590	0.6432	0.6442	0.6424	0.6382	0.6650	0.6599	0.6582	0.6578
67	Ecuador	0.6873	0.6891	0.6852	0.6821	0.6838	0.6444	0.6445	0.6489	0.6545	0.6820	0.6860	0.6920
68	Saudi Arabia	0.6818	0.6827	0.6811	0.6823	0.6843	0.6728	0.6797	0.6766	0.6767	0.6773	0.6704	0.6715
69	Mongolia	0.6813	0.6797	0.6705	0.6706	0.6680	0.6693	0.6717	0.6724	0.6615	0.6501	0.6462	0.6573
70	Zambia	0.6798	0.6799	0.6750	0.6775	0.6735	0.6806	0.6820	0.6852	0.6850	0.6805	0.6728	0.6687
71	Dominica	0.6796	0.6810	0.6693	0.6599	0.6631	0.6714	0.6720	0.6774	0.6843	0.6861	0.6644	0.6631
72	Paraguay	0.6746	0.6736	0.6658	0.6652	0.6641	0.6637	0.6650	0.6637	0.6719	0.6739	0.6759	0.6800
73	Uganda	0.6719	0.6714	0.6661	0.6638	0.6664	0.6711	0.6692	0.6695	0.6688	0.6661	0.6618	0.6650
74	Barbados	0.6708	0.6731	0.6643	0.6658	0.6624	0.6544	0.6540	0.6559	0.6567	0.6414	0.6230	0.6153
75	Vietnam	0.6704	0.6700	0.6659	0.6616	0.6583	0.6560	0.6530	0.6511	0.6483	0.6457	0.6392	0.6414
76	Indonesia	0.6668	0.6696	0.6571	0.6592	0.6587	0.6614	0.6586	0.6585	0.6523	0.6765	0.6673	0.6681
77	North Macedonia	0.6666	0.6669	0.6646	0.6638	0.6652	0.6637	0.6607	0.6644	0.6657	0.6631	0.6657	0.6653
78	Honduras	0.6634	0.6672	0.6584	0.6560	0.6544	0.6382	0.6361	0.6344	0.6366	0.6304	0.6551	0.6913
79	Armenia	0.6631	0.6637	0.6614	0.6573	0.6707	0.6734	0.6746	0.6728	0.6755	0.6731	0.6720	0.6681
80	Philippine	0.6630	0.6645	0.6631	0.6611	0.6621	0.6642	0.6322	0.6357	0.6286	0.6286	0.6464	0.6461
81	Albania	0.6624	0.6630	0.6595	0.6564	0.6553	0.6533	0.6542	0.6632	0.6667	0.6432	0.6150	0.6140
× /	Papua New Guinea	0.6583	0.6607	0.6453	0.6449	0.6727	0.6756	0.6806	0.6776	0.6784	0.6633	0.6529	0.6437
83	Thailand	0.6546	0.6565	0.6524	0.6499	0.6491	0.6508	0.6463	0.6486	0.6401	0.6247	0.6295	0.6552
84	India	0.6524	0.6537	0.6450	0.6452	0.6476	0.6499	0.6507	0.6435	0.6429	0.6370	0.6308	0.6256
85	Gambia	0.6518	0.6523	0.6515	0.6511	0.6548	0.6577	0.6543	0.6564	0.6555	0.6546	0.6530	0.6497
86	Ukraine	0.6491	0.6528	0.6287	0.6269	0.6180	0.6159	0.6139	0.6144	0.6110	0.6068	0.6014	0.6156

