

## Chapter 2 Warranted Openness: An Analysis Based on Some Countries

Whether openness is warranted or not is an important issue facing the development of an open world economy. Openness brings both opportunities and challenges to all parties concerned. To make full use of the opportunities and properly deal with challenges brought about by openness both require the relations to be effectively balanced between the degree of openness and the level of development, between the course of openness and the upgrading of competitiveness, between openness skill and governance capability, between openness strength and responsibility shouldering, and between openness benefit and inclusiveness and sharing, and the “golden junction” to be found during different times and at different development levels.<sup>①</sup>

### I. The Problem of Warrantedness of Openness

#### 1. An diversity analysis of country openness

Take the Group of 20 (G20) countries as a sample. From 2008 to 2020, the openness index of the 19 state members of the G20 was between 0.6189 and 0.9328, and the simple arithmetic average was 0.7271. Of the 129 economies in the World Openness Index 2020 list, the highest openness index of the G20 countries is 0.8591 (Germany) and the lowest is 0.6189 (Brazil), ranking 2<sup>nd</sup> and 107<sup>th</sup>, respectively.

Based on a simple arithmetic average of the openness index between 2008 and 2020, the 19 members of the G20 can be divided into the following three groups.

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<sup>①</sup> The Institute of World Economics and Politics of Chinese Academy of Social Sciences & Research Center for Hongqiao International Economic Forum (2021). *World Openness Report 2021*. Beijing: China Social Sciences Press. Page 5.

First group: three countries with the highest average degree of openness --- the United States, Germany and the United Kingdom, whose simple arithmetic average openness index is 0.843, 0.8365 and 0.805, respectively. They are the only three G20 members whose openness index exceeds 0.8, as shown in Fig. 2.1 (a). The openness index of these three countries is between 0.7653 (US, 2018) and 0.9328 (US, 2008), with a simple arithmetic average openness index of 0.8282. The coefficient of variation<sup>①</sup> of US' openness index is 0.0712, which is the G20 member with the largest fluctuation in openness.

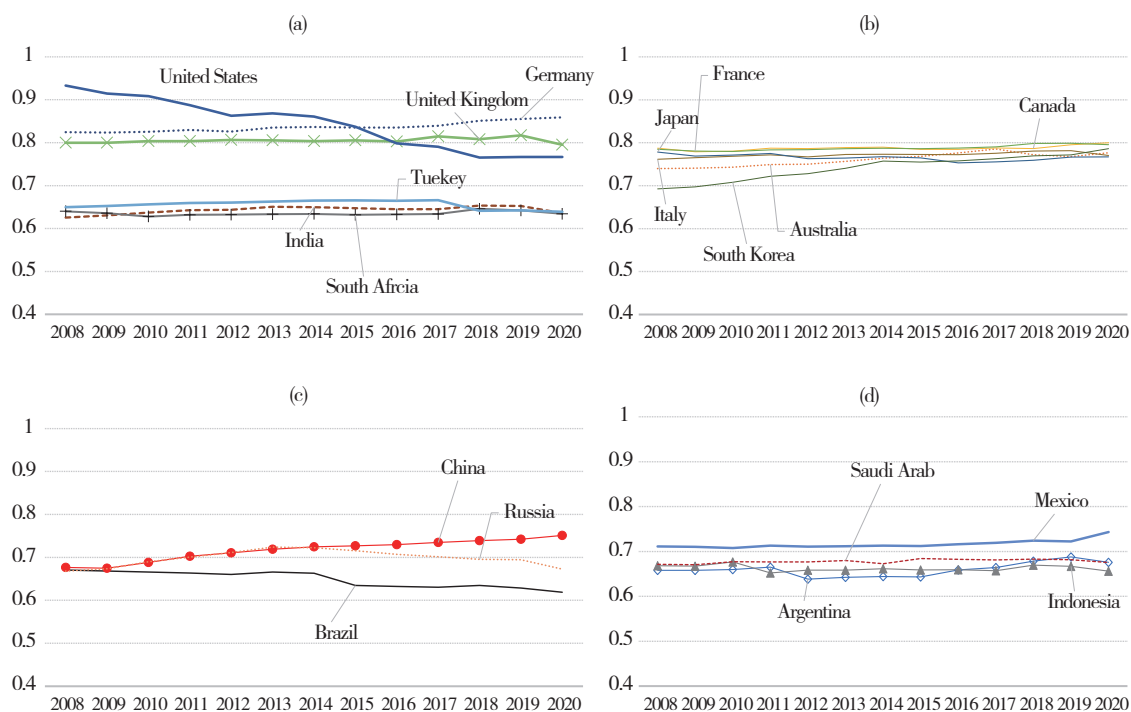


Fig. 2.1 Openness index of 19 G20 countries, 1980-2020

Second group: eight countries with an average degree of openness between 0.7 and 0.8. According to the simple arithmetic average openness index from 2008 to 2020 and in a “from high to low” order, they are France (0.7879), Canada (0.7876), Italy (0.7718), Japan (0.7658), Australia (0.7608), South Korea (0.7422), China (0.717) and Mexico (0.7165). The openness index of these eight countries is between 0.6747 (China, 2009) and 0.7998 (Canada, 2020), and the simple arithmetic average openness index is 0.7562.

