



Study on the Improvement of Paying Taxes in China proposed by the Analysis of Paying Taxes in Korea and Japan

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Abstract

Purpose – The purpose of this study is to analyze the root causes of changes in the rankings of paying taxes in Japan and Korea from 2019 to 2020, and put forward relevant policy recommendations for China from the perspective of enterprise tax burden and tax compliance costs.

Research design, data, and methodology – This paper analyzes the data information of four indicators of Japan and Korea in paying taxes from 2009 to 2019, excel tool was used to summarize the essential reasons for the changes.

Result – The results showed that, through the reform of tax system, especially the application of electronic tax system for tax declaration, and this is the fundamental reason why Korea has surpassed Japan in the ranking of Paying Taxes in recent five years.

Conclusion – Drawing lessons from the reforms in South Korea and Japan, it is concluded that China should improve its tax ranking through two ways. First, deepen the reform of the main tax and fee system and reduce the burden of enterprise taxes and fees. Second, further simplify the tax procedures. Return rights and responsibilities to the enterprise.

Keywords: Paying Taxes; Tax environment; Optimization approach; Comparative analysis

JEL Classification Code: H21, H71, K34, E62.

1. Introduction

In the context of economic globalization, the doing business has been paid more and more attention by governments. In 2013, Japan's prime minister, Abe shin zo, proposed that "Japan should be among the top three developed countries by 2020 on the world bank's doing business rankings." But in fact, after 2013, Japan's doing business ranking basically declined year after year, but its paying taxes did not fall but rose. At the same time, South Korea's business environment and paying taxes ranking has climbed. In 'The Boao Forum for Asia Asian Competitiveness Annual Report 2019', Korea ranked first in Asia and Japan fourth, In 'Doing Business Records 2019', Korea ranked fourth and Japan 39, both rising in the rankings and the Once-Asian economic powerhouse Japan, which has fallen in recent years, the business environment, especially in paying taxes, of great value to mainland China. The doing business project provides objective measures of business regulations and their enforcement across 190 economies and selected cities at the subnational and regional level. The doing business project, launched in 2002, looks at domestic small and medium-size companies and measures the regulations applying to them through their life cycle (Paying Taxes Report 2019, World Bank & PwC, 2019). By gathering and analyzing comprehensive quantitative data to compare business regulation environments across economies and over time, doing business encourages economies to compete towards more efficient regulation; offers measurable benchmarks for reform; and serves as a resource for academics, journalists, private sector researchers and others interested in the business climate of each economy (Qin, 2017).

In addition, doing business offers detailed subnational studies, which exhaustively cover business regulation and reform in different cities and regions within a nation. These studies provide data on the ease of doing business, rank each location, and recommend reforms to improve performance in each of the indicator areas. Selected cities can compare their business regulations with other cities in the economy or region and with the 190 economies that doing business has ranked (Doing Business Report 2019, World Bank). The first doing business study, published in 2003, covered 5 indicator sets and 133 economies (Cai & Liu, 2018). This year's study covers 11 indicator sets and 190 economies. Ten of these areas—starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency—are included in the ease of doing business score and ease of doing business ranking. Most indicator sets refer to a case scenario in the largest business city of each economy, except for 11 economies that have a population of more than 100 million as of 2013 (Bangladesh, Brazil, China, India, Indonesia, Japan, Mexico, Nigeria, Pakistan, the Russian Federation and the United States) where doing business, also collected data for the second largest business city. The data for these 11 economies is a population-weighted average for the 2 largest business cities. The project has benefited from feedback from governments, academics, practitioners and reviewers. The initial goal remains: to provide an objective basis for understanding and improving the regulatory environment for business around the world (Kim, 2019).

Doing business records the taxes and mandatory contributions that a medium-size company must pay in a given year as well as measures of the administrative burden of paying taxes and contributions and complying with post-filing procedures. The project was developed and implemented in cooperation with PwC. Taxes and contributions measured include the profit or corporate income tax, social contributions and labor taxes paid by the employer, property taxes, property transfer taxes, dividend tax, capital gains tax, financial transactions tax, waste collection taxes, vehicle and road taxes, and any other small taxes or fees. This is paying taxes (Lin & Yang, 2018). Paying taxes is a report jointly published by the World Bank Group and PwC. The World Bank Group takes charge of the methodology, while PwC (including China) is one of the contributors involved in data collection for around 150 of the 190 economies covered in the Report (Seo & Moon, 2014). Paying Taxes, an annual study from PwC and the World Bank Group, helps governments and businesses understand how their tax systems compare on the global stage and helps tax administrations learn from what others are doing.

With 15 years of data and comparative analysis on the tax systems in 190 economies, paying taxes lets you see the impact of digital innovation around the world (Luo, 2017). Learn what technologies are currently available for tax compliance, how they're being implemented and the ways in which you can use them to reduce administrative burdens. See what other economies are doing to improve the neutrality of their VAT systems by enhancing the process of VAT refunds. Dive deeper into the most prominent tax policy shifts and tax policy issues (Paying Taxes Report 2019, World Bank & PwC, 2019).

The ranking of economies on the ease of paying taxes is determined by sorting their scores for paying taxes. These scores are the simple average of the scores for each of the component indicators, with a threshold and a nonlinear transformation applied to one of the component indicators, the total tax and contribution rate. The threshold is defined as the total tax and contribution rate at the 15th percentile of the overall distribution for all years included in the analysis up to and including doing business 2015, which is 26.1%. All economies with a total tax and contribution

rate below this threshold receive the same score as the economy at the threshold. paying taxes uses four indicators to measure the ease of paying taxes, i.e. the number of payments, the time to comply, Total Tax and Contribution Rate, and post-filing index (Cai & Liu, 2018).

Tax payments, the tax payments indicator reflects the total number of taxes and contributions paid, the method of payment, the frequency of payment, the frequency of filing and the number of agencies involved for the standardized case study company during the second year of operation. It includes taxes withheld by the company, such as sales tax, VAT and employee-borne labor taxes (Paying Taxes Report 2019, World Bank & PwC, 2019). These taxes are traditionally collected by the company from the consumer or employee on behalf of the tax agencies. Although they do not affect the income statements of the company, they add to the administrative burden of complying with the tax system and so are included in the tax payments measure (Luo, 2017). The number of payments takes into account electronic filing. Where full electronic filing and payment is allowed and it is used by the majority of medium-size businesses, the tax is counted as paid once a year even if filings and payments are more frequent. For payments made through third parties, such as tax on interest paid by a financial institution or fuel tax paid by a fuel distributor, only one payment is included even if payments are more frequent (Paying Taxes Report 2019, World Bank & PwC, 2019). Where two or more taxes or contributions are filed for and paid jointly using the same form, each of these joint payments is counted once. For example, if mandatory health insurance contributions and mandatory pension contributions are filed for and paid together, only one of these contributions would be included in the number of payments.