20192018201720162017201620172017201720102009200987Jamaca0.64330.64330.64530.67530.67900.67920.67220.67220.68280.68130.63120.633388Marocco0.64300.64300.63860.63200.61200.61740.61660.62330.63180.63230.63130.6320.63130.6320.63130.6320.63230.63130.63230.63130.63230.63230.63130.63230.63230.63130.63230.63230.63130.63230.63230.63130.63230.63230.63130.63230.63230.63230.63130.63230.63230.64140.64330.64230.64130.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.64140.64330.6414													` 	itinued)
88Morecco0.64470.64700.64490.63400.63200.63320.66400.66600.66600.66160.66320.66340.65340.66380.65360.65360.65360.65360.65360.65360.65360.65360.6724 </th <th></th> <th></th> <th>2019</th> <th>2018</th> <th>2017</th> <th>2016</th> <th>2015</th> <th>2014</th> <th>2013</th> <th>2012</th> <th>2011</th> <th>2010</th> <th>2009</th> <th>2008</th>			2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
8 Yrgyz 0.6430 0.6439 0.6389 0.6322 0.6172 0.6166 0.6623 0.6684 0.6670 0.6660 90 Nuth Arrica 0.6422 0.6435 0.6337 0.6339 0.6339 0.6333 0.6328 0.6319 0.6380 0.6420 0.6580 0.6560 0.6520 0.6590 0.6560 0.6520 0.6590 0.6510 0.6520 0.6590 0.6510 0.6720 0.6713 0.6724	87	Jamaica	0.6483	0.6493	0.6506	0.6755	0.6790	0.6791	0.6792	0.6782	0.6828	0.6801	0.6812	0.6936
South Arrica 0.6422 0.6458 0.6337 0.6329 0.6318 0.6339 0.6333 0.6323 0.6319 0.6280 0.6420 I Turkey 0.6420 0.6410 0.6458 0.6646 0.6688 0.6640 0.6528 0.6596 0.6596 0.6524 0.6591 0.6524 0.6724	88	Morocco	0.6471	0.6470	0.6445	0.6414	0.6375	0.6348	0.6335	0.6374	0.6336	0.6323	0.6340	0.6325
91 Africa 0.6422 0.6438 0.6337 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6338 0.6439 0.6438 0.6438 0.6448 0.6448 0.6448 0.6448 0.6418 0.6430 0.6520 0.6520 0.6542 0.6584 0.6938 0.6473 0.6738 0.6731 0.6731 0.6584 0.6618 0.673 0.6643 0.6631 0.6432 0.6381 0.6337 0.633 0.6367 0.6210 0.6221 0.6181 0.6232 0.6737 0.6638 0.6631 0.633	89	Kyrgyz	0.6430	0.6439	0.6386	0.6392	0.6122	0.6174	0.6166	0.6243	0.6684	0.6670	0.6640	0.6662
92 Egyr 0.6410 0.6441 0.6149 0.6180 0.6202 0.6824 0.6884 0.6918 0.6923 0.7084 94 Molova 0.6402 0.638 0.6417 0.613 0.6723 0.6684 0.6713 0.6724 0.624 0.6	90		0.6422	0.6458	0.6337	0.6329	0.6318	0.6339	0.6333	0.6323	0.6319	0.6280	0.6356	0.6401
93 Lehano 0.6400 0.6422 0.6389 0.6411 0.6473 0.6723 0.6684 0.6713 0.6724 0.6729 94 Moldova 0.6385 0.6433 0.6337 0.6363 0.6267 0.6202 0.6013 0.5997 0.5982 0.5990 0.6011 95 Belize 0.6382 0.6331 0.6361 0.6369 0.6311 0.6222 0.6292 0.6292 0.6190 0.6042 0.6041 96 Kenya 0.6352 0.6361 0.6363 0.6418 0.6252 0.6161 0.619 0.6143 0.6415 0.6141 0.6424 0.6441 0.6441 97 Balivia 0.6323 0.6371 0.6281 0.6321 0.6481 0.632 0.6416 0.6123 0.6142 0.6441 0.6433 0.6424 0.6246 0.6249 0.6276 0.6311 0.6329 0.6560 0.6171 0.6183 0.6121 0.6253 0.6614 0.6123 0.6241 0.6242 0.6231 <th0< th=""><th>91</th><th>Turkey</th><th>0.6420</th><th>0.6415</th><th>0.6658</th><th>0.6646</th><th>0.6658</th><th>0.6649</th><th>0.6628</th><th>0.6606</th><th>0.6596</th><th>0.6561</th><th>0.6525</th><th>0.6498</th></th0<>	91	Turkey	0.6420	0.6415	0.6658	0.6646	0.6658	0.6649	0.6628	0.6606	0.6596	0.6561	0.6525	0.6498
Moldova 0.6385 0.6403 0.6337 0.6363 0.6267 0.6202 0.6013 0.5977 0.5982 0.5990 0.6017 95 Belize 0.6385 0.6332 0.6364 0.6369 0.6377 0.6412 0.6402 0.6292 0.6292 0.6190 0.6494 0.6404 0.6407 96 Kenya 0.6355 0.6361 0.6336 0.6386 0.6412 0.6452 0.6416 0.6490 0.6490 0.6491 0.6463 97 Belivia 0.6328 0.6310 0.6336 0.6330 0.6218 0.6427 0.6452 0.6640 0.6477 0.6485 0.6694 0.6233 0.6614 0.6233 0.6216 0.6223 0.611 0.6329 0.6264 0.6223 0.6116 0.6099 0.6606 0.6604 0.623 0.621 0.6221 0.621 0.6221 0.621 0.6221 0.621 0.6221 0.621 0.6223 0.6117 0.613 0.613 0.613 0.613 0.612 <	92	Egypt	0.6410	0.6448	0.6441	0.6179	0.6189	0.6201	0.6202	0.6542	0.6854	0.6918	0.6993	0.7084
95 Belize 0.6382 0.6340 0.6360 0.6371 0.6322 0.6292 0.6190 0.6149 0.6404	93	Lebanon	0.6400	0.6422	0.6389	0.6417	0.6413	0.6723	0.6723	0.6684	0.6713	0.6724	0.6724	0.6729
6 kenya 0.6358 0.6352 0.6364 0.6364 0.6386 0.6427 0.6452 0.6461 0.6490 0.6494 0.6491 0.64642 97 Bolivia 0.6353 0.6364 0.6329 0.6348 0.6329 0.6418 0.6152 0.6131 0.6493 0.6193 0.6130 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193	94	Moldova	0.6385	0.6403	0.6337	0.6363	0.6267	0.6260	0.6022	0.6013	0.5997	0.5982	0.5990	0.6051
97 Bolivia 0.6355 0.6361 0.6336 0.6398 0.6418 0.6526 0.6513 0.6495 0.6477 0.6485 0.6564 0.6664 98 Lesotho 0.6329 0.6344 0.620 0.6128 0.6123 0.6123 0.6123 0.6123 0.6123 0.6120 0.6164 99 Brazil 0.6284 0.633 0.6325 0.6348 0.6325 0.6348 0.6604 0.6604 0.6635 0.6659 0.6604 0.6235 0.6121 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6221 0.6231 0.6121 0.6221 0.6231 0.6121 0.6221 0.6231 0.6231 0.6231 0.6231 0.6231 0.6231 0.6231 0.6121 0.6231 0.6121 0.6231 0.6121 0.6123 0.6121 0.6123 0.6141 0.6123 0.6133 0.6133 0.613	95	Belize	0.6382	0.6394	0.6361	0.6369	0.6367	0.6311	0.6292	0.6292	0.6292	0.6169	0.6042	0.6070
98 lesotho 0.6329 0.6344 0.6220 0.6148 0.6165 0.6176 0.6139 0.6123 0.6169 0.6095 0.6096 99 Brazil 0.6234 0.6348 0.6303 0.6325 0.6348 0.6632 0.6664 0.6635 0.6659 0.6680 0.6704 100 Tunisia 0.6238 0.6231 0.6217 0.6236 0.6235 0.6311 0.6329 0.6266 0.6211 0.6286 0.6221 0.6226 0.6212 0.6264 0.6221 0.6224 0.6224 0.6224 0.6214 0.6226 0.6175 0.6183 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6193 0.6121 0.6211 0.6221 0.6214 0.6223 0.6215 0.6213 0.6233 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.6133 0.	96	Kenya	0.6358	0.6352	0.6364	0.6361	0.6386	0.6427	0.6452	0.6461	0.6490	0.6494	0.6491	0.6465
99 Brazil 0.6284 0.6348 0.6325 0.6348 0.6632 0.6660 0.6664 0.6635 0.6669 0.6680 0.6673 0.6680 0.6714 100 Tunisia 0.6283 0.6271 0.6267 0.623 0.625 0.611 0.6329 0.6266 0.6271 0.6286 0.6221 0.6214 101 Samoa 0.6264 0.6263 0.6170 0.6152 0.615 0.6193 0.6105 0.6021 0.5297 0.5909 103 Azerbaijan 0.6214 0.6229 0.5269 0.5509 0.5577 0.5568 0.559 0.559 0.5564 104 Cape Verde 0.6214 0.6203 0.6182 0.6236 0.6271 0.558 0.559 0.5579	97	Bolivia	0.6355	0.6361	0.6336	0.6398	0.6418	0.6526	0.6513	0.6495	0.6477	0.6485	0.6564	0.6642
100 Tunisia 0.6283 0.6271 0.6267 0.6283 0.6285 0.6311 0.6329 0.6266 0.6271 0.6286 0.6221 0.6263 101 Samoa 0.6288 0.6253 0.6176 0.6172 0.6152 0.6115 0.6099 0.6066 0.6098 0.6073 0.6042 0.6021 102 Laos 0.6246 0.6249 0.626 0.6290 0.6263 0.6175 0.6185 0.6055 0.6211 0.5393 0.6142 104 Cape Verd 0.6214 0.6203 0.6186 0.6237 0.558 0.559 0.559 0.5564 105 Zimbabw 0.6140 0.6203 0.618 0.6231 0.6233 0.6333 0.6233 0.6333 0.6243 0.5939 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 0.5559 <	98	Lesotho	0.6329	0.6344	0.6220	0.6200	0.6148	0.6165	0.6176	0.6139	0.6123	0.6160	0.6095	0.6064
101 Samoa 0.6258 0.6253 0.6176 0.6172 0.6152 0.6115 0.6099 0.6086 0.6098 0.6093 0.6042 0.6042 0.6024 102 Laos 0.6246 0.6246 0.6228 0.6213 0.6215 0.6175 0.6185 0.6098 0.6012 0.5099 0.5097 103 Azerbaijan 0.6245 0.6239 0.6235 0.6295 0.5599 0.5569 0.5585 0.5599 0.5599 0.5564 104 Cape Verde 0.6214 0.6203 0.6186 0.6263 0.6039 0.5981 0.6233 0.6333 0.6243 0.5943 0.5943 105 Zimbabwe 0.6170 0.6218 0.6184 0.6183 0.6263 0.6039 0.5981 0.6233 0.6333 0.6243 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943 0.5943	99	Brazil	0.6284	0.6348	0.6303	0.6325	0.6348	0.6632	0.6660	0.6604	0.6635	0.6659	0.6680	0.6704
102Laos0.62460.62640.62280.62130.62160.62250.61750.61850.60650.60210.59270.5907103Azerbaijan0.62450.62490.62760.62900.62360.62150.61930.61930.61270.60210.60930.6123104Cape Verde0.62150.62250.58990.55690.55770.55680.55850.55990.55790.55690.5579105Zimbabwe0.62140.60230.61850.61850.60390.59810.62330.63330.62430.59430.5933106Bosnia and Herzegovina0.61800.61280.61440.61630.61000.61610.61540.61470.60350.60510.60530.60510.60530.60550.59440.5755107Mozambique0.61660.61680.61340.58560.58310.58560.58010.57220.65330.60550.59440.5625108Sudan0.61660.61680.61340.58560.58310.58560.58010.57220.56340.55550.57440.5626109Kazakhstan0.61600.61630.61440.61630.61880.61240.60530.60390.60330.60380.60380.60390.60380.60380.60390.60380.60380.60420.60400.6172110Bangladesh0.61290.61480.61630.61480.61630.6046	100	Tunisia	0.6283	0.6271	0.6267	0.6238	0.6285	0.6311	0.6329	0.6266	0.6271	0.6286	0.6221	0.6252
103 Azerbaijan 0.6245 0.6249 0.6276 0.6290 0.6236 0.6215 0.6193 0.6193 0.6127 0.6021 0.5939 0.5164 104 Cape Verde 0.6214 0.6203 0.5589 0.5560 0.5570 0.5568 0.5588 0.5593 <td>101</td> <td>Samoa</td> <td>0.6258</td> <td>0.6253</td> <td>0.6176</td> <td>0.6172</td> <td>0.6152</td> <td>0.6115</td> <td>0.6099</td> <td>0.6086</td> <td>0.6098</td> <td>0.6073</td> <td>0.6042</td> <td>0.6024</td>	101	Samoa	0.6258	0.6253	0.6176	0.6172	0.6152	0.6115	0.6099	0.6086	0.6098	0.6073	0.6042	0.6024
104 Cape Verde 0.6215 0.6225 0.5899 0.5569 0.5560 0.5577 0.5568 0.5585 0.5599 0.5579	102	Laos	0.6246	0.6264	0.6228	0.6213	0.6216	0.6225	0.6175	0.6185	0.6065	0.6021	0.5927	0.5907
105Zimbabwe0.62140.62030.61850.61860.62630.60390.59810.62330.63330.62430.59430.5933106Bosnia and Herzegovina0.61800.62930.62190.61940.62360.62710.65090.65830.67270.65170.63550.63550.6525107Mozambique0.61700.62180.61440.61630.61000.61610.61540.61470.60350.60050.59940.5975108Sudan0.61660.61780.61340.58560.58310.58560.58010.57220.56340.55550.54740.5629109Kazakhstan0.61630.61590.61440.61090.60540.60680.60510.60530.60380.59890.59940.5982110Fiji0.61600.62130.61440.61090.60540.60680.60510.60530.60380.51280.59740.5629110Fiji0.61600.62130.61440.61090.60180.61280.62180.62420.62300.61880.61220.60380.61230.60380.59940.5989111Bangladesh0.61550.61670.61180.61120.61160.60260.60250.61980.60250.60420.62000.6172112Nigeria0.61290.61480.60760.60430.58890.59990.60270.60130.60420.60910.6033	103	Azerbaijan	0.6245	0.6249	0.6276	0.6290	0.6236	0.6215	0.6193	0.6193	0.6127	0.6021	0.5939	0.6142