① The coefficient of variation in openness index is equal to ratio of the standard deviation of openness series to its average, where a higher result indicates a greater fluctuation of openness index, and vice versa.

Among them, the degree of openness of South Korea and China has fluctuated greatly, and the coefficient of variation in openness index is 0.0405 and 0.0346, respectively.

Third group: eight countries with an average of openness index between 0.6 and 0.7. According to the simple arithmetic average from 2008 to 2020 and in a “from high to low” order, they are Russia (0.6981), Saudi Arabia (0.6779), Indonesia (0.6623), Argentina (0.6596), Turkey (0.6558), Brazil (0.649), India (0.6431) and South Africa (0.635). The openness index of these eight countries for each year is between 0.6189 (Brazil, 2020) and 0.7241 (Russia, 2013), and the simple arithmetic average openness index is 0.6601. Among them, Brazil, Russia and Argentina had the largest fluctuations in openness degree, with a coefficient of variation in openness index between 0.0229 and 0.0291.

Of course, the above grouping method is simple, but the results are intuitive. The G20 members include almost all the countries with the largest economies and populations in the world, but their openness degree is diverse, varying from high to low in world rankings.

—There are 10 high-income countries (Australia, Canada, France, Germany, Italy, Japan, South Korea, Saudi Arabia, the United Kingdom, and the United States), and their highest world ranking in openness index is 2<sup>nd</sup> (Germany), the lowest is 71<sup>st</sup> (Saudi Arabia). Except for Saudi Arabia, the remaining nine countries are all developed economies, with the highest and lowest world ranking in openness index being 2<sup>nd</sup> (Germany) and 27<sup>th</sup> (United States), respectively.

—There are 7 upper-middle-income countries (Argentina, Brazil, China, Mexico, Russia, South Africa, Turkey) and 2 lower-middle-income countries (India, Indonesia), and their highest and lowest world ranking in openness index are 37<sup>th</sup> (China) and 107<sup>th</sup> (Brazil), respectively.

So, did openness index for each of the 19 countries from 2008 to 2020 satisfy themselves and their partner economies? This requires an assessment of their “warrantedness of openness”.

## 2. Theoretical analysis of warranted openness

The term “warranted” is used in law, linguistics and economics. In economics, there are related concepts such as “warranted growth rate”, which refers to economic growth rate warranted by the savings rate. The definition of “warranted openness” in

this chapter has reference from the concept of “warranted growth rate”.

#### **a. Concept of “warranted openness”**

The “warrantedness” of openness refers to the characteristic that openness is warranted by the openness capacity of the subject concerned. This definition includes the following keywords.

The first keyword is the “subject of openness”, that is, the state carrying out the act of openness or the subject as a component of the state.<sup>①</sup> The basic unit of this chapter is the economy, so it takes the economy as the subject of openness.

The second keyword is “openness capacity”, which refers to the comparative advantages/disadvantages of an economy compared with its partner economies in terms of openness, as well as realistic ability to govern openness dimensions, intensity, speed, and order. The stronger the ability to open up, the higher openness can be, and vice versa. The main determinant variable of openness capacity is the endowment of the economy, including innate endowment and acquired endowment, with the former including such elements as geographical location and natural resources, and the latter including such elements as population, production technology, labor quality, capital, institution, culture, etc. Some endowments can increase openness, while others can decrease openness, and ultimately, all endowments together determine the strength of openness.

The third keyword is “warrant”. The specific openness of an economy needs to be supported by the corresponding openness capacity. If the latter does not exceed the maximum openness capacity of the economy, then its openness can be defined as warranted openness, otherwise its openness can not be defined to be warranted.

To sum up, the warranted openness of an economy refers to openness warranted by the capacity of the economy to open up.

Theoretically, warranted openness has the following characteristics.

