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**An Quantitative Analysis
on China-CEEC Economic and Trade
Cooperation**

CHEN Xin

Senior Research Fellow, Director of Economic Division

Institute of European Studies

Chinese Academy of Social Sciences

Secretary General of Chinese Association of European Studies

chen-xin@cass.org.cn

YANG Chengyu

Assistant Researcher, Economic Division

Institute of European Studies

Chinese Academy of Social Sciences

yangchy@cass.org.cn

Institute of European Studies, Chinese Academy of Social Sciences • Beijing 100732

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CHEN Xin & YANG Chengyu
Institute of European Studies, Chinese Academy of Social Sciences
5 Jianguomennei Dajie, Beijing 100732
CHINA

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An Quantitative Analysis on China-CEEC Economic and Trade Cooperation

CHEN Xin¹ and Yang Chengyu²

Abstract: The Analysis will use the mathematical models to evaluate the development of the business environment of CEE countries scientifically according to 51 set of index data, and will evaluate the development and level of the cooperation between China and 16 CEE countries based on 18 set of index data. Based on the results of the analysis, the Paper will establish a coordinate graph of the development of China-CEEC Cooperation. The indicator systems of the business environment of CEE countries (x-axis) and the bilateral cooperation of China-CEE countries (y-axis) visualize the development of the cooperation in last 5 years while assessing the dynamic relationship involved therein.

Key words: China-CEEC Cooperation, Business Environment, Bilateral Relationship between China and 16 CEE Countries.

1. Introduction

The year 2016 is the fifth year of China-CEEC Cooperation Mechanism. Recently, China-CEEC Cooperation had made plentiful achievements, especially in the development and deepening of trade and economy. The assessment of business environment of the partner and the comprehensive evaluation of bilateral cooperation are the key for measuring the development of the cooperation. The Paper³ will combine the business environment of CEEC with the establishment and index of China-CEEC Cooperation Mechanism in a very visual way to show the development of last 5 years⁴.

Concerning the business environment of CEE countries, the Paper will use the mathematical models to evaluate the development of the business environment of CEE countries scientifically according to the index data, such as the national administration, macro economy, trade, finance, investment and

¹ Prof. Dr. CHEN Xin, Senior Research Fellow, Director of Economic Division, Institute of European Studies, Chinese Academy of Social Sciences. He also serves as Secretary General of Chinese Association of European Studies. Email: chen-xin@cass.org.cn

² Dr. YANG Chengyu, Assistant Researcher, Economic Division, Institute of European Studies, Chinese Academy of Social Sciences. Email: yangchy@cass.org.cn

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⁴ The data collection had been closed by the end of July 2016.

financing, infrastructure, social environment and innovation ability of the CEE countries, to provide a reference for the Cooperation of China and 16 CEE Countries (hereinafter “16+1 Cooperation”). In regard to the bilateral cooperation of China-CEE countries, the Paper will evaluate the development and level of the cooperation based on the index data for cooperation, including politics, trade, finance, investment and people-to-people exchanges. Based on the results of the analysis, the Paper will establish a coordinate graph of the development of China-CEEC Cooperation. The indicator systems of the business environment of CEE countries (x-axis) and the bilateral cooperation of China-CEE countries (y-axis) visualize the development of the cooperation while assessing the dynamic relationship involved therein.

2. Country Analysis

In regard to the business environment, the Paper will divide the evaluation system into 8 secondary modules, including administrative environment, macro economy, trade environment, financial environment, investment and financing environment, infrastructure, social environment and innovation ability, and 51 indicators at third level.⁵ In regard to the bilateral cooperation, the Paper will evaluate the cooperation level from 5 secondary models such as political cooperation, trade cooperation, finance cooperation, investment cooperation and people-to-people exchange, with 17 indicators at third level.⁶ All data had been collected by the end of July 2016.