Bosnia and Herzegovina 0.6180 0.6293 0.6219 0.6194 0.6236 0.6271 0.6509 0.6583 0.6727 0.6517 0.6355 0.6525 107 Mozambique 0.6170 0.6218 0.6144 0.6103 0.6100 0.6161 0.6147 0.6047 0.6005 0.5994 0.5975 108 Sudan 0.6163 0.6168 0.6144 0.5856 0.5831 0.5525 0.5634 0.5555 0.5474 0.5629 109 Kazakhsta 0.6163 0.6149 0.6149 0.6054 0.6068 0.6051 0.6053 0.6038 0.5989 0.5994 0.5982 110 Fiji 0.6160 0.6113 0.6149 0.6183 0.6198 0.6212 0.6030 0.6198 0.6124 0.6091 0.6126 111 Bangladesh 0.6155 0.6167 0.6118 0.6112 0.6116 0.6205 0.6198 0.6204 0.6220 0.6081 0.6097 112 Nagria 0.6144<	104	Cape Verde	0.6215	0.6225	0.5899	0.5569	0.5560	0.5577	0.5568	0.5585	0.5599	0.5579	0.5559	0.5564
106Herzegovina0.61800.62930.62190.61940.62360.62710.65090.65830.67270.65170.63550.6525107Mozambique0.61700.62180.61440.61630.61000.61610.61540.61470.60350.60050.59940.5975108Sudan0.61660.61680.61340.58560.58310.58560.58010.57220.56340.55550.54740.5629109Kazakhstan0.61630.61590.61440.61090.60540.60680.60510.60530.60380.59890.59940.5982110Fiji0.61600.62130.61440.61090.60540.60680.60510.60330.60380.59890.59940.5982111Bangladesh0.61550.61670.61280.61130.61880.62120.60380.61220.60980.6071112Nigeria0.61440.61500.61180.61120.61160.62060.62050.61980.62200.62020.62020.62020.62020.62020.62020.60420.5917113Namibia0.61290.61170.60670.60410.610670.60330.60270.60130.59440.59190.5932114Belarus0.60950.61170.60750.60790.61070.61080.60270.60330.60400.60220.62370.6184115Algeria0.6058 <td>105</td> <td>Zimbabwe</td> <td>0.6214</td> <td>0.6203</td> <td>0.6185</td> <td>0.6186</td> <td>0.6263</td> <td>0.6039</td> <td>0.5981</td> <td>0.6233</td> <td>0.6333</td> <td>0.6243</td> <td>0.5943</td> <td>0.5923</td>	105	Zimbabwe	0.6214	0.6203	0.6185	0.6186	0.6263	0.6039	0.5981	0.6233	0.6333	0.6243	0.5943	0.5923
108 Sudan 0.6166 0.6168 0.6134 0.5856 0.5831 0.5856 0.5801 0.5722 0.5634 0.5555 0.5474 0.5629 109 Kazakhstan 0.6163 0.6159 0.6144 0.6109 0.6054 0.6068 0.6051 0.6053 0.6038 0.5989 0.5994 0.5982 110 Fiji 0.6160 0.6213 0.6149 0.6183 0.6198 0.6212 0.6230 0.6198 0.6124 0.6091 0.6126 111 Bangladesh 0.6155 0.6167 0.6128 0.6112 0.6118 0.6139 0.6113 0.6088 0.6122 0.6098 0.6091 112 Nigeria 0.6144 0.6105 0.6118 0.6112 0.6116 0.6026 0.6039 0.6033 0.6024 0.6202 0.6020 0.6123 0.6124 0.6198 0.6123 0.6091 0.6172 113 Namibia 0.6129 0.6118 0.6047 0.6043 0.6033 0.6027	106		0.6180	0.6293	0.6219	0.6194	0.6236	0.6271	0.6509	0.6583	0.6727	0.6517	0.6355	0.6525
100Kazakhstan0.61630.61630.61590.61440.61090.60540.60680.60510.60530.60380.59890.59940.5982110Fiji0.61600.62130.61490.61830.61980.62180.62420.62300.61980.61240.60910.6126111Bangladesh0.61550.61670.61280.61150.61380.61390.61130.60880.61220.60980.60810.6097112Nigeria0.61440.61500.61180.61120.61160.62060.62050.61980.62040.62200.62000.6172113Namibia0.61290.61480.60650.60460.60610.60070.60330.60250.60420.59450.5917114Belarus0.60950.61170.60670.60430.58480.58390.59990.60270.60130.59640.59190.5932115Algeria0.60740.60750.60790.61070.61060.60940.61050.60830.60940.61190.60220.60270.6033116Madagascar0.60580.60170.58290.58790.58730.58580.58470.58980.60520.60320.60220.60320.60230.60950.60120.60980.5981117Ghana0.60450.60400.60320.60320.60370.60380.60130.59970.59930.59600.5981 <t< td=""><td>107</td><td>Mozambique</td><td>0.6170</td><td>0.6218</td><td>0.6144</td><td>0.6163</td><td>0.6100</td><td>0.6161</td><td>0.6154</td><td>0.6147</td><td>0.6035</td><td>0.6005</td><td>0.5994</td><td>0.5975</td></t<>	107	Mozambique	0.6170	0.6218	0.6144	0.6163	0.6100	0.6161	0.6154	0.6147	0.6035	0.6005	0.5994	0.5975
110 Fiji 0.6160 0.6213 0.6149 0.6183 0.6198 0.6218 0.6220 0.6230 0.6198 0.6124 0.6030 0.6124 0.6091 0.6126 111 Bangladesh 0.6155 0.6167 0.6128 0.6115 0.6138 0.6139 0.6113 0.6088 0.6122 0.6098 0.6091 0.61097 112 Nigeria 0.6144 0.6150 0.6118 0.6112 0.6116 0.6206 0.6205 0.6198 0.6202 0.6200 0.6122 0.6098 0.6200 0.6172 113 Namibia 0.6129 0.6148 0.6065 0.6041 0.6067 0.6033 0.6027 0.6013 0.5944 0.5919 0.5932 114 Belarus 0.6074 0.6075 0.6079 0.6107 0.6106 0.6094 0.6105 0.6033 0.6043 0.5949 0.5932 115 Algeria 0.6074 0.6075 0.6079 0.6107 0.6106 0.6297 0.6230	108	Sudan	0.6166	0.6168	0.6134	0.5856	0.5831	0.5856	0.5801	0.5722	0.5634	0.5555	0.5474	0.5629
111 Bangladesh 0.6155 0.6167 0.6128 0.6115 0.6138 0.6139 0.6113 0.6088 0.6122 0.6098 0.6098 0.6097 112 Nigeria 0.6144 0.6150 0.6118 0.6112 0.6116 0.6206 0.6205 0.6198 0.6204 0.6220 0.6200 0.6172 113 Namibia 0.6129 0.6148 0.6065 0.6046 0.6061 0.6067 0.6039 0.6033 0.6025 0.6042 0.5945 0.5917 114 Belarus 0.6075 0.6117 0.6067 0.6043 0.5848 0.5839 0.5999 0.6027 0.6013 0.5944 0.5919 0.5932 115 Algeria 0.6074 0.6075 0.6079 0.6107 0.6106 0.6094 0.6105 0.6083 0.6094 0.6119 0.6019 0.6033 116 Madagascar 0.6058 0.6056 0.6051 0.6028 0.6277 0.6230 0.6052 0.6032 0.6043	109	Kazakhstan	0.6163	0.6159	0.6144	0.6109	0.6054	0.6068	0.6051	0.6053	0.6038	0.5989	0.5994	0.5982
112 Nigeria 0.6144 0.6150 0.6118 0.6112 0.6116 0.6206 0.6205 0.6198 0.6204 0.6220 0.6220 0.6120 0.6172 113 Namibia 0.6129 0.6148 0.6065 0.6046 0.6061 0.6067 0.6039 0.6033 0.6025 0.6042 0.5945 0.5917 114 Belarus 0.6095 0.6117 0.6067 0.6043 0.5839 0.5999 0.6027 0.6013 0.5946 0.5919 115 Algeria 0.6074 0.6075 0.6079 0.6107 0.6106 0.6094 0.6105 0.6023 0.6043 0.6023 0.6023 0.6013 0.5919 0.5932 116 Madagascar 0.6074 0.6075 0.6079 0.6107 0.6264 0.6297 0.6230 0.6060 0.6022 0.6237 0.6184 117 Ghana 0.6045 0.6017 0.5829 0.5879 0.5873 0.5878 0.5874 0.5898 0.6052	110	Fiji	0.6160	0.6213	0.6149	0.6183	0.6198	0.6218	0.6242	0.6230	0.6198	0.6124	0.6091	0.6126
113 Namibia 0.6129 0.6148 0.6065 0.6046 0.6061 0.6067 0.6039 0.6033 0.6025 0.6042 0.5945 0.5917 114 Belarus 0.6095 0.6117 0.6067 0.6043 0.5848 0.5839 0.5999 0.6027 0.6013 0.5964 0.5919 0.5932 115 Algeria 0.6074 0.6075 0.6079 0.6107 0.6106 0.6094 0.6105 0.6083 0.6094 0.6119 0.6091 0.6033 116 Madagascar 0.6058 0.6056 0.6051 0.6028 0.6297 0.6230 0.6058 0.6022 0.6237 0.6184 117 Ghana 0.6045 0.6017 0.5829 0.5879 0.5873 0.5858 0.5847 0.5898 0.6052 0.6032 0.6021 0.6008 118 Mali 0.6045 0.6040 0.6012 0.6032 0.6040 0.6073 0.6067 0.6076 0.6076 0.6039 0.5981	111	Bangladesh	0.6155	0.6167	0.6128	0.6115	0.6138	0.6139	0.6113	0.6088	0.6122	0.6098	0.6081	0.6097
114 Belarus 0.6095 0.6117 0.6067 0.6043 0.5848 0.5839 0.5999 0.6027 0.6013 0.5964 0.5919 0.5932 115 Algeria 0.6074 0.6075 0.6079 0.6107 0.6106 0.6094 0.6105 0.6083 0.6094 0.6119 0.6091 0.6033 116 Madagascar 0.6058 0.6056 0.6051 0.6028 0.6264 0.6297 0.6230 0.6058 0.6060 0.6022 0.6237 0.6184 117 Ghana 0.6045 0.6017 0.5829 0.5879 0.5873 0.5858 0.5847 0.5898 0.6052 0.6032 0.6021 0.6008 118 Mali 0.6045 0.6040 0.6012 0.6032 0.6040 0.6072 0.6033 0.5997 0.5993 0.5993 0.5993 0.5993 0.5993 0.5993 0.5993 0.6040 0.6092 0.6040 0.6032 0.6043 0.6073 0.6073 0.6067 0.6076	112	Nigeria	0.6144	0.6150	0.6118	0.6112	0.6116	0.6206	0.6205	0.6198	0.6204	0.6220	0.6200	0.6172
115 Algeria 0.6074 0.6075 0.6079 0.6107 0.6106 0.6094 0.6105 0.6083 0.6094 0.6119 0.6094 0.6093 116 Madagascar 0.6058 0.6056 0.6051 0.6028 0.6264 0.6297 0.6230 0.6058 0.6060 0.6022 0.6237 0.6184 117 Ghana 0.6045 0.6017 0.5829 0.5879 0.5873 0.5858 0.5847 0.5898 0.6052 0.6032 0.6021 0.6008 118 Mali 0.6045 0.6012 0.6048 0.6032 0.6077 0.6033 0.6073 0.5997 0.5993 0.5908 0.5997 0.5993 0.5908 0.5907 0.5909 0.5908 0.6094 0.6094 0.6093 0.6094 0.6094 0.6093 0.6097 0.6062 0.6073 0.6067 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 0.6076 </td <td>113</td> <td>Namibia</td> <td>0.6129</td> <td>0.6148</td> <td>0.6065</td> <td>0.6046</td> <td>0.6061</td> <td>0.6067</td> <td>0.6039</td> <td>0.6033</td> <td>0.6025</td> <td>0.6042</td> <td>0.5945</td> <td>0.5917</td>	113	Namibia	0.6129	0.6148	0.6065	0.6046	0.6061	0.6067	0.6039	0.6033	0.6025	0.6042	0.5945	0.5917
116 Madagascar 0.6058 0.6056 0.6051 0.6028 0.6244 0.6297 0.6230 0.6058 0.6060 0.6022 0.6237 0.6184 117 Ghana 0.6045 0.6017 0.5829 0.5879 0.5873 0.5858 0.5847 0.5898 0.6052 0.6032 0.6021 0.6008 118 Mali 0.6045 0.6040 0.6012 0.6048 0.6032 0.6037 0.6038 0.6013 0.5997 0.5993 0.5981 119 Pakistan 0.6042 0.6052 0.6040 0.6032 0.6040 0.6070 0.6062 0.6073 0.6067 0.6076<	114	Belarus	0.6095	0.6117	0.6067	0.6043	0.5848	0.5839	0.5999	0.6027	0.6013	0.5964	0.5919	0.5932
117 Ghana 0.6045 0.6017 0.5829 0.5879 0.5873 0.5858 0.5847 0.5898 0.6052 0.6032 0.6021 0.6008 118 Mali 0.6045 0.6040 0.6012 0.6048 0.6032 0.6037 0.6038 0.6013 0.5997 0.5993 0.5960 0.5981 119 Pakistan 0.6042 0.6052 0.6040 0.6032 0.6040 0.6070 0.6062 0.6073 0.6067 0.6076 0.6039 0.6009	115	Algeria	0.6074	0.6075	0.6079	0.6107	0.6106	0.6094	0.6105	0.6083	0.6094	0.6119	0.6091	0.6033
118 Mali 0.6045 0.6040 0.6012 0.6048 0.6032 0.6037 0.6038 0.6013 0.5997 0.5993 0.5960 0.5981 119 Pakistan 0.6042 0.6052 0.6040 0.6032 0.6040 0.6070 0.6062 0.6073 0.6067 0.6076	116	Madagascar	0.6058	0.6056	0.6051	0.6028	0.6264	0.6297	0.6230	0.6058	0.6060	0.6022	0.6237	0.6184
119 Pakistan 0.6042 0.6052 0.6040 0.6032 0.6040 0.6070 0.6062 0.6073 0.6067 0.6076 0.6039 0.6009	117	Ghana	0.6045	0.6017	0.5829	0.5879	0.5873	0.5858	0.5847	0.5898	0.6052	0.6032	0.6021	0.6008
	118	Mali	0.6045	0.6040	0.6012	0.6048	0.6032	0.6037	0.6038	0.6013	0.5997	0.5993	0.5960	0.5981
120 Sri Lanka 0.5983 0.5980 0.5988 0.5997 0.6007 0.5967 0.5933 0.6241 0.6275 0.6258 0.6238 0.6254	119	Pakistan	0.6042	0.6052	0.6040	0.6032	0.6040	0.6070	0.6062	0.6073	0.6067	0.6076	0.6039	0.6009
	120	Sri Lanka	0.5983	0.5980	0.5988	0.5997	0.6007	0.5967	0.5933	0.6241	0.6275	0.6258	0.6238	0.6254