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① The components of one economy include institutional sectors or industrial sectors. According to the definition of the *System of National Accounts*, resident institutions can be divided into the following five institutional sectors: the general government sector, the non-financial corporate sector, the financial corporate sector, the non-profit sector serving households sector, and the household sector. Non-resident institutions that interact with resident institutions are collectively referred to as the foreign sector. Another common concept is industry sector. Each industry sector corresponds to each industry in the international standard industrial classification, including the most detailed industry classification levels and higher levels based on aggregations (such as medium category, large category and final category). “Individual businesses” refers to the economic agent doing business, that is, the operator (See SNA 2008, Para.4.24, 5.46).

Firstly, there can be multiple values of warranted openness. As long as the openness of an economy does not exceed its maximum openness capacity, corresponding openness can be called “warranted openness”. Openness that requires maximum openness capacity to warrant is the greatest “warranted openness” of the economy. Obviously, there must be more than one value of openness below maximum warranted openness capacity, and they all belong to warranted openness. Openness that exceeds maximum warranted openness capacity is not warranted openness, that is, unwarranted openness.

Secondly, while remaining relatively stable in the short term, maximum warranted openness may change significantly in the medium and long term. This is because the endowments of an economy may change more slowly in the short run, and therefore openness capacity determined by it and corresponding maximum warranted openness are more stable. Given that changes in an economy’s endowment over the medium to long term may be more pronounced, openness capacity determined by it and corresponding maximum warranted openness may also see significant changes as time goes by.

Thirdly, given that maximum warranted openness is achieved under the utilization of openness capacity to a maximum degree, it should become the main goal of all economies to explore openness practice.

#### **b. Relations with optimal openness**

The openness of an economy is determined by its demand for openness (hereinafter referred to as “openness demand”) and its supply of openness (hereinafter referred to as “openness supply”). The “authentic openness” formed when openness demand equals openness supply is “equilibrium openness”, which includes low-level equilibrium openness and high-level equilibrium openness. When openness demand is low, openness supply with which it forms a state of equilibrium is clearly below maximum openness capacity, at which point only part of openness capacity is utilized. When openness demand is high, if openness supply with which it forms a state of equilibrium is also at a higher level, most of openness capacity is fully utilized.

When openness demand is high enough to reach maximum openness capacity, “equilibrium openness” promoted by it is “optimal openness”. Obviously, whether openness is optimal depends on whether openness capacity is maximally utilized and whether openness demand is high enough to form equilibrium with maximum openness capacity.

Warranted openness is not necessarily optimal openness, but optimal openness

must be warranted openness. When openness is in an optimal state, the utilization of openness capacity would reach its maximum level, and corresponding openness is maximum warranted openness.

If the openness supply level matching with openness demand exceeds maximum openness capacity, it is excessive openness, which means openness is not sustainable. This is because excessive openness requires more openness supply than its maximum openness capacity, resulting in a gap in openness supply. As a result, openness supply and demand will be at an unbalanced state, pushing openness demand back to the scope that can be warranted by openness capacity.

### 3. Warrantedness of openness should take development as fundamental direction to achieve optimal openness

If openness is warranted, does it mean that the effects of openness are satisfactory to the economy concerned? The specific objectives served by an economy's opening up to the outside world belong to the "result" of openness. The "result" of openness is quite rich in connotation and extension, and the concept that can best summarize it is probably *development*.

Development is the basis and key to solving all problems. As Chari & Corbridge (2008)<sup>①</sup> puts it, *development* has become one of humanity's most quoted words since its creation, but also one of the most controversial words. In the existing massive literature, the word *development* has been widely applied to many fields, such as economic development, social development, cultural development and political development. This corresponds to the "openness" as defined by the "Openness Index" in this report: cross-border openness likewise covers economic, social, cultural, political and other dimensions.

Just like the concept of *openness*, the concept of *development* is also applicable to all economies: No matter whether the starting point of development is high or low, or the current level of development is high or low, any economy is always on the road to development, its development in economic, social, cultural, political and other fields is endless, and there is always a need for it to have sustainable development.

An example is that the research subject of development economics was for a

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① Chari, S., & Corbridge, S. (2008). Introduction of Part I: The Object of Development. In *The Development Reader*, Routledge, The 1<sup>st</sup> edition., pp. 3-8.

long time poor economies, later it expanded to backwards economies, or developing economies, and now it covers almost all economies, because the research purpose is to “explore ... a way to enjoy growing prosperity” for these economies (Clive Bell<sup>①</sup>). Clearly, under the concept of a community with a shared future for mankind, all economies are entitled to “growing prosperity” for themselves and the world.

The development of an economy has both macro- and micro-level connotations.