Time is recorded in hours per year. The indicator measures the time taken to prepare, file and pay three major types of taxes and contributions: the corporate income tax, value added or sales tax, and labor taxes, including payroll taxes and social contributions. Preparation time includes the time to collect all information necessary to compute the tax payable and to calculate the amount payable (Paying Taxes Report 2019, World Bank & PwC, 2019). If separate accounting books must be kept for tax purposes -or separate calculations made- the time associated with these processes is included. This extra time is included only if the regular accounting work is not enough to fulfill the tax accounting requirements. Filing time includes the time to complete all necessary tax return forms and file the relevant returns at the tax authority. Payment time considers the hours needed to make the payment online or in person. Where taxes and contributions are paid in person, the time includes delays while waiting (Cai & Liu, 2018).

Total tax and contribution rate, the total tax and contribution rate is designed to provide a comprehensive measure of the cost of all the taxes a business bears (Doing Business Report 2019, World Bank). It differs from the statutory tax rate, which merely provides the factor to be applied to the tax base. In computing the total tax and contribution rate, the actual tax or contribution payable is divided by commercial profit. Data for Iraq are provided as an example (Table 1). Commercial profit is essentially net profit before all taxes and contributions borne. It differs from the conventional profit before tax, reported in financial statements. In computing profit before tax, many of the taxes borne by a firm are deductible. In computing commercial profit, these taxes are not deductible. Commercial profit therefore presents a clear picture of the actual profit of a business before any of the taxes it bears in the course of the fiscal year (Luo, 2017).

Post-filing index, the post-filing index is based on four components -time to comply with VAT refund, time to obtain VAT refund, time to comply with a corporate income tax correction and time to complete a corporate income tax correction. If both VAT and corporate income tax apply, the post-filing index is the simple average of the scores for each of the four components. If only VAT or corporate income tax applies, the post-filing index is the simple average of the scores for only the two components pertaining to the applicable tax. If neither VAT nor corporate income tax applies, the post-filing index is not included in the ranking of the ease of paying taxes (Cai & Liu, 2018).

Because the paying taxes' ranking these four indicators. So, the purpose of this study is to analyze the root causes of changes in the rankings of paying taxes in Japan and Korea from 2019 to 2020, and sum up the internal reasons behind the change of ranking through the trend of change. From the point of view of enterprise tax burden and tax cost, this paper puts forward policy suggestions for optimizing China's Paying Taxes.

2. Previous research

A system in the sense of economics," is a series of rules to be dealt with, compliance with procedures and moral, ethical norms of conduct" (Qin, 2017). The business environment refers to the sum of the elements of the whole process of the enterprise from start-up, operation to end and so on. It is a series of institutional arrangements (World Bank, 2004; Adrian, & Robert, 2015) that affect the operation of the enterprise, while the tax business environment is the sum of a series of institutional arrangements, such as tax laws, policies, rules, supervision (Paying Taxes Report 2019, World Bank & PwC, 2019), that affect the enterprise (Luo, 2017). The term "environment" is derived from

geography and ecology and is meant to be "the conditions and conditions surrounding it". Gauss (Luo, 2017) first put forward the idea of studying the phenomenon of public administration by ecological method in his book *Government Ecology*. As an inseparable part of the government ecological administration system, the study of "tax environment" has gradually aroused the interest of the theoretical circle. Choudongfang (Cai & Liu, 2018) considers that the tax environment refers to the scope of activities involved in tax work, including the internal environment (awareness of the rule of law in tax departments, compliance with tax laws, standards and measures of law enforcement, and the quality of the tax force itself) And the external environment (the tax consciousness of citizens and corporate persons, the construction of national rule of law, the social and economic situation, and the importance and cooperation of the government and various departments to tax). Qiaojiahua (Qin, 2017) believe that the tax environment is affected by the political system, economic operation, history, tradition, thought, culture and other external factors, which affect the emergence and function of the tax system. Studies have shown that a good tax business environment contributes to coordinated tax and economic growth, which can be achieved through at least three channels: one is to promote tax compliance. The improvement of tax business environment, including reducing the gap between actual tax burden and nominal tax burden (Qin, 2017), standardizing the collection and management process (Luo, 2017), is conducive to reducing the cost of collection and management, and promoting the voluntary compliance of taxpayers (Cai & Liu, 2018).

Attract elements to gather. Yes, Element agglomeration is conducive to the formation of economies of scale, and then promote the increase in output (Adrian, & Robert, 2015). Research shows that, since 2004, the number of reforms in the "tax" sector has been second only to the "simplified start-up procedures" sector, Second place, Optimizing the tax business environment has become a key indicator (World Bank: for global economies to improve the business environment and attract agglomeration of factors 2017). Third, the formation of healthy regional competition. The advantages and disadvantages of the tax business environment, are not only an important reference for the global investment layout of enterprises (Qin, 2017). Also, can encourage the government to speed up reform, promote regional improvement of tax business environment to form a healthy competition (Lin & Yang, 2018). However, Since the World Bank (2006) released the Tax Business Environment Study, there is little research on the special perspective and topic of "tax business environment" in China, A few scholars, such as (Adrian & Robert, 2015), Wangshaole (Lin & Yang, 2018), Weishengming (Qin, 2017), have carried out exploratory research. Based on the data paying taxes Japan and Korea, by comparing the changes in the business environment and paying taxes rankings between the two countries between 2006 and 2019, Analyze the reasons, so as to provide reference for the construction of Chinese paying taxes.

3. Research method

3.1. Methods of Comparative Analysis

Methods of Comparative Analysis: Comparative research, simply put, is the act of comparing two or more things with a view to discovering something about one or all of the things being compared. The general method of comparing things is the same for comparative research as it is in our everyday practice of comparison (Bao, Xiao & Hong, 2018). There are several methods of doing comparative analysis and (Tilly & Fergani, 2016). Distinguishes four types of comparative analysis namely: individualizing, universalizing, variation-finding and encompassing (Bao & Hong, 2018).

Comparison lies at the heart of human reasoning and is always there in the observation of the world - "thinking without comparison is unthinkable" (Greenblatt, 2017). Indeed, even the observation of singular phenomena is empty if we do not engage in a comparison: A phenomenon or object can be identified as such only if it is recognized as different from other phenomena or objects (Greenblatt, 2017). For instance, we know that apples are not pears because we have compared the two. More specifically, comparison is a key operation in any empirical scientific effort. There is a long line of scholars who have reflected upon this -and applied this empirically- all the way from Aristotle (probably the founder of a rigorous comparative approach) to de Tocqueville, Weber and Durkheim, and on to more contemporary works by Sartori (Bao, Xiao & Hong, 2018), Lajpat (Tilly & Fergani, 2016) and Marradi (Greenblatt, 2017). For one thing, any descriptive effort, any typology or classification involves comparison (Bao & Hong, 2018). To consider both apples and pears as this article analyzes the paying taxes report like t analyzes he financial statements, the comparative analysis method is applied to the analysis of paying taxes report in Japan and Korea (Greenblatt, 2017).