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		2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008		
121	Republic of Congo)	0.5961	0.5947	0.5960	0.5933	0.5944	0.5854	0.5827	0.5815	0.5850	0.5884	0.5918	0.5848		
122	Malawi	0.5909	0.5917	0.5898	0.5890	0.5848	0.5892	0.5885	0.5676	0.5668	0.5666	0.5646	0.5777		
123	Ethiopia	0.5885	0.5894	0.5851	0.5848	0.5821	0.5917	0.5946	0.5904	0.5921	0.5907	0.5850	0.5822		
124	Tanzania	0.5867	0.5869	0.5857	0.5987	0.5965	0.6038	0.6029	0.6031	0.6016	0.5942	0.5914	0.5930		
125	Cote d'Ivoire	0.5843	0.5828	0.5735	0.5754	0.5749	0.5793	0.5804	0.5819	0.5797	0.5817	0.5812	0.5823		
126	Nepal	0.5785	0.5813	0.5784	0.5793	0.5789	0.5810	0.5661	0.5755	0.5721	0.5743	0.5739	0.3132		
127	Burundi	0.5723	0.5720	0.5710	0.5697	0.5690	0.5716	0.5729	0.5728	0.5699	0.5686	0.5640	0.5671		
128	Gabon	0.5709	0.5705	0.5676	0.5679	0.5679	0.5676	0.5692	0.5659	0.5641	0.5617	0.5602	0.5555		
129	Central African Republic	0.5508	0.5500	0.5488	0.5513	0.5491	0.5504	0.5519	0.5489	0.5494	0.5518	0.5495	0.5470		