On the macro level, development refers to the growth of some specific macro targets and the structural transformation of the economy (Summer & Tribble, 2008<sup>②</sup>). In both development economics and economic history literature, “structure” refers to the relative importance of sectors in the economy (in terms of production and factor use), that is, the subdivision of the economy as a whole, which can be extrapolated from technical or behavioral relationships into certain ratios (the former, such as input-output coefficient, the latter, such as aggregate savings rate); “structural transformation” refers to the process of the change of numerous interconnected structures (Syrquin, 1988<sup>③</sup>).

On the micro level, development is “related to individual life and death, well-being and illness, happiness and misery, freedom and vulnerability, etc.” (Sen, 1988<sup>④</sup>; Meier, 2001<sup>⑤</sup>). It refers to increasing behavioral choices, growing capabilities, and improving well-being of individuals in this economy, specifically represented by “material prosperity” and “dignity, freedom, and satisfaction in the workplace” (Clive Bell).

The macro and micro connotations of development may or may not coincide. When the two coincide, the economy is at an optimal level of development.

Openness is a means of development and aims at promoting development. Development achieved through openness is “development under openness”, referred to as “open development”. Openness is one of the many means of

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① Clive Bell. Development Economics. In *The New Palgrave Dictionary of Economics and The Law* (Edited by John Eatwell, Murray Milgate, Peter Newman), Vol. 1, Chinese version, Economic Science Press, 1992, pp. 884-891.

② Pansera, M., & Owen, R. (2018). *Innovation and Development: The Politics and the Bottom of Pyramid*. ISTE Ltd. and John Wiley & Sons. Chapter 1, pp. 1-9.

③ Syrquin, M. (1988). Patterns of structural change. In *Handbook of Development Economics*, edited by Chenery, H., & Srinivasan, T. (1988), ScienceDirect, Chapter 7, pp. 203-273.

④ Sen, A. (1988). The concept of development. In *Handbook of Development Economics*, edited by Chenery, H. & Srinivasan, T. (1988), Chapter 1, pp. 9-26.

⑤ Meier, G. (2001). Introduction: Ideas for Development. In *Frontiers of Development Economics: The Future in Perspective*, edited by Meier, G., & Stiglitz, J. (2001), The World Bank & Oxford University Press, pp. 1-11.

development, which aims to promote high-quality development through internal and external connectivity, that is, it is necessary to improve the ability to make good use of both international and domestic markets and resources, and it is also necessary to strengthen the ability to use international economic and trade rules to fight for international economic narratives. In China, “open development” is an important part of the new development concept.

### Box 2-1 China’s New Development Philosophy

Development philosophy is the precursor of development actions. It is something of overall, fundamental, directional, and long-term management, and a concentrated embodiment of development thinking, development direction, and development priorities.

New development philosophy refers to innovative, coordinated, green, open and shared development. Among them, innovative development focuses on providing the driving force of development, coordinated development focuses on solving the problem of unbalanced development, green development focuses on solving the problem of harmony between man and nature, open development focuses on promoting the internal and external connectivity of development, and shared development focuses on solving the problem of social equity and justice.

New development philosophy conforms to the needs of the times, and it is of great guiding significance to eliminating development difficulties, enhancing development impetus and building up development advantages.

If the development effect of an economy is ideal, it indicates that its openness is warranted or even optimal. If the development effect of an economy is not ideal, it indicates that there may be some following problems with openness.

Firstly, when, openness is warranted, but equilibrium between openness supply and demand is at a low level, the utilization of openness capacity has not reached its maximum, and the development effect of openness and even the overall development effect are not maximized.

Secondly, although openness is not only warranted but also optimal, the development effect of openness does not achieve the best synergistic effect with the development effect of other ways, which may result in unsatisfactory effects of overall development.

Thirdly, openness is not warranted, that is, openness exceeds the scope that



maximum openness capacity can warrant, or excessive openness.

## II. Typical Case Analysis of Warranted Openness

### 1. Methods, variables and data

With “openness” as the center, if the reasons of openness are linked directly to the its effects, it will form such a causal chain:

Openness capacity → openness → development effect of openness.

Clearly, one of the manifestations in this process is “openness”, which is located at the center of the causal chain described above. The causal relationship between the first two of the chain shows that since the warrantedness of openness is guaranteed by openness capacity, then it can be evaluated based on openness capacity.

The causal relationship between the latter two of the chain shows that since openness will form a development effect, then the warrantedness of openness and whether it is optimal can be evaluated based on the effect.

From the perspective of methodology, the warrantedness of openness can be defined and measured either from the development effect of openness or from the determinants of openness capacity on openness. However, in both theory and practice, as the determining force of openness, the connotation of openness capacity is easy to define, but its extension is difficult to define and measure. Similarly, the determining forces of development effect are also diverse, and openness is only one of them. It is also difficult to accurately identify the development effect of openness from it.