3.2. Horizontal comparative analysis

Horizontal comparative analysis is the comparison of two or more things in the same category or at the same level or two or more similar things. Comparison objects often have spatial connections (Gebremariam & Marchetti, 2018). A more hierarchical comparison method than the ordinary comparison method. The article compares the World Bank's 2006-2019 World Bank rankings between Japan and Korea in the Global doing business Report with two countries in the business environment and paying taxes ranking to find the year of reversal, using horizontal comparative analysis: the business environment ranking, which reversed in 2011, followed Japan's downward trend, and South Korea's gradual climb, while in paying taxes, South Korea's paying taxes ranking is converging with the business environment ranking, while Japan's business environment ranking declined in 2014 and in 2014 paying taxes does not rise but fall.

Find common ground according to the purpose of research, determine attributes anything has two attributes: unique attributes and occasional attributes (Tilly & Fergani, 2016).

Unique attributes are common attributes, that is, one thing and the same the same kind of things; occasional attributes are separate attributes, that is, a thing is owned alone. In the comparison of things, finding common ground between things and identifying the unique attributes of things are the basis of establishing classification.

Note the comparability of things. In comparative analysis, the standard of comparison between things must be unified, otherwise the comparison will lose validity. This paper does not carry out a comparative analysis of Chinese data in three countries. China's tax accounting system is different from other capitalist countries, so there is no comparability.

Be good at discovering and comparing nature. The so-called things are the same and different, in fact, are relatively existing. In comparative analysis, we should learn to grasp the essence of things, "similarities and differences in seeking".

3.3. Vertical comparative analysis

The vertical comparison method is different from the horizontal comparison method, which focuses on the method of comparing two or more things in different strata or different stages. The difference between comparison objects is usually in time and space, that is, before and after time and up and down the level, so the vertical comparison method is more suitable to compare the changes of the same object in different stages of development. The trend and characteristics of things are inferred by data differences. By comparing and analyzing whether there is an inherent mechanism between the business environment and paying taxes in Japan and Korea, this paper adopts the method of vertical comparative analysis, and the business environment in Japan in 2008 Years later, the paying taxes has been in a downward phase, but after 2014, the decline in the business environment in Japan began to ease in the next few years and was smoothed in 2016. Thus, the change of paying taxes will gradually benefit and business environment, indicating that the reform of tax structure will affect the overall business environment of a country to some extent.

3.4. Methodological application of this paper

In the stage of empirical analysis, this paper focuses on vertical comparative analysis, about the four indicators to measure of Japan and Korea are compared vertically to analyze the internal relations relationship between tax index and paying taxes ranking (Greenblatt, 2017).

Vertical comparative analysis of the number of taxes paid on Japan and Korea, mainly to assess the frequency of enterprises to declare and pay various types of taxes. Electronic declaration and tax payment services, regardless of the number of times, are determined as one. Through the vertical comparison and analysis of Japan, Korea total tax times, income tax times, labor tax times, other tax times, analysis of Japan, Korea in the degree of tax convenience benefits.

Longitudinal comparison of Japanese and Korean tax time, tax time in hours as a unit, a typical enterprise in a tax year, in the enterprise income tax, value-added tax, personal income tax and social insurance premiums, provident fund and other major taxes and fees on the preparation, declaration, payments of the time spent. Through the longitudinal comparison analysis Japan, Korea total tax time, income tax time, labor tax time, other tax time, analysis Japan, Korea in the tax time cost benefits.

Vertical comparison and analysis of the total tax rate and social payment rate total tax rate and social payment rate, to measure the typical enterprises to bear the enterprise income tax, social insurance premiums and other direct taxes and fees to the proportion of all commercial profits. In this paper, the total tax burden rate, income tax burden rate,

labor tax burden rate and other tax burden rates are compared to Japan and Korea, and the difference of tax burden between Japan and Korea is analyzed.

Vertical comparison of after-tax process refers to the time of obtaining VAT refund, the time of enterprise income tax declaration and audit completion, which reflects the overall tax environment of a country (region) in terms of efficiency.

4. Empirical analysis

Reasons for changes in doing business and paying taxes rankings by Japan and Korea. On the basis of the <Global Doing Business Report >2006-2019 data, I collate the doing business and paying taxes ranking of Japan and Korea in 2006-2019 as shown in Table 1:

Table 1: Doing Business and Paying Taxes Ranking of Japan and Korea in 2006-2019

Year	Japan		Korea	
	Doing Business Ranking	Paying Taxes Ranking	Doing Business Ranking	Paying Taxes Ranking
2006	10	—	27	—
2007	11	100	24	49
2008	12	105	28	105
2009	12	113	23	43
2010	15	116	19	50
2011	16	112	16	50
2012	6	120	20	40
2013	24	128	8	30
2014	28	140	7	25
2015	29	122	5	23
2016	34	122	4	28
2017	34	68	4	23
2018	34	70	5	23
2019	90	78	5	23

Source of data: World Bank Group, Doing business 2006-2019

EX: Doing business 2019, <http://www.doingbusiness.org/reports/global-reports/doing-business-2019>

Note to the data : The World Bank. Doing Business 2019: Training for Reform [EB/OL]. (2018-10-31) [2019-03-20]. The World Bank's 2019 Global Doing Business report for 2017/2018 records reforms taken between June 2, 2017 and June 1, 2018, reflected in the 2019 annual report. Others.

Figure 1 and Figure 2 show that Japan has been declining for doing business Ranking 2006-2019 years, while Korea began to turn in 2008, rising all the way, surpassing Japan in 2009, rising steadily; Since 2008, Japan's doing business Ranking has fallen for years, but paying taxes has risen after 2014, a move that this article argues is likely to be directly linked to Japan's economic downturn forcing the government to optimize its tax structure. Meanwhile, Korea's doing business Ranking and paying taxes rankings have been rising, and overall paying taxes over the period 2006-2018 is higher than Japan's, indicating that Korea has a better tax structure than Japan's. My paper holds that the promotion of Korean doing business Ranking is directly related to the superiority of paying taxes construction. Therefore, the comparative analysis of the reasons for the changes in the paying taxes Ranking of Japan and Korea has a good reference for China to improve the paying taxes structure and Doing Business Ranking. Hence, this paper focuses on the analysis of the paying taxes four indicator between Japan and Korea in 2009-2019. The data difference, the analysis causes the difference, obtains the optimization Chinese paying taxes key point (Luo, 2017).