(Continued)

III. Theoretical Models of One Economy Opening-up to the Outside World

Based on the summary of various frontier mainstream cross-border trade models by Costinot & Rodríguez-Clare (2014) ⁽¹⁾, p_{ij} as price of the product of economy *i* in economy *j* can be expressed as:

$$p_{ij} = \tau_{ij} c_i^p \times \left(\left(\frac{E_j}{c_{ij}^x} \right)^{\frac{\delta}{1-\sigma}} \frac{\tau_{ij} c_i^p}{P_j} \right)^\eta \times \left(\frac{R_i}{c_i^e} \right)^{\frac{\delta}{1-\sigma}} \times \zeta_{ij}$$

In the equation, τ_{ij} is the bilateral variable trade cost of economy *i* and *j*. c_i^p , c_{ij}^x , and c_i^e represent impact of input prices on production costs, export costs, and market entry costs, respectively. E_j is the total expenditure of economy *j* and R_i is the total income of economy i. P_j is the price index of *j*, that is, $P_j = (\sum_{\omega} p_j(\omega)^{1-\sigma} d\omega)^{1/(1-\sigma)}$, with σ being the substitution elasticity of the CES utility function. δ takes different values in accordance with the setting of the market structure as follows. It takes 1 when the market structure is monopolistic competition, and 0 when the market structure is fully competitive. η represents the degree of product difference, and 0 is taken when there is no business heterogeneity. ζ_{ij} is a function of structural parameters that do not include variable trade

① Costinot. A. & Rodríguez-Clare, A. (2014). Trade theory with numbers: Quantifying the consequences of globalization. *Handbook of international economics*, Elsevier, 4, 197-261.

costs. In this model, $\zeta_{ij} = (\frac{\tilde{\sigma}}{\eta\sigma})^{1/(1-\sigma)} (\frac{\sigma f_{ij}}{\tilde{\sigma}})^{\eta/(\sigma-1)} (f_i^e)^{1/(\sigma-1)} = \zeta_{ij}(f_{ij}, f_i^e)$, where $\tilde{\sigma} = (\frac{\sigma}{\sigma-1})^{1-\sigma}$, and f_{ij} is the fixed cost of economy *i* entering economy *j*, while f_i^e is the entry cost of economy *i*. Therefore, $\zeta_{ij}(f_{ij}, f_i^e)$ is and increasing function of f_{ij} and f_i^e .

Some variables in the above model are not directly related to cross-border openness, such as the economy's total expenditure E_j , total income R_i , or price index P_j . Although they are important, they are not the focus of this report. Here we focus on variables directly related to cross-border openness. In order to measure cross-border openness in multiple fields, this report makes the following assumptions based on these variables.

1. Trade openness

The fallouts of trade policies, such as tariff rates and non-tariff measures, can be reflected in the bilateral trade cost τ_{ij} . Trade openness not only includes the opening-up of final products, but also the opening-up of intermediate products; the latter affects cross-border trade, but they also obviously promote the economic development of trading partners. For this reason, this article assumes that production includes trade in intermediate goods, and all output can become end-use goods and intermediate inputs. The end-use products and intermediate inputs of an economy can be domestic products or overseas products, and the trade cost of overseas products is unified as t. Studies, such as Costinot & Rodríguez-Clare (2014) and Caliendo & Parro (2015)^①, can serve as a reference and the production cost $c_{i,s}^p$ of industry *s* can be expressed in the form of Cobb-Douglas function:

$$c_{i,s}^{p} = Y_{i}^{1-\alpha_{is}} \prod_{k=1}^{S} P_{i,k}^{\alpha_{iks}} = Y_{i}^{1-\alpha_{is}} \prod_{D} P_{i,k}^{\alpha_{iks}} \prod_{F} (t_{i}P_{ik})^{\alpha_{iks}} = c_{i,s}^{p}(t_{ij})$$

In the equation, Y_i is the total income of economy I. a_{is} and a_{iks} are the parameters of the production function, satisfying $\alpha_{is} = \sum_{k=1}^{S} \alpha_{iks}$. t_i is the variable trade cost of intermediate product imports, and P_{ik} is price index of industry k. The intermediate goods input can be divided into domestic part and foreign part, belonging to Set D and Set F, respectively. Therefore, $c_{i,s}^p(t_i)$ is an increasing function of t_i , which is the level of openness of intermediate goods trade. In addition, if we assume that the costs of

① Caliendo., L. & Parro, F. (2015). Estimates of the Trade and Welfare Effects of NAFTA. *The Review of Economic Studies*, 82(1), 1-44.

production, export, and entry into use are homogeneous, and, at the same time, $c_{i,s}^x$ and $c_{i,s}^e$ do not use intermediate products, then it has nothing to do with t_{ij} . τ_{ij} is the trade cost incurred when economy i exports to economy *j*, and it is highly influenced by the trade policy of host economy *j*. t_i is the trade cost of economy *i* using overseas intermediate goods, which is significantly influenced by economy *i*'s own trade policy.