The Paper uses econometric models to calculate the indicators in the Business Environment module and Bilateral Relationship module. Based on the results and ranking in the modules from the calculations, country analysis is followed, which objectively presents the advantages and disadvantages of business environment of the CEE countries and their cooperation with China. The purpose of such kind approach is to provide the scientific and theoretical basis for “16+1 Cooperation”. It needs to emphasize that the indicators is based on the numerical value distribution from 0 to 10, “0” is the worst and “10” is the best while the value corresponds closely to 10 is better.

2.1 Albania

The business environment of Albania in 2016 is shown in Figure 1.1. The modest modules of Albania in 2016 are the financial environment (4.88), social environment (4.70) and investment and financing environment (3.43) while the other indicators are all less than 1. This shows that the aspects of administrative environment, macro economy, trade environment, infrastructure and innovation ability of Albania are in need of improvement.

The bilateral cooperation of China-Albania in 2016 is focused on field of finance (9.02), politics (5.47), investment (4.91) and people-to-people exchange (4.91) while there is much room for improvement of trade field (0.46), as shown in the Figure 1.2.

⁵ See Annex 1 for details.

⁶ See Annex 2 for details.

Figure 1.1 Radar Chart of Business Environment of Albania

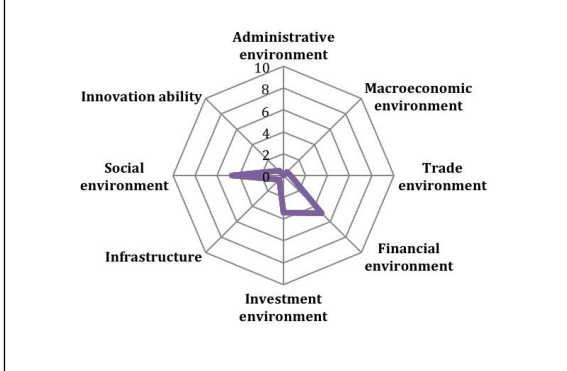
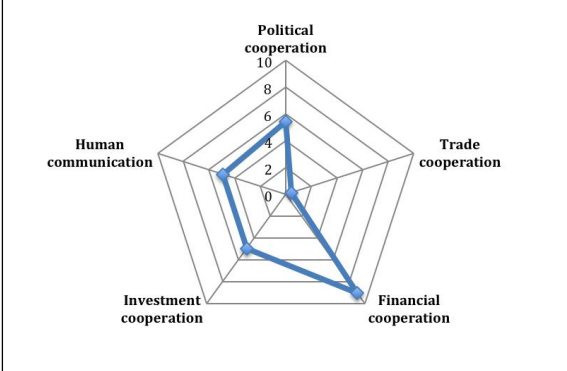


Figure 1.2 Radar Chart of China- Albania Bilateral Cooperation



2.2 Bosnia and Herzegovina

The business environment of Bosnia-Herzegovina in 2016 is shown in Figure 2.1. The good modules of Bosnia-Herzegovina in 2016 are the social environment (7.76) and administration environment (4.86). In addition, the value of investment and financing environment (1.91) and financial environment (1.37) is less than 2 while the others are less than 1. This shows that the aspects of investment and financing environment and financial environment of Bosnia-Herzegovina are in need of improvement while the field of macro economy, trade environment, infrastructure and innovation ability are need to be greatly enhanced.

The bilateral cooperation of China- Bosnia-Herzegovina in 2016 is focused on the field of investment (4.53), people-to-people exchange (4.53) while involves some degree of cooperation in the field of politics (2.20) and finance (1.42), but the field of trade (0.49) should be enhanced, as shown in the Figure 2.2.