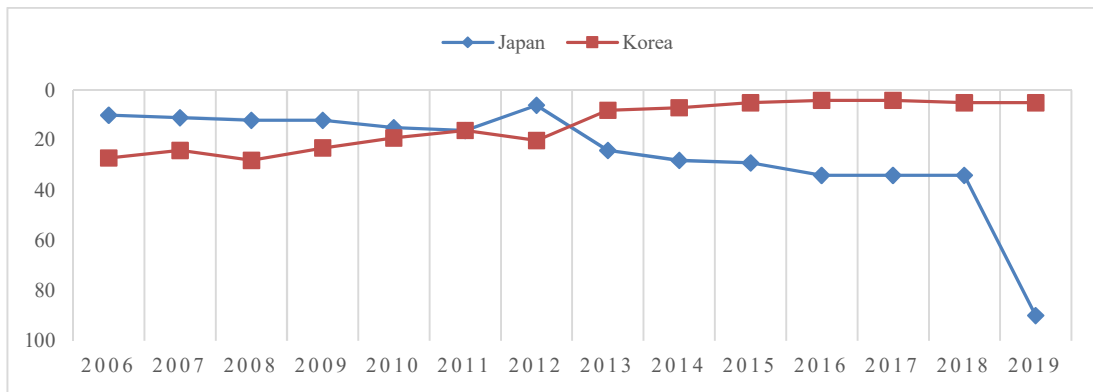


Figure 1: Japan & Korea Doing Business Ranking in 2006-2019

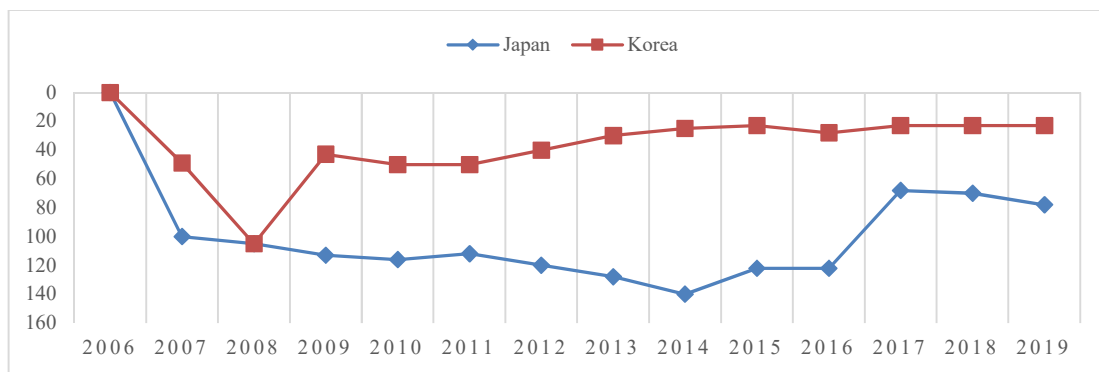


Figure 2: Japan & Korea Paying Taxes Ranking in 2006-2019

4.1. Comparative analysis of paying taxes indicators in Japan and Korea

Paying Taxes uses four indicators to measure the ease of paying taxes, i.e. the number of payments, the time to comply, Total Tax and Contribution Rate, and post-filing index.

This article synthesizes PwC and World Bank Group the joint release of the <Paying Taxes> 2009-2019 calendar year of four indicators data. Data from Korea and Japan were selected as samples individual comparative analysis of indicators. (Source of data: World Bank Group, Paying Taxes Report at 2009-2019)

The World Bank Group and PwC Global jointly hosted the global launch of Paying Taxes 2019 report.

Table 2: Korea Paying Taxes indicators 2009-2019

Year	Total Tax & Contribution Rate(TTCR)	Profit TTCR%	Labour TTCR%	Other Taxes TTCR%	Time to comply	Corporate income tax time(hours)	Labour tax time (hours)	Consumption tax time(hours)	Number of payments	Profit tax payments	Labour tax Payments	Other taxes payments
2009	33.9	18.8	12.8	2.3	250	120	80	50	15	1	3	11
2010	32.3	17.4	13.2	1.7	250	120	80	50	15	1	4	10
2011	30.2	15.6	12.9	1.7	250	120	80	50	15	1	4	10
2012	34.1	19.2	13.2	1.7	225	100	80	45	13	1	4	8
2013	34	19.2	13.4	1.4	207	94	74	39	11	1	2	8
2014	33.4	18.4	13.6	1.4	187	82	80	25	11	1	2	8

2015	33.2	18.2	13.6	1.4	187	82	80	25	11	1	2	8
2016	33.2	18.2	13.6	1.4	188	83	80	25	12	2	2	8
2017	33.1	18.2	13.6	1.3	188	83	80	25	12	2	2	8
2018	33.1	18.2	13.5	1.4	188	83	80	25	12	2	2	8
2019	33.3	18.2	13.7	1.4	174	75	80	19	12	2	2	8

TTCR: Total Tax and Contribution Rate, the total tax and contribution rate is designed to provide a comprehensive measure of the cost of all the taxes a business bears.

Table 3: Japan Paying Taxes indicators 2009-2019

Year	Total Tax & Contribution Rate (TTCR)	Profit TTCR%	Labour TTCR%	Other Taxes TTCR%	Time to comply	Corporate income tax time(hours)	Labour tax time (hours)	Consumption tax time(hours)	Number of payments	Profit tax payments	Labour tax Payments	Other taxes payments
2009	54.7	34.5	16.2	4	254	131	98	25	13	2	2	9
2010	54.2	33.7	16.5	4	254	131	98	25	12	2	2	8
2011	46.9	27.9	14.7	4.3	246	127	96	23	13	2	2	9
2012	47.8	26.9	16.5	4.4	221	102	96	23	13	2	2	9
2013	48.5	26.8	17.4	4.3	221	102	96	23	13	2	2	9
2014	48.8	26.6	18	4.2	221	102	96	23	13	2	2	9
2015	50.4	28	18.1	4.3	221	102	96	23	14	3	2	9
2016	50.4	28	18.2	4.2	204	87	94	23	14	3	2	9
2017	48.9	26.2	18.4	4.3	151	38	92	21	14	3	2	9
2018	47.4	24.6	18.5	4.3	151	38	92	21	14	3	2	9
2019	46.7	23.9	18.6	4.2	128.5	38	71	20	19	3	3	13

TTCR: Total Tax and Contribution Rate, the total tax and contribution rate is designed to provide a comprehensive measure of the cost of all the taxes a business bears.