2. Investment Openness

Investment openness can be divided into two categories; one is openness to foreign investment and the other is openness to outbound investment. The introduction of foreign capital can not only ease funding shortage, but also raise the productivity of enterprises in the host economy through the competition effect and the spillover effect of technology and management expertise. The role of outbound investment also mainly lies in full utilization of overseas resources to enhance international competitiveness. Therefore, the level of investment openness mainly affects technical parameters. If the investment openness parameter is fdi, then $A_i=A_i$ (dif, fdi), which is an increasing function of fdi.

3. Financial Openness

The financing constraints caused by the dysfunctional financial system are a serious restrictive factor for the production and international operation of enterprises. Financial opening-up can reduce the financing costs of export and outbound investment of enterprises, and can significantly boost those internationalization activities that require huge fixed costs. Both theoretical models (such as Muûls 2008^①) and empirical studies (such as Yu et al. 2011) emphasize the impact of the financial system on the fixed costs of export by enterprises. Therefore, this report sets the financial openness index fin as a factor that affects the fixed cost of export by enterprises, and the export cost $f_{ij}(fin)$ is a decreasing function of fin.

4. Technology openness

In previous chapters, wages are standardized as 1. Here the concept of effective production cost is introduced in this report; let $\widetilde{c_{i,s}^p} = \frac{c_{i,s}^p}{A_i}$, where $\widetilde{c_{i,s}^p}$ is the effective

¹ Muûls, M. (2008). Exporters and credit constraints: A firm-level approach. NBB Working Paper No. 139.

production cost, and A_i is a technical parameter, which involves the concept of total factor productivity. The openness of knowledge and technology can enable a country to use the world's advanced technology. It is especially important for latecomer countries, represented by China. If we let the parameter of the technology diffusion level be dif, then $A_i(dif)$ is an increasing function of the technology diffusion parameter *dif*.

5.Institutional Openness

Different from the openness of commodity factor flows, institutional openness is committed to removing institutional barriers to international economic and trade exchanges, creating a favorable business environment, and improving institutional quality (Antràs & Yeaple, 2014^(D)). The impact of institutional quality on the production and operation of enterprises has been explained in two theoretical frameworks, namely, the contract theory and the property theory, in institutional economics. When they are introduced into the basic model of international trade, those two theoretical frameworks can both be treated as a variable of institutional cost to become part of the variable cost of corporate decision-making (Antràs & Yeaple, 2014). Therefore, this report introduces institutional cost Γ_{i} , which is a structural variable that is composed of a series of parameters that measure the level of contract perfection and strength of property rights protection, and constitutes the variable cost of corporate production in the form of a denominator, that is, $\frac{1}{r_i}$.

Based on the above 5 assumptions, the price of goods in cross-border trade can ultimately be expressed as:

$$p_{ij} = \tau_{ij} \frac{c_i^p(t_i)}{A_i(dif, fdi)} \times \left(\left(\frac{E_j}{c_{ij}^x}\right)^{\frac{\delta}{1-\sigma}} \frac{\tau_{ij} \frac{c_i^p(t_i)}{A_i(dif, fdi)}}{P_j} \right)^{\eta} \times \left(\frac{R_i}{c_i^e}\right)^{\frac{\delta}{1-\sigma}} \times \zeta_{ij} (f_{ij}(fin), f_i^e) \times \frac{1}{\Gamma_i}$$

The formula takes the logarithm and fully differentiates the key variables to obtain the following formula:

⁽¹⁾ Antràs, P. & Yeaple, S. (2014). Multinational firms and the structure of international trade. *Handbook of international economics*, Elsevier, 4, 55-130.

$$dlnp_{ij} = \frac{1}{\tau_{ij}} d\tau_{ij} + \frac{1+\eta}{c_i^p(t_i)} \frac{\partial c_i^p(t_i)}{\partial t_i} dt_i - \frac{1+\eta}{A_i(dif, fdi)} \frac{\partial A_i(dif, fdi)}{\partial dif} ddif$$
$$- \frac{1+\eta}{A_i(dif, fdi)} \frac{\partial A_i(dif, fdi)}{\partial fdi} dfdi + \frac{\frac{\partial \zeta_{ij}(f_{ij}(fin), f_i^e)}{\partial f_{ij}(fin)} \times \frac{\partial f_{ij}(fin)}{\partial fin}}{\zeta_{ij}(f_{ij}(fin), f_i^e)} dfin - \frac{1}{\Gamma_i} d\Gamma_i$$

Among them, $\frac{1}{\tau_{ij}} d\tau_{ij}$ is the impact of openness of final product trade; $\frac{1+\eta}{c_i^p(t_i)} \frac{\partial c_i^p(t_i)}{\partial t_i} dt_i$ is the impact of openness of intermediate product trade; $\frac{1+\eta}{A_i(dif, fdi)} \frac{\partial A_i(dif, fdi)}{\partial dif} dfdi$ is the impact of openness of technology openness; $\frac{1+\eta}{A_i(dif, fdi)} \frac{\partial A_i(dif, fdi)}{\partial fdi} dfdi$ is the impact of openness of investment; $\frac{\frac{\partial \zeta_{ij}(f_{ij}(fin), f_i^e)}{\partial f_{ij}} \frac{\partial f_{ij}(fin)}{\partial fin}}{\zeta_{ij}(f_{ij}(fin), f_i^e)} dfn$ is the impact of financial openness; and $\frac{1}{\Gamma_i} d\Gamma_i$ is the impact of institutional quality and openness.

IV. Treatment of Missing Values of Indicators

1. For a country that has a value for only one year in the entire sample period, this value is used for all years.

2. For a country that has a value for two or more uninterrupted years throughout the sample period, the data of other years shall be made complete in accordance with the principle of proximity. For example, when the country has a value for 2011 and 2012, then its value for the year before 2011 should be the same as that for 2011, and its value for the year after 2012 should also be the same as that for 2012.

3. For a country that has values for more than one year in the entire sample period, and there are discontinuities, the values between the two discontinuous years are also taken according to the principle of proximity. For example, when it has only values for 2011 and 2014, then its value for 2012 should be taken as that for 2011, while that for 2013 should be the same as that for 2014. When a country lacks a value for an odd number of years, then its value for the year in the middle should be the average of the two values for the years at the two ends. For example, when there are only values for the year 2011 and 2015, the value for 2011 should be the same as that for 2015; the value for 2013 (in the middle of the 2011-2015 period), however, should be the average of the values for 2011 and 2015.

4. For a country that has no value during the entire sample period, based on its economic development, social and cultural conditions, institutional characteristics, and

geographical features, countries that are most similar to it should be picked so that the value of a similar country can be taken as its missing values.

V. Dimensionless Calculation of Indicators

1. Principles

Dimensionless treatment is a necessary step for basic index data processing. It should adhere to the following principles: design processing methods in according with economics principle of supply and demand.

Opening-up to the outside world is a two-way opening-up. First, it is inward opening-up. That is, economy A opens its market to other economies to meet A's own needs, which is reflected by economy A importing commodities, capital, technology, and personnel from other economies. Second, it is outward opening-up from other economies. That is, other economies open their economy to economy A to meet their own needs, which is reflected by economy A exporting goods, capital, technology, and personnel to other economies.

Such a principle is in essence to make the openness indicators dimensionless based on market supply and demand. First, if the value of Economy A on one certain inward opening-up indicator is an absolute one, it is divided by the total value of Economy A on the *corresponding categorial indicator* to which this indicator belongs. Second, if the value of the Economy A on one certain outward opening-up indicator is an absolute one, it is divided by the total value of the world minus that of Economy A on the *corresponding categorial indicator*. This report stipulates that the *corresponding categorial indicator* of economic openness indicators is GDP, and that of headcountstyle openness indicators is total population. The rest can be deduced in the same vein.

2. Specific methods

(1) Outflows measured by value

Such an indicator system includes six indicators, including export of goods, export of services, overseas direct investment, outbound portfolio investment, intellectual property export, and cultural product export.

It is calculated as follows:

$$y_{it} = \frac{x_{it}}{\sum_{j \neq i} GDP_{jt}}$$

In the equation, y_{it} is the final value of the indicator of economy *i* in period *t*; x_{it} is the original value of the indicator, and $\sum_{j \neq i} GDP_{jt}$ is the total *GDP* of all the other economies in the world.