Figure 2.1 Radar Chart of Business Environment of Bosnia-Herzegovina

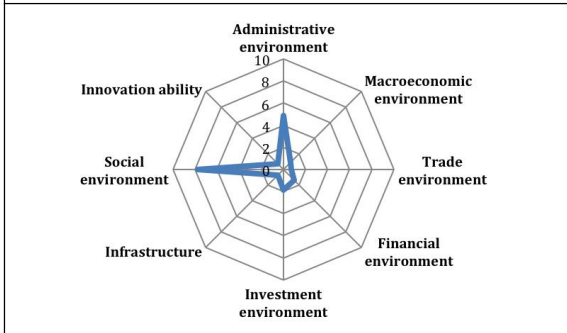
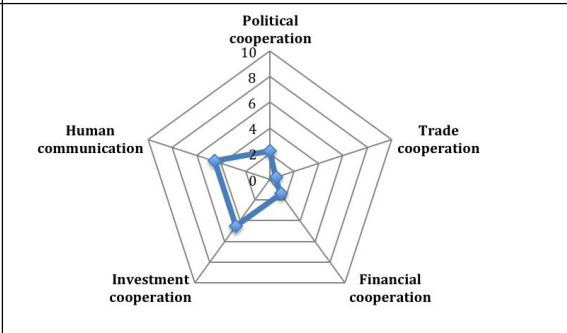


Figure 2.2 Radar Chart of China- Bosnia-Herzegovina Bilateral Cooperation

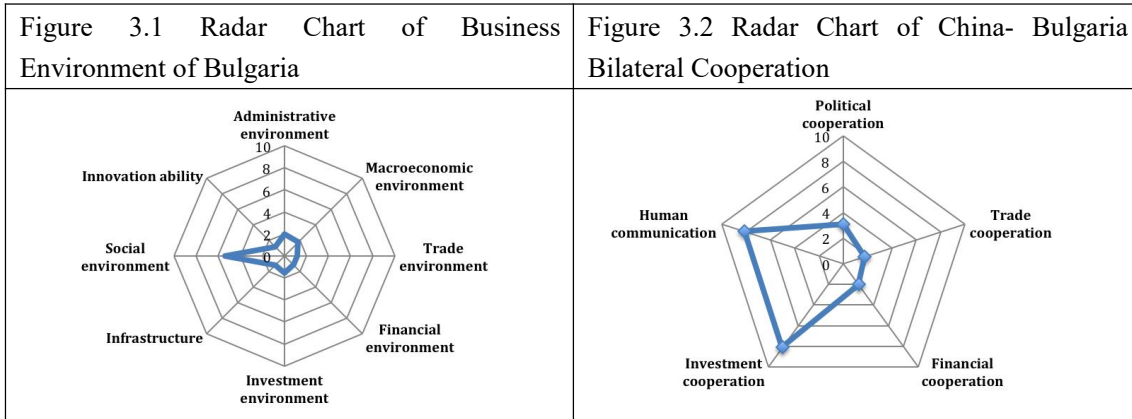


2.3 Bulgaria

The business environment of Bulgaria in 2016 is shown in Figure 3.1. The social environment (5.37) is the modest one in the business environment modules of Bulgaria in 2016. The value of the other

modules is between 1 and 2.