4.2. Total tax and contribution rate comparative analysis

Total tax and contribution rate, the total tax and contribution rate is designed to provide a comprehensive measure of the cost of all the taxes a business bears. The construction of a good paying taxes cannot be separated from appropriate total tax and contribution rate, appropriate mitigation of the total tax and contribution rate, of enterprises in the economic crisis, is a substantive support. Note here that the relationship between total tax and contribution rate and paying taxes rankings is: The higher the total tax and contribution rate, the better the paying taxes ranking (Luo, 2017).

The lower the index, the higher the tax convenience, so the lower the index number, the better, the downward trend represents optimization. Through the Figure3-6, it is not difficult to see that the total tax and contribution rate between Japan and Korea did not fluctuate greatly between 2009 and 2019, and the overall situation was stable. Korea's total

tax and contribution rate and three taxes are all lower than Japan's, which is the main factor in Korea's paying taxes ranking. On specific tax indicators, Japan's Profit TTCR% is higher than Korea's, with the largest rate difference between the two countries in 2009, 15.7% (34.5-18.8%) higher than Korea in 2009, followed by a decline in Profit TTCR% between the two countries until 2013, basically stable, but more stable than Korea's Profit TTCR%; Labour TTCR% Japan is also higher than Korea, and has been rising since 2011, and Korea's Labour TTCR% has been stable; Other Taxes TTCR%, Japan as a whole is also higher than Korea, but Other Taxes TTCR%, Japan and Korea in the study year in a stable state. The above analysis, there are two points worthy of our attention, one is that low Total tax and contribution rate is the key to improve paying taxes, but stable Total tax and contribution rate cannot be ignored.