In the following part, this chapter attempts to directly link openness and development effect, preliminarily explore the closeness of this relationship, and make a concise and intuitive judgment on the “warrantedness” of openness, in order to form a complementary causality study between them.

As mentioned above, development is reflected by “total growth and structural transformation” on the macro level, and “increased individual behavioral choices, growing ability and improved well-being” on the micro level. Therefore, this chapter applies “development index” to measure the performance of development.<sup>①</sup>

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① The composite index method has a defect, that is, the development index of each year cannot reflect the dynamic effect between economic variables across years.

**Table 2.1** Basic indicators of development index

	Indicators	Specification	Data sources	Weighting
1	Real GDP growth rate	Measuring real economic growth rate of the previous year in the reporting year.	<i>International Financial Statistics</i> , IMF	0.5
2	Gini coefficient of income, YOY change	Income Gini coefficient measures income distribution among individuals or households within an economy, and in some economies it is a gauge of consumption distribution.	<i>World Development Indicators</i> , World Bank	0.3
3	Human development index (HDI), YOY change	Measuring individual choice opportunity, ability and will-being level in an average sense. <sup>①</sup>	UNDP <sup>②</sup>	0.2

Development index is the weighted composite value of YOY changes of the following three basic indicators: real GDP growth rate; Gini coefficient of income (the difference in income distribution between households or individuals); Human Development Index (HDI). See Table 2.1 for definitions, specifications and data sources of each indicator. There are also upgraded versions of the HDI sub-indices adjusted for their respective distribution gaps. The upgraded HDI version based on the weighting of these adjusted subdivision indicators can replace the weighting of income Gini coefficient and HDI, but its data time series is limited to 2010-2019, which does not meet the requirements for calculating development index as above.

When creating development index, the weight of its basic indicators is as follows: the weight of real GDP growth rate is 0.5, the weight of income Gini coefficient is 0.3, and the weight of HDI is 0.2. Before weighting, the dimensions of these three basic indicators were all unified as 0-100, among which the income Gini coefficient and the HDI were already between 0-100, and the real GDP growth rate was converted to the value between 0 and 100 with 100 as the benchmark in 2008. The principle of weight determination embodies the following understandings of development.

Firstly, growth is the basis and key to solving all problems, including structural evolution and changes in individual choice opportunities, well-being and abilities.

① The HDI is the weighted mean of three sub-indicators: life expectancy index (based on life expectancy at birth); education index (based on two indicators: average years of schooling for people aged above 25 years old and expected years of schooling for school-age children); gross national income index (based on GNI per capita ppp\$).

② <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>.

Secondly, the income structure is one of the most important among many structures, which is mainly determined by production structure, especially production input structure, and determines consumption structure. The structure of production is more fundamental to development than the structure of income, but it is difficult to measure because many economies lack consistent and long-term subdivision data. As a measure of individual well-being structure, consumption structure is more suitable than production structure and income structure, but its basic data are not easy to obtain in most economies, and even are greatly affected by the development of consumption finance in some economies.

Thirdly, human development is not only the source of economic development, but also the result of economic development. In order to reduce the circular causal effect between HDI and GDP growth rate and income Gini coefficient, the weight of HDI is set by this paper the lowest among the three indicators.

Of course, even based on these three points of understanding, the weight distribution of the three indicators can still choose other schemes for which readers can have a try.

Because the basic data of some indicators in the sample period are not complete, the development index values of some countries are not available in some sample years, among which all development index series values of Russia and Saudi Arabia are not available.

As for the relationship between openness and development, this paper adopts an indirect evaluation method, taking development as the “result” and “openness” as the cause, and applies ordinary least squares (OLS) to estimate the effect of openness on development. The alternative method is, with openness capacity as the “cause” and openness as the “result”, apply corresponding econometric methods to estimate the determining effect of openness capacity on openness, but the measurement of “openness capacity” also faces a higher difficulty. The common deficiency of these two methods is that the relationship between openness and development has not been fully elucidated by scientific and rigorous professional theoretical models<sup>①</sup>, resulting in the

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① The relationship between the openness in specific field and the development in specific term has been elucidated by some professional theoretical models, such as “trade-growth” theory and “direct investment-growth” theory, but it is still necessary to further integrate economic (including trade, investment, finance), social and cultural openness, and set up the theoretical models on interactive relationships between these openness and development ( such as growth, structure transformation, increased individual ability and well-being improvement).

causal relationship identified by the aforementioned empirical method may not be the causal relationship elucidated by the theoretical model.