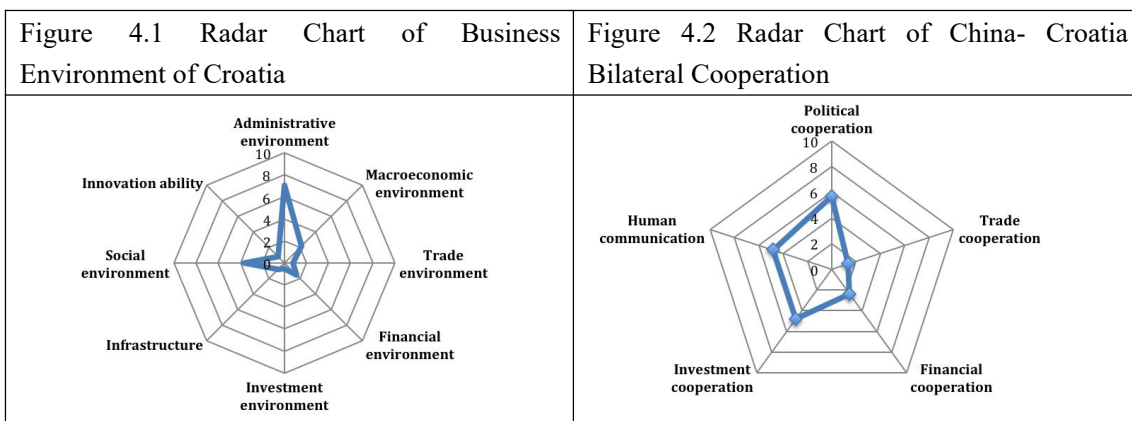
However, as shown in the Figure 3.2, the bilateral cooperation of China-Bulgaria is outstanding in the field of investment (8.11), people-to-people exchange (8.11) while involves some degree of cooperation in the field of politics (3.08) and finance (2.05). In addition, the field of trade should be improved.



2.4 Croatia

The business environment of Croatia is shown in Figure 4.1. The Administrative environment (7.03) is good and social environment (3.64) is modest in business environment modules of Croatia in 2016, macro economy environment (2.17) and financial environment (1.55) needs to be improved. The value of other modules is less than 1. This shows that the aspects of trade environment, investment and financing environment, infrastructure and the innovation ability of Croatia are in need of improvement.

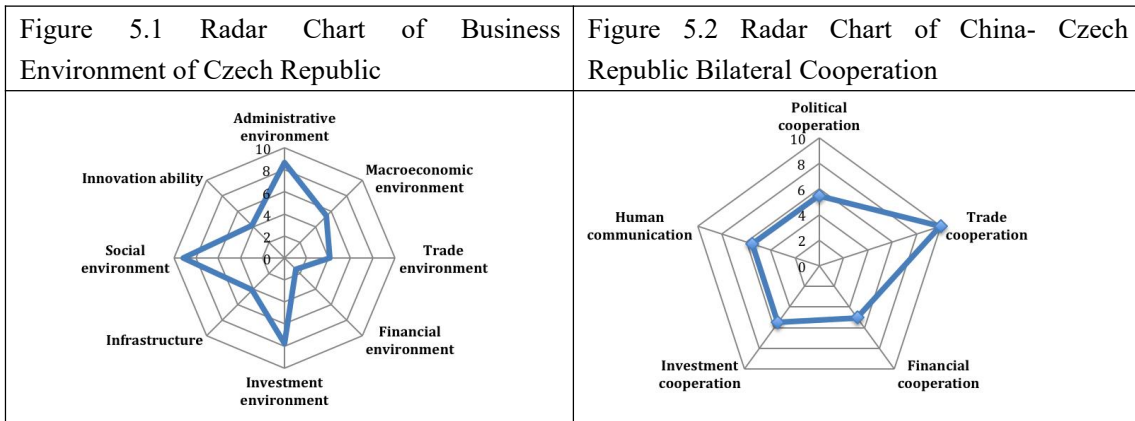
As shown in the Figure 4.2, the bilateral cooperation of China- Croatia is good in the field of politics (5.68), investment (4.82) and people-to-people exchange (4.82) while the field of finance (2.40) and trade should be improved.



2.5 Czech Republic

As shown in the Figure 5.1, the business environment of Czech Republic in 2016 is better than most of the CEE countries and it is outstanding in the field of social environment (9.16) and administrative environment (8.64) while the macro economy (5.41), trade environment (4.10) and infrastructure (4.10) are good. However, the field of financial environment (1.46) should be enhanced.