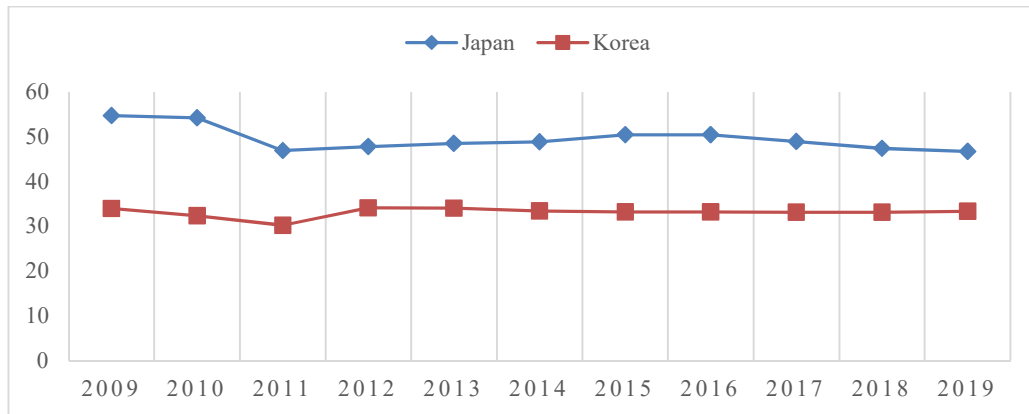


Figure 3: Total Tax & Contribution Rate

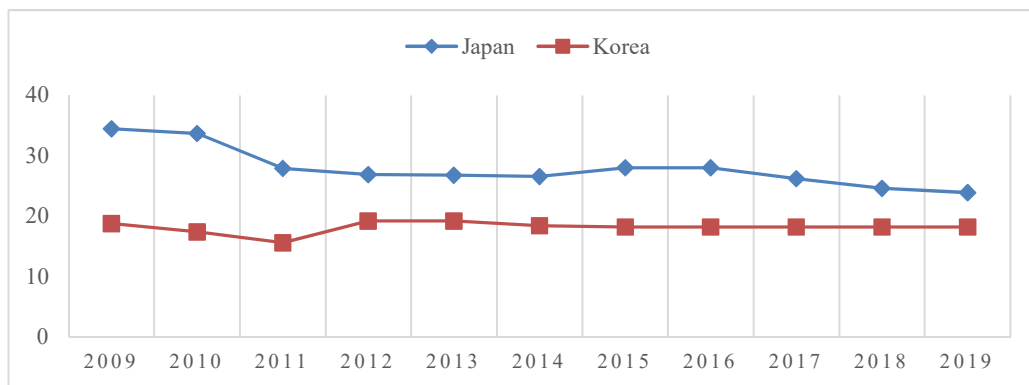


Figure 4: Profit TTCR%

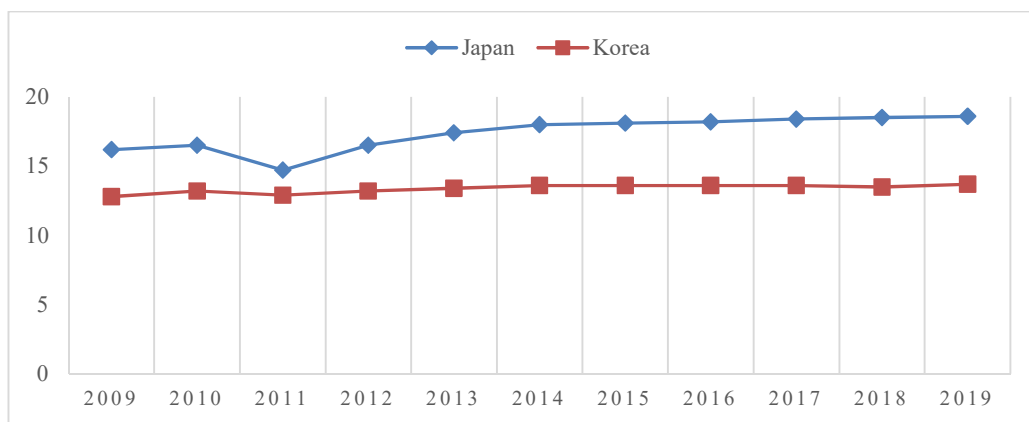


Figure 5: Labour TTCR%

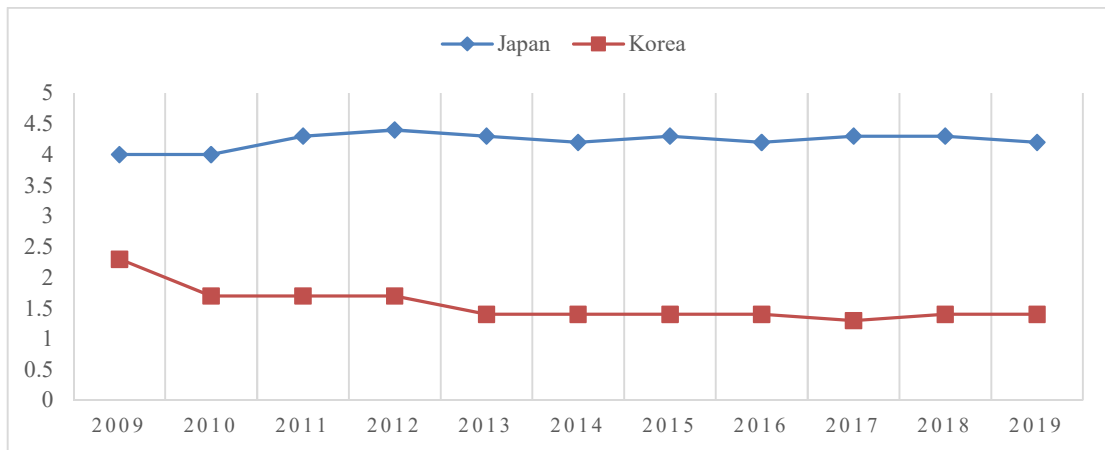


Figure 6: Other Taxes TTCR%

4.3. The number of payments comparative analysis

The number of payments takes into account electronic filing. Where full electronic filing and payment is allowed and it is used by the majority of medium-size businesses, the tax is counted as paid once a year even if filings and payments are more frequent. The theory of transaction cost expresses the motive of system optimization as: the whole social system has the motive force to pursue low operating cost (Gebremariam & Marchetti, 2018). Generally speaking, enterprises want to do things easily, taxes and fees light; the government wants to facilitate the organization of income and effective provision of public goods; people look forward to living and working (Cai & Liu, 2018). But the enterprise tax payment frequency is too high, directly causes the enterprise tax payment cost to be too high, this suppresses the paying taxes. Fewer taxes, lower tax costs, higher tax convenience, better paying taxes ranking.

The lower the index, the higher the tax convenience, so the lower the index number, the better, the downward trend represents optimization.

Figure7-10 : Overall, the number of payments, Japan and Korea reversed their data in 2012, followed by a steady level, with Japan showing an upward trend in 2018; In Profit tax payments, Japan was more frequent than Korea and the trend was similar. Labour tax Payments data show that Japan was better than Korea before 2013, but after 2013, the two countries overlapped. Other taxes payments data show that the trend is very similar between this two countries. As can be seen, Korea and Japan are very similar in number of payments, both out of a very good state, but Korea's future trend is better than Japan.