## 2. Judgment of openness warrantedness

Table 2.2 shows the results of the econometric analysis based on the “openness-development” relationship of the 17 G20 members from 2008 to 2020. The econometric estimation takes into consideration two scenarios: (1) country heterogeneity is not considered; (2) country heterogeneity is considered. The results of the former are given in the first column of the upper panel of the table, and the results of the latter are given in the lower panel of the table.

**Table 2.2 Econometric estimates of the “openness-development” link for 17 G20 countries, 2008-2020**

	Openness significantly promotes development									Openness may drag foot on development
	17 members	UK	France	Germany	China	Mexico	Australia	India	South Korea	US
Openness	0.5124*** (6.58)	6.9454*** (2.46)	6.4932*** (7.03)	5.7774*** (6.02)	4.2446*** (11.80)	4.096*** (2.20)	3.4549*** (9.51)	3.4119*** (8.02)	1.6732*** (14.55)	-0.8524*** (-14.11)
Constant term	0.3726 (6.51)	-4.808 (-2.11)	-4.3045 (5.93)	-4.0118 (-5.02)	-2.3664 (-9.21)	-2.2139 (1.66)	-1.8362 (-6.66)	-1.6221 (-6.01)	-0.4378 (-5.23)	1.4982 (29.13)
Sample number	178	10	11	11	12	13	11	4	9	12
R <sup>2</sup>	0.1974	0.4311	0.8471	0.8008	0.933	0.3065	0.9095	0.9708	0.9678	0.9522
F	43.29	6.03	49.46	36.2	139.24	4.86	90.37	64.26	211.77	199
	Openness does not significantly affect development									
	Canada	Brazil	Turkey	Japan	South Africa	Indonesia	Argentina	Italy		
Openness	6.7852 (1.80)	-0.8682 (1.36)	-0.8241 (-0.25)	-0.9050 (-0.47)	-2.8403 (-0.58)	-2.6999 (-0.68)	-0.7518 (-0.76)	-2.0181 (-1.09)		
Constant term	-4.5546 (-1.53)	1.3053 (3.15)	1.2385 (0.56)	1.5029 (1.00)	2.4488 (0.79)	2.4840 (0.94)	1.2853 (1.97)	2.3512 (1.65)		
Sample size	10	13	12	6	7	13	13	11		
R <sup>2</sup>	0.2873	0.1442	0.006	0.0513	0.0625	0.0402	0.0500	0.1165		
F	3.23	1.85	0.06	0.22	0.33	0.46	0.58	1.19		

Notes: \*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.01. In parentheses is the t-statistics.

Econometric analysis based on sample data reveals that openness has a significant impact on development. Taking development index as dependent variable, openness as independent variable, and the practice of 17 G20 member countries from 1980 to 2020 as the sample (except for Russia and Saudi Arabia which lacks of development data), and using ordinary least squares (OLS) and STATA software, we can get parameter estimation results as shown in Table 2.2. The analysis based on these results is as follows.

From 2008 to 2020, the results without considering country heterogeneity show that a one percentage increase in openness increases the development index by 0.512 percentage (see Column 2 in the upper panel of Table 2.2). After taking account of country heterogeneity, openness does not necessarily have a significant impact on the development of all countries. In nine countries the opening-up has significantly affected their own development, while the opening-up in the other eight countries has not significantly affected their development.

—There are eight countries where openness promotes their development. The following eight countries (in a “from big to small” order in terms of influence) whose openness has significantly boosted their development: UK, France, Germany, China, Mexico, Australia, India and South Korea.