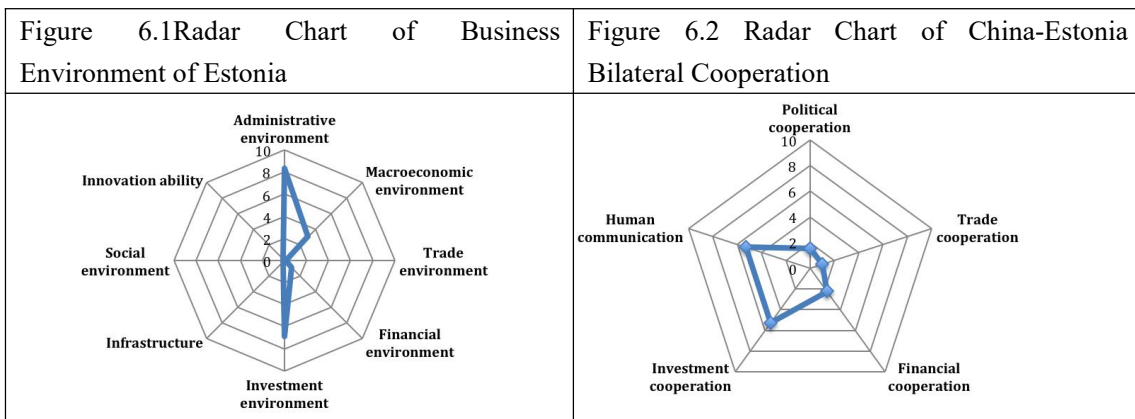
The bilateral cooperation of China- Czech Republic in 2016 is outstanding in the field of trade (10.0) while it is also doing good in the field of investment (5.49), people-to-people exchange (5.49), politics (5.46) and finance (5.06), as shown in the Figure 5.2.



2.6 Estonia

As shown in the Figure 6.1, the administrative environment (8.33) is outstanding and investment and financing environment (6.90) is good in the business environment modules of Estonia in 2016. The value of the macro economy is 3.04 while the others' values are all less than 1 which shows that the aspects of trade environment, financial environment, infrastructure, social environment and innovation ability of Estonia are not ideal.

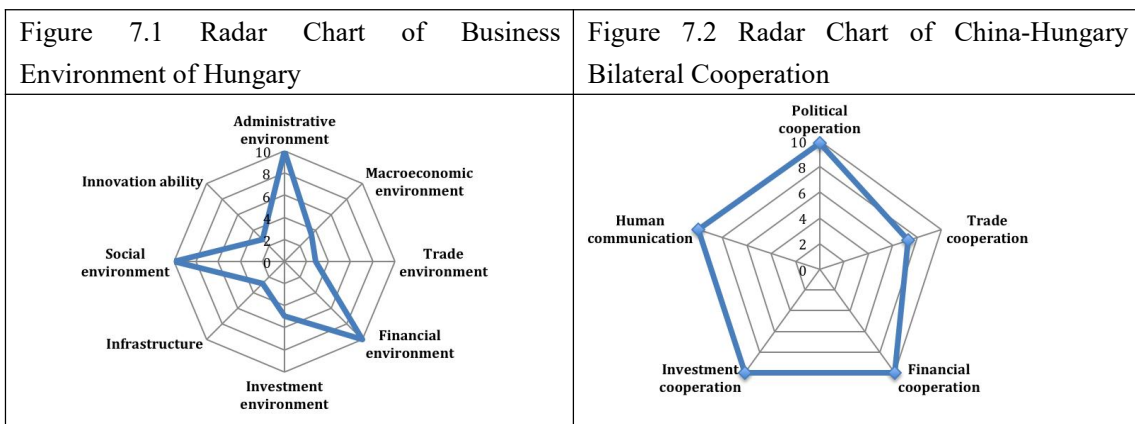
The bilateral cooperation of China- Estonia in 2016 is focused in the field of investment (5.28) and people-to-people exchange (5.28) while the field of finance (2.26), politics (1.54) and trade (1.01) should be improved, as shown in the Figure 6.2.



2.7 Hungary