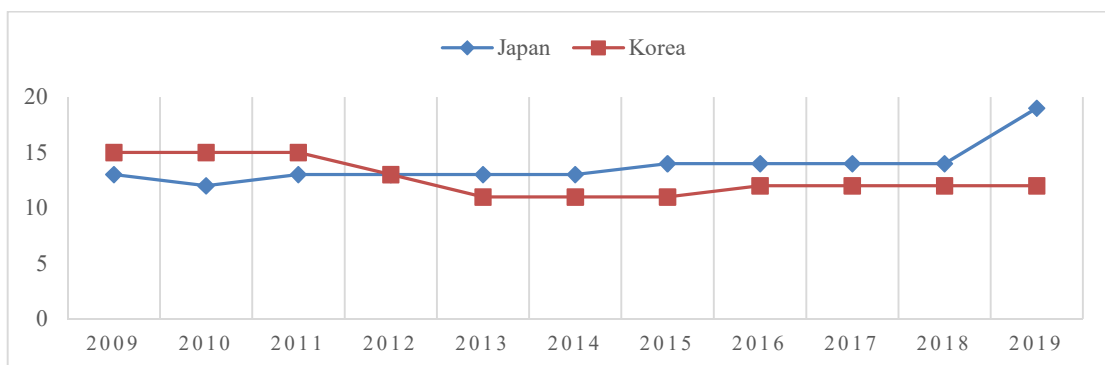


Figure 7: Number of payments

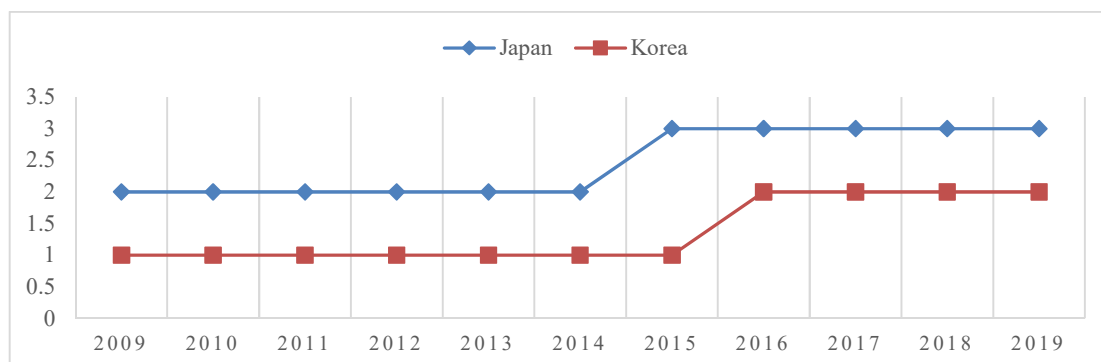


Figure 8: Profit tax payments

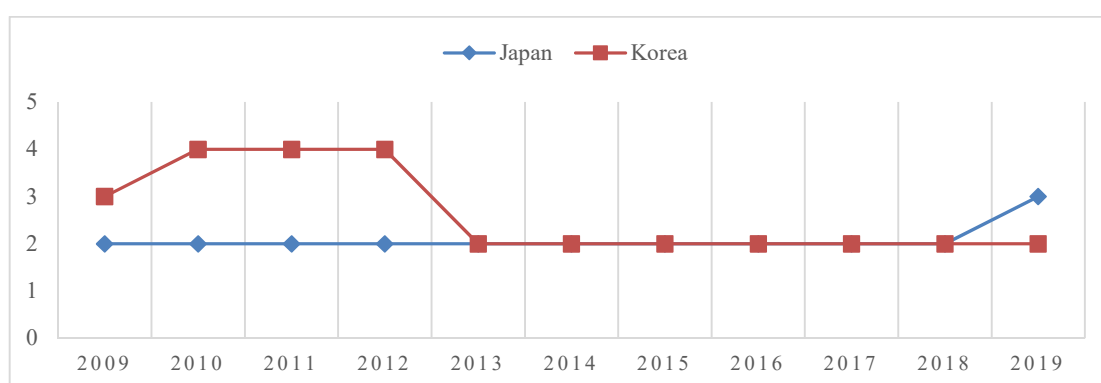


Figure 9: Labour tax Payments

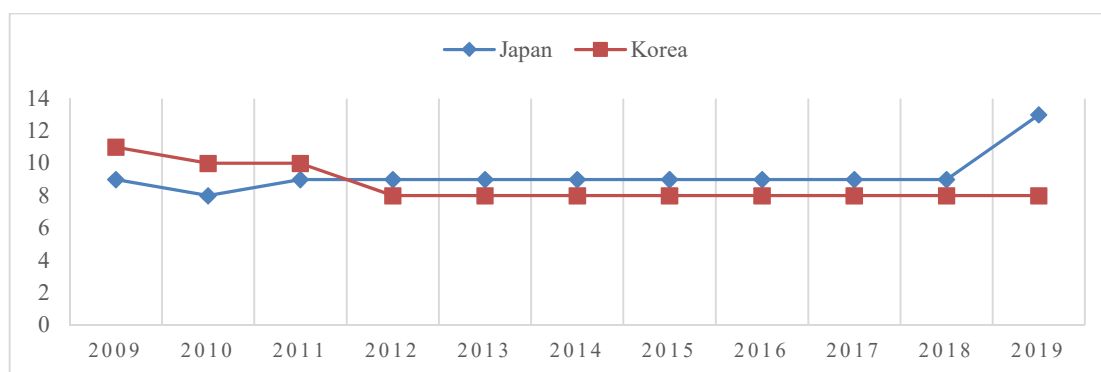


Figure 10: Other taxes payments

4.4. Time to comply comparative analysis

Time, Time is recorded in hours per year. The indicator measures the time taken to prepare, file and pay three major types of taxes and contributions: the corporate income tax, value added or sales tax, and labor taxes, including payroll taxes and social contributions. Preparation time includes the time to collect all information necessary to compute the tax payable and to calculate the amount payable.

In economy and society, time is money. The problem of enterprise tax payment time and enterprise tax payment times is the efficiency and convenience of tax payment, the simplification of tax compliance procedure and the simplification and convenience of tax payment. Through the measures of reducing the tax category, improving the tax refund procedure of VAT, improving the tax audit and the procedure of enterprise income tax correction and declaration, the time of tax payment by taxpayers is greatly reduced, thus reducing the cost of tax compliance and reducing the burden on enterprises.

The lower the index, the higher the tax convenience, so the lower the index number, the better, the downward trend represents optimization. Figure 11-14 : overall, Japan and South Korea's "Time to comply" overall shows a downward trend year by year, South Korea is relatively stable compared with Japan, Japan has a significant decline in 2015, by 2019, Japan's "Time to comply" fell to 128.5 hours, South Korea's 2019 "Time to comply" is 174 hours, the future trend of Japanese data continues to decline; Corporate income tax time : Japan and South Korea Corporate income tax time overall showed a downward trend, and Japan's Corporate income tax time was slightly higher than South Korea in 2009-2015, but after 2016, Japan's Corporate income tax time began to decline ,2016-2019 began to fall lower than South Korea, and was in a stable trend after 2017; Labour tax time between 2009-2018, Japan's Labour tax time are higher than South Korea, knowing that after 2018, Japan's Labour tax time fell, starting to fall below South Korea in 2019, and continues to decline; Consumption tax time, overall, South Korea's Consumption tax time are higher than Japan's, especially in 2009-2014, South Korea's Consumption tax time has been on a downward trend. By 2019, the data fell to almost the same as Japan

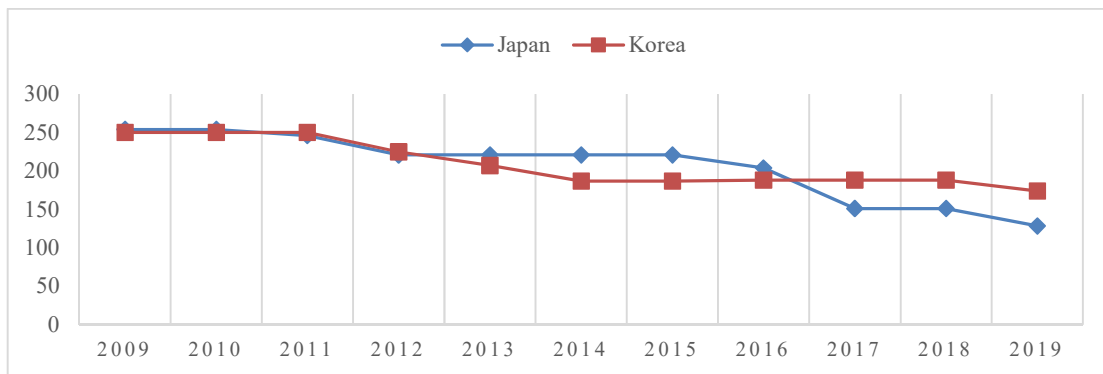


Figure 11: Time to comply

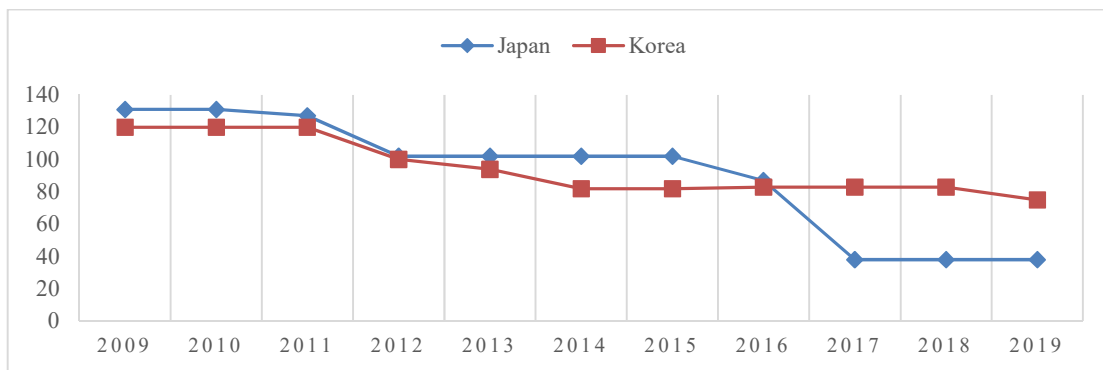


Figure 12: Corporate income tax time (hours)

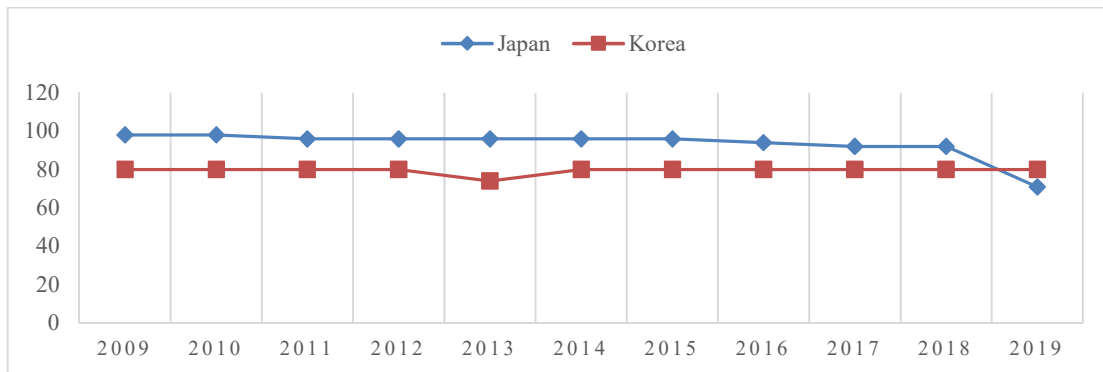


Figure 13: Labour tax time (hours)