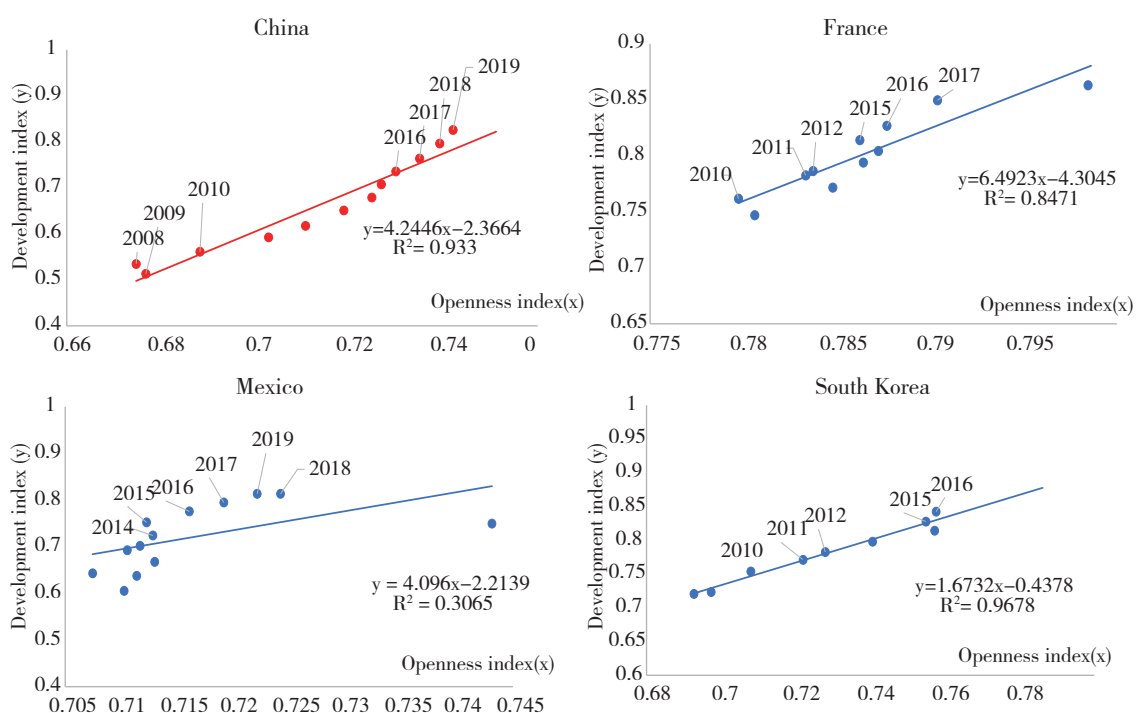
—There are eight countries where the relationship between openness and development is not statistically significant. As shown in the lower half of Tables 2-2, the impact of openness on development is insignificant in Canada, Brazil, Turkey, Japan, South Africa, Indonesia, Argentina, and Italy.

For the eight above-mentioned economies where openness has considerably promoted their development, the value of their development index can be fitted well based on above econometric results. If the actual development index is greater than the fitted development index, then corresponding openness is considered to have higher warrantedness, and the corresponding year is a year with a higher level of warranted openness. Based on this criteria, the annual statistics of openness warrantedness for the eight G20 countries in the sample period are shown in Table 2.3.

**Table 2.3** Years of higher warranted openness for the eight G20 countries, 2008-2020  
(Only for years with available development index data, in a descending order in the proportion of years with warranted openness)

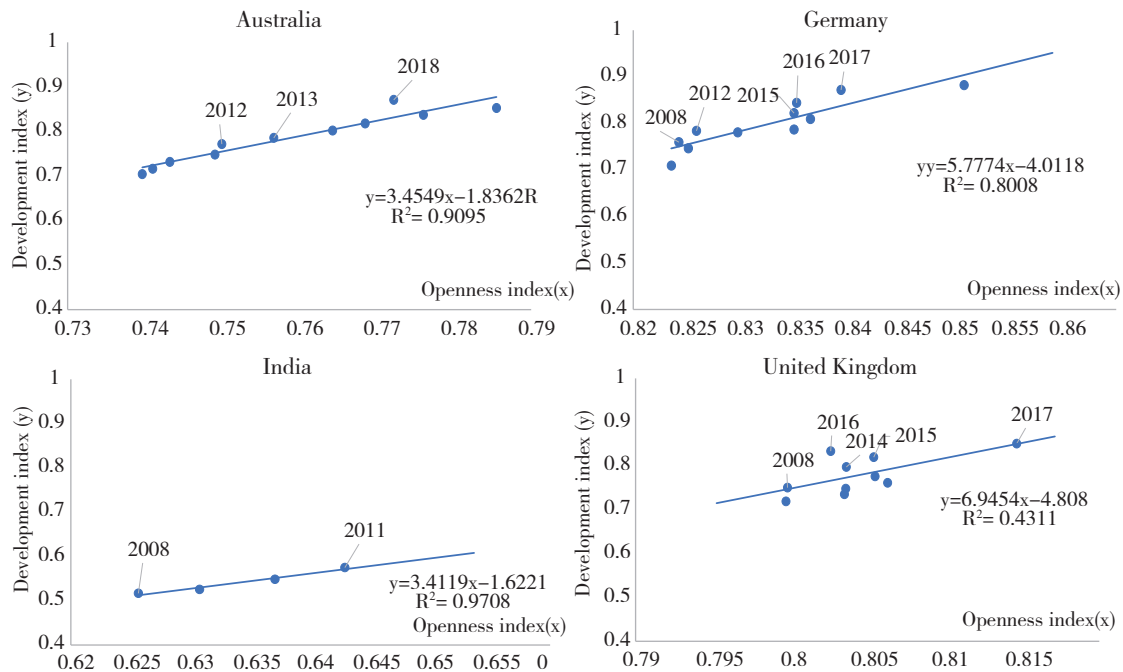
No		Years of warranted openness	Total (years)	Development index time series	Total (years)	Percent of years with warranted openness
1	China	2008-2010、2016-2019	7	2008-2019	12	58.3
2	South Korea	2010-2012、2015-2016	5	2008-2016	9	55.6
3	France	2010-2012、2015-2017	6	2008-2018	11	54.5
4	Mexico	2013-2019	7	2008-2020	13	53.8
5	India	2008、2011	2	2008-2011	4	50.0
6	UK	2008、2014-2017	5	2008-2017	10	50.0
7	Germany	2008、2012、2015-2017	5	2008-2018	11	45.5
8	Australia	2012、2013、2018	3	2008-2018	11	27.3