(2) Inflows measured by value

Such an indicator system includes six indicators, including import of goods, import of services, foreign direct investment, foreign portfolio investment, intellectual property import, and cultural product import.

It is calculated as follows:

$$y_{it} = \frac{x_{it}}{GDP_{it}}$$

In the equation, y_{it} is the final value of economy *i*'s index in period *t*; x_{it} is the original value of the indicator; and GDP_{it} is the concerned economy's GDP.

(3) Outflows measured by headcount

Such an indicator system includes three indicators: outbound tourists, outbound students, and emigrants.

It is calculated as follows:

$$y_{it} = \frac{x_{it}}{\sum_{j \neq i} POP_{jt}}$$

In the equation, y_{it} is the final value of the indicator of economy *i* in period t; x_{it} is the original value of the indicator; and $\sum_{j \neq i} POP_{jt}$ is the total population of all the other economies in the world.

(4) Inflows measured by headcount

Such an indicator system includes three indicators: inbound tourists, inbound students, and immigrants.

It is calculated as follows:

$$y_{it} = \frac{x_{it}}{POP_{it}}$$

In the equation, y_{it} is the final value of the indicator of economy *i* in period t; x_{it} is the original value of the indicator; and POP_{it} is the population of economy *i*.

(5) Patent application

It includes two indicators: residents applying for patents abroad (*patex*) and non-residents applying for patents within the data reporting economy (*patim*).

patex is calculated as follows:

$$patex_{it} = \frac{abroad_{it}}{\sum_{j \neq i} (resi_{jt} + nonr_{jt})}$$

In the equation, *abroad*_{it} refers to the number of patent applications filed abroad in economy *i* in year t, $\sum_{j \neq i} (resi_{jt} + nonr_{jt})$ refers to the total number of patent applications in other countries except economy *i* (*resi_{jt}* is the number of patent applications filed by residents in this economy; *nonr_{jt}* is the number of patents applied by foreign residents in economy *j*).

The calculation formula for non-residents applying for patents (*patim*) in the data reporting economy is as follows:

$$patim_{it} = \frac{nonr_{it}}{resi_{it} + nonr_{it}}$$

In the equation, $nonr_{it}$ is the number of patents applied in the concerned country by nonresidents; $resi_{it}+nonr_{it}$ is the total number of patent applications in the concerned economy.

(6) International citations of science documents

It contains only one indicator (paper) and it is calculated by the following equation:

$$paper_{it} = \frac{Citations_{it} - Selfcitations_{it}}{\sum_{j} Documents_{jt}}$$

In the equation, *Citations_{it}* is the total citations of science documents with the authors from economy *i* in year *t*; *Selfcitations_{it}* is the citations of science documents written and cited by the authors from economy *i*; and $\Sigma_j Documents_{jt}$ is the total number of science documents written by authors from all the other economies.

(7) Outbound openness of concerned international trade and investment agreement(s)

There are two indicators based on free trade agreement and investment agreements, respectively.

The equation goes as follows:

$$T_{it} = \sum_{p} T_{ipt} \frac{GDP_{pt}}{\sum_{j \neq i} GDP_{jt}}$$

In the equation, T_{it} is the openness of the trade or investment agreement in economy *i* in year *t*; GDP_{pt} is the GDP of the contracting partner *p*, $\Sigma_{j\neq i} GDP_{jt}$ is the sum of GDP of all the other economies; T_{iPt} is a dummy variable and takes 1 when the agreement(s)

concerned is (are) effective for economy *i* as its member in year *t*; otherwise it takes 0.

(8) Inbound openness of concerned international trade and investment agreement(s)

There are two indicators based on free trade agreement and international investment agreement, respectively.

The equation goes as follows:

$$T_{it} = \frac{GDP_{it}}{\sum_{p} T_{ipt} \times GDP_{pt}}$$

In the equation, T_{it} is the openness index of the trade or investment agreements of economy *i* in year *t*; GDP_{it} is GDP of the concerned country; GDP_{Pt} is the GDP of the contracting partner *p*; T_{iPt} is a dummy variable, when the agreement between economy *i* and j is effective in year *t*, it would take 1, otherwise 0.

(9) Non-tariff trade barrier

The equation goes as follow:

$$X_{it} = ntb_{it} \times hs_{it}$$

In the equation, T_{it} refers to non-tariff barrier indicator of country *i* in year *t*; ntb_{it} refers to number of non-tariff measures; hs_{it} refers to quantity of concerned products.

(10) Indicators that do not require additional treatment

They include three indicators: weighted tariff rate, financial openness index, and passport convenience index.

In order to achieve the consistency of the standard index dimensions, the following treatments are carried out on each indicztor:

$$y_{it} = \frac{x_{it} - min(x)}{max(x) - min(x)}$$

In the equation, y_{it} is the post-centralization value of indicator x for economy I, x_{it} is the pre-centralization indicator, max(x) is the maximum value of the x in the entire sample period, and min(x) is the minimum value of indicator x in the entire sample period.

For some inverse indicators, such as weighted tariff rate and non-tariff measures, for which the larger the value, the lower the level of openness, the following calculation methods are adopted:

$$y_{it} = 1 - \frac{x_{it} - min(x)}{max(x) - min(x)}$$

This calculation method projects all indicators on [0,1].

VI. On the Results of Openness Measurement

1. The sample of 129 economies

This index covers 129 economies during the 2008-2018 period. It is determined by the availability of the following basic data for each indicator.

First, the original data sequence of each indicator in the indicator system is uneven. The data of some indicators began in 2008, so that the time sequence of the comprehensive index cannot be traced back to earlier years.

Second, from 2008 to 2018, not all indicators in all economies have complete original data. Even if the aforementioned treatment of missing data is applied, there are still some economies that cannot be included in the samples for the lack of necessary original data.

2. Property of the openness index reading

The openness index in this report is a result of calculation based on the aforementioned theories, methods and data, and has the following characteristics.

The index reading is between 0 and 1 (inclusive). The larger the index reading is, the higher the level of openness, and vice versa.

The index readings are comparable across time and space. The index readings of different economies in the same year, those of the same economy in different years, and those of different economies in different years are all comparable.

When the ranking dynamics of the openness of each economy, based on the index reading, is analyzed, it should be combined with the index reading to come to a scientific conclusion.

3. Interpretation of index reading

The time range of this index is limited to 2008-2019, which, very probably, may not be enough to match the observation, analysis and research of the long-term openness trend of economies.

Therefore, the openness trend conclusion based on the current time ranges of this index may be inconsistent with the inference of the openness theory based on the longer-term time ranges. Readers need to interpret it carefully, especially when they extrapolate the conclusion based on this time range.

More importantly, when judgment is made regarding the appropriateness of openness through global rankings based on the openness index, it is necessary to carefully take into consideration such heterogeneous scenarios as economic, social, and cultural development theories, the development stages of each economy, and the choice of development paths. Openness, nonetheless, is only one of many factors that affect the development of human society, and it is natural that its development effects on different economies or during different time ranges may differ.

VII. Comparison between Openness Index and Other Indices

There are many well-known global indices that measure the performance of economies in many aspects. This report has selected the following highly representative index, which have attracted much attention and which are very authoritative, to make a comparison: KOF Globalization Index, Human Development Index (HDI), Ease of Doing Business, Global Competitiveness Index, Index of Economic Freedom, and Global Innovation Index. The specific situation is shown in the table below. The openness index is for 2018, and the rest of the index readings are for 2017.

The performance of the 129 economies in this list shows that very few economies are entirely close in their rankings of the seven major indexes. This at least illustrates the following characteristics. First, the themes measured by each index are different from each other, and there is not much overlapping. Second, those indices differ in the concepts, theories, methods, and data processing of their respective themes, which may lead to differences in the measurement results of the same economy at the same time on the same topic. Third, the performance of economies on those themes is not highly consistent. Few economies are "omnipotent" and perform well in all indices, just like the fact that few economies are totally incompetent or mediocre in all the indices; most economies only perform well or poorly on some of the themes.