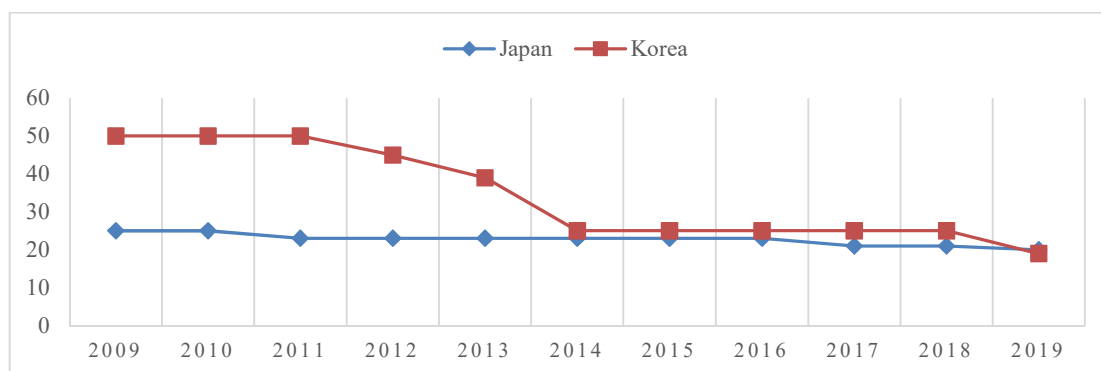


Figure 14: Consumption tax time (hours)

4.5. Post-filing index comparative analysis

The post-filing index is based on four components-time to comply with VAT refund, time to obtain VAT refund, time to comply with a corporate income tax correction and time to complete a corporate income tax correction. In efficiency reflects a country (region) overall tax environment.

Table 4: The post-filing index for 2019 of Japan & Korea & World average

2019	Economy/region (PFI score)	Time to comply with a VAT refund (hours)	Time to obtain a VAT refund (weeks)	Time to comply with a corporate income tax correction (hours)	Time to complete a corporate income tax correction (weeks)
Japan	95.2	1	10.8	3	Review likelihood < 25%
Korea	93.9	0	8.6	9	Review likelihood < 25%
World average	59.51	18.4	27.3	14.6	25.5

Post-filing index data for 2019 show that overall Post-filing index in South Korea and Japan are higher than in World average. Economy/region.

Time to comply with a VAT refund, World average is 18.4hours,Japan is 1hours, And Korea has already done so "as soon as it pays", 0hours; Time to obtain a VAT refund (weeks), World average is 27.3 weeks, Japan is 10.8 weeks, Korea is 8.6 weeks; Time to comply with a corporate income tax correction (hours), World average is 9hours,Japan is 3hours, Korea is 9hours; Time to complete a corporate income tax correction, Japan and Korea are below the world average.

According to the above data, the post-filing efficiency of South Korea and Japan is very high, which is of great significance to China.

5. Conclusions and Discussions

The empirical analysis of the above data shows that The empirical analysis of the above data shows that the average Total Tax & Contribution Rate The empirical analysis of the above data shows that Japan is 20% higher than that of Korea, and the burden rate of Profit Tax, Labour Tax and Other Taxes is also significantly higher than that of South Korea. Enterprise Total Tax & Contribution Rate is an important factor affecting a country's tax business environment. It is for this reason that Japan's tax business environment lags behind Korea. Horizontal comparison shows that Japan had lowered the corporate income tax rate in 2018, when Japan's tax business environment rose to 70 in 2015, thus improving the tax business environment by reducing the tax burden on enterprises.

Another important factor affecting a country's tax business environment is the cost of paying taxes, which will be significantly improved paying taxes the decline.

Japan has continuously strengthened its electronic tax payment system in recent years. In order to improve the fairness of social security and tax system and make interaction with the government easier, in 2015, it will provide

individuals and enterprises with exclusive tax identification codes to improve management efficiency and fairness. As a result, Japan Economy/region up to 95 points in 2019.

Korea in recent years in the value-added tax rebate reform has achieved remarkable results. Simplify VAT refund application, audit, taxpayers only need to check the standard VAT return, standard VAT returns are submitted electronically, no need to submit any other documents to confirm the tax refund, these measures make the Korean Economy/region (PFI score) up to 93 points. In terms of management, Korea's reform is more comprehensive. The tax administration provides a mobile service operating system, which realizes the mobile operation of taxpayers handling many tax affairs. Electronic value-added tax invoices, combined with mobile applications to achieve paperless operation. The above conclusions are very useful to China.

The paying taxes index system has been widely cited by various economies in the world. The World Bank's evaluation criteria on the doing business have strong authority and are widely cited by various economies. It also has reference value and reference significance for China. However, considering the actual situation in China, due to the characteristics of China's socialist market economy, the proportion of state-owned enterprises is high, and in the period 2004-2017, China's data are not completely open and the data collection is not complete. This is also the limitation of this paper. Due to the lack of data in some years in China, it is impossible to carry out comparative analysis of China, Japan and Korea.

Therefore, this paper provides the following suggestions for optimizing tax indicators in China by comparing Japan and Korea:

First, deepen the reform of the main tax and fee system and reduce the burden of enterprise taxes and fees. To improve the paying taxes environment, we need to reduce the tax burden of enterprises and narrow the gap with the top countries. It is necessary to lighten the burden of social security expenses of enterprises, adjust the structure of financial expenditure, and increase the financial to social insurance year by year. Further optimize value-added tax, for the production of taxable products or provide taxable services purchased products or services included in the income tax as much as possible (Adrian & Robert, 2015). We will continue to deepen the reform of enterprise income tax and fully draw lessons from international experience in tax rate design and preferential policies.

Second, further simplify the tax procedures. Return rights and responsibilities to the enterprise. China's enterprises tax time, especially value-added tax has a greater space for decline (Luo, 2017). Return rights and responsibilities to the enterprise. China's enterprises tax time, especially value-added tax has a greater space for decline. We should continue to simplify tax procedures and improve the efficiency of tax service, such as simplifying the registration procedures of forms in the process of tax declaration, registration, change and cancellation; adopting a longer reporting period for most enterprises to reduce the number of enterprise declarations and taxes; and simplifying the tax administration of the general branch of enterprises. Make full use of big data and other technologies to increase the supply of high-end tax services.

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