As shown by Table 2.3, during the sample period, among the years with available development index value, China has the highest proportion of the years with high-level warranted openness (58.3%), followed by South Korea (55.6%) and France (54.5%), then by Mexico (53.8%), India (50%), the UK (50%), Germany (45.5%) and Australia (27.3%). As shown in Fig. 2.2, the years of warranted openness at a higher level for China, South Korea, France, and Mexico are marked.



**Fig. 2.2** Years of higher-level warranted openness for China, France, Mexico and South Korea, 2008-2020

The years of higher-level warranted openness for India, the UK, Germany and Australia are shown in Figures 2-3.



**Fig. 2.3** Years of higher-level warranted openness for Australia, Germany, India, and the United Kingdom, 2008-2020

### III. Conclusions and Policy Implications

So far, the evaluation of openness warrantedness is not a mature topic in theory, method and data. This paper tries to put forward some views on these aspects, in order to “throw a brick to attract jade”, looking forward to further discussions of readers from all walks of life. From discussions on warranted openness, this paper obtains the following conclusions and policy implications.

#### 1. Warranted openness is not difficult, but optimal openness is not easy

To judge whether specific openness is warranted, we only need to see whether openness capacity matching it exceeds the maximum of actual openness capacity. Any openness that does not exceed this maximum is warranted openness. To maximize the utilization of openness capacity, achieve maximum warranted openness, and then achieve equilibrium between openness supply and demand and optimal openness should be the policy goal of openness practice. But this requires the best “time”,

“place” and “people” conditions inside and outside an economy. No matter in theory or practice, it is difficult to achieve maximum warranted openness.

## **2. Cultivating openness capacity to improve warrantedness of openness**

What determines the warrantedness of openness is openness capacity, while the latter in turn depends on an economy’s innate and acquired endowments. Innate endowments, such as geographical location and natural resources, have strong exogeneity and are difficult to change in a short period. It often takes several generations to persevere and work for a long time to form some certain innate endowments. Acquired endowments, including population, production technology, labor quality, capital, system, culture, etc., should not only balance dynamic relationship between quantity increase and quality improvement of each of them, but also need to carefully plan organic combination of all of them, so as to provide a solid foundation for strong openness capacity. Among them, improving national governance, especially cross-border openness governance, is one of institutional prerequisites for maximizing openness capacity.

## **3. Openness must take development as fundamental guidance**

Openness is the means to achieve development, while the core of development is to put the people at the center. This makes it necessary not only to accelerate economic growth and make a bigger economic pie, but also to realize structural transformation, especially to optimize the structure of production and income, and to increase the opportunities for the majority of individuals to make behavioral choices, boost their main abilities and improve their material well-being.

When the development effect of an economy is not ideal, it may need to improve its development philosophy in time. Development philosophy is the forerunner of development actions that guides overall, fundamental, directional and long-term development, and the concentrated embodiment of development thinking, development direction and development priorities. Even if a country’s development philosophy is appropriate, it still needs to explore its own development path suited to its concrete conditions.



#### **4. Building a new cross-border openness landscape of mutual benefit and win-win result**

The core of warranted openness is the full and even maximum use of openness capacity of an economy. However, in an open world economic system, an economy's openness capacity is often affected by its open partner economies. Therefore, the openness of an economy should be coordinated with the openness of other economies in the world under the principle of mutual benefit and win-win results, so that they can both share the development benefits of opening-up and shoulder the responsibility for building openness capacity, to upgrade their warranted openness to an optimal level and build a community with a shared future for mankind.