	World Openness Index, 2018	KOF Globalization Index	Human Development Index	Ease of Doing Business	Global Competitiveness Index	Index of Economic Freedom	Global Innovation Index
No. of economies	129	201	201	191	153	184	201
Singapore	1	19	9	37	3	89	6
Hong Kong, SAR	2	69	5	3	6	90	16
Germany	3	8	4	18	5	74	9
Ireland	4	17	3	16	24	77	10
Switzerland	5	1	2	173	1	82	1
United Kingdom	6	5	15	6	8	76	5
France	7	10	26	32	22	63	15
Canada	8	16	13	19	14	79	18
Netherlands	9	2	10	1	4	76	3
Malta	10	39	28	145	37	68	26
Italy	11	22	29	49	43	63	29
Belgium	12	3	17	45	19	68	27
Israel	13	41	22	39	16	70	16
Australia	14	25	5	15	21	81	23
Korea	15	34	22	5	26	74	11
Cyprus	16	35	31	47	63	68	30
Spain	17	12	25	101	34	64	28
Czech Republic	18	13	27	31	31	73	24
United States	19	23	15	10	2	75	4
Austria	20	7	20	22	18	72	19
Sweden	21	4	7	30	7	75	2
Norway	22	11	1	62	11	74	19
Denmark	23	6	11	4	12	75	6
New Zealand	24	38	14	130	13	84	21
Estonia	25	18	30	12	29	79	25
Hungary	26	14	44	53	59	66	39
Latvia	27	32	39	13	54	75	33
Japan	28	36	19	24	9	70	14
Costa Rica	29	53	68	63	47	65	52
Lithuania	30	29	34	59	41	76	40
Luxembourg	31	21	21	170	19	76	12
Finland	32	9	12	17	9	74	8
Chile	33	40	42	52	33	77	46
Portugal	34	15	40	57	42	63	31
Peru	35	60	84	104	72	69	70
Nicaragua	36	97	123	149	92	59	
Uruguay	37	47	58	87	76	70	67

A.3 A Comparison between World Openness Ranks and Other Six Major Ranks 2017 (Sorted by World Openness Index)

	World						
	Openness	KOF Clabalization	Human	Ease of	Global	Index of	Global
	Index,	Index	Development Index	Doing Business	Competitiveness Index	Economic Freedom	Innovation Index
	2018	пася	шаех	Dusiness	maex	Treedom	maex
Panama	38	48	66	103	50	66	63
Bahrain	39	62	45	61	43	69	66
Macao, SAR	40	133	—	—	—	71	
Slovakia	41	20	37	34	59	66	34
China	42	81	85	80	27	57	22
Guatemala	43	88	125	88	84	63	97
Poland	44	26	33	28	39	68	38
Trinidad and Tobago	45	79	63	69	83	61	91
Malaysia	46	27	61	139	23	74	37
Georgia	47	42	70	11	67	76	68
Oman	48	90	47	138	62	62	77
Iceland	49	54	7	21	28	74	13
Cambodia	50	103	142	136	94	60	101
Greece	51	24	31	66	87	55	44
Bulgaria	52	31	51	50	49	68	36
Croatia	53	28	46	48	73	59	41
Mexico	54	51	75	51	50	64	57
Jordan	55	46	98	116	63	67	83
Antigua and Barbuda	56	101	73	105		_	_
Slovenia	57	30	24	127	48	59	32
Mauritius	58	52	66	46	45	75	64
Salvador	59	73	122	86	109	64	103
Kuwait	60	57	57	100	52	65	56
Guyana	61	126	121	119		59	
Botswana	62	113	97	68	63	70	88
Romania	63	33	51	36	67	70	42
Russia	64	49	49	35	38	57	44
Colombia	65	82	77	60	66	70	64
Ecuador	66	96	83	113	97	49	92
Saudi Arabia	67	78	36	146	30	64	55
Dominican Republic	68	74	91	112	103	63	79
Zambia	69	110	141	153	118	56	124
Mongolia	70	77	94	54	100	55	52
Argentina	70	70	48	115	92	50	52 76
Paraguay	71	89	98	64	112	62	85
Barbados	72	93	51	111	· · · · · · · · · · · · · · · · · · ·	55	
Uganda	73	128	157	70	 114	61	101
Vietnam	74	84	116	123	55	52	47
viculalli	/ 3	84 87	110	79	36	62	

	World Openness Index, 2018	KOF Globalization Index	Human Development Index	Ease of Doing Business	Global Competitiveness Index	Index of Economic Freedom	Global Innovation Index
Honduras	77	91	130	121	96	59	104
North Macedonia	78			8	—	—	
Philippine	79	72	105	25	56	66	73
Armenia	80	66	80	55	73	70	59
Albania	81	71	69	82	75	64	93
Papua New Guinea	82	140	152	110		51	—
Thailand	83	50	76	131	32	58	50
India	84	95	127	120	39	53	60
Ukraine	85	43	87	27	81	48	50
Gambia	86	136	175	154	117	53	
Jamaica	87	75	96	65	70	70	84
Morocco	88	59	119	140	71	62	72
South Africa	89	61	110	184	61	62	57
Egypt	90	76	115	124	100	53	105
Kyrgyz	91	85	120	91	100	61	95
Lebanon	92	67	93	128	105	53	81
Turkey	93	56	59	114	53	65	43
Moldova	94	64	105	67	89	58	54
Belize	95	106	102	125		59	
Bolivia	96	105	113	147	—	48	106
Kenya	97	115	145	85	91	54	80
Brazil	98	100	77	126	78	53	69
Lesotho	99	153	161	109	130	54	
Bosnia and Herzegovina	100	63	74	76	103	60	86
Tunisia	101	68	90	56	94	56	74
Laos	102	170	137	150	97	54	—
Samoa	103	137	109	89		58	—
Azerbaijan	104	80	86	81	35	64	81
Cape Verde	105	122	126	134	110	57	
Mozambique	106	125	177	171	136	50	107
Fiji	107	107	101	92	—	63	_
Zimbabwe	108	146	150	_	124	44	121
Sudan	109	180	165	155		49	—
Bangladesh	110	145	133	174	97	55	114
Kazakhstan	111	83	51	38	56	69	78
Nigeria	112	114	154	141	125	57	119
Namibia	113	104	127	108	89	63	97
Belarus	114	65	50	43	—	59	88

	World Openness Index, 2018	KOF Globalization Index	Human Development Index	Ease of Doing Business	Global Competitiveness Index	Index of Economic Freedom	Global Innovation Index
Algeria	115	112	80	161	86	47	108
Madagascar	116	151	159	135	121	57	109
Pakistan	117	130	148	142	115	53	113
Mali	118	157	181	77	123	59	118
Ghana	119	98	139	107	111	56	_
Sri Lanka	120	102	72	129	84	57	90
Congo, Republic of	121	124	133	178	—	40	—
Malawi	122	152	169	23	132	52	115
Ethiopia	123	175	170	167	108	53	109
Tanzania	124	144	157	42	112	59	95
Cote d'Ivoire	125	—		—	—	_	_
Nepal	126	155	145	33	87	55	109
Burundi	127	186	182	163	129	53	122
Gabon	128	131	113	168	—	59	_
Central African Republic	129	187	184	186	—	52	—
Correlation Coef. with World Opennes index	1	0.808	0.809	0.510	0.787	-0.752	0.831

Source:

- (1) KOF Globalization Index: https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html.
- (2) Human Development Index (United Nation Development Programme), http://hdr.undp.org/en/ content/human-development-index-hdi.
- (3) Ease of Doing Business (The World Bank), https://www.doingbusiness.org/en/reports/global-reports/doing-business-2020.
- (4) Global Competitiveness Index (World Economic Forum), https://www.weforum.org/reports/the-global-competitiveness-report-2020.
- (5) Index of Economic Freedom (Heritage Foundation), https://www.heritage.org/index/about.
- (6) Global Innovation Index (World Intellectual Property Organization), https://www.globalinnovationindex.org/Home.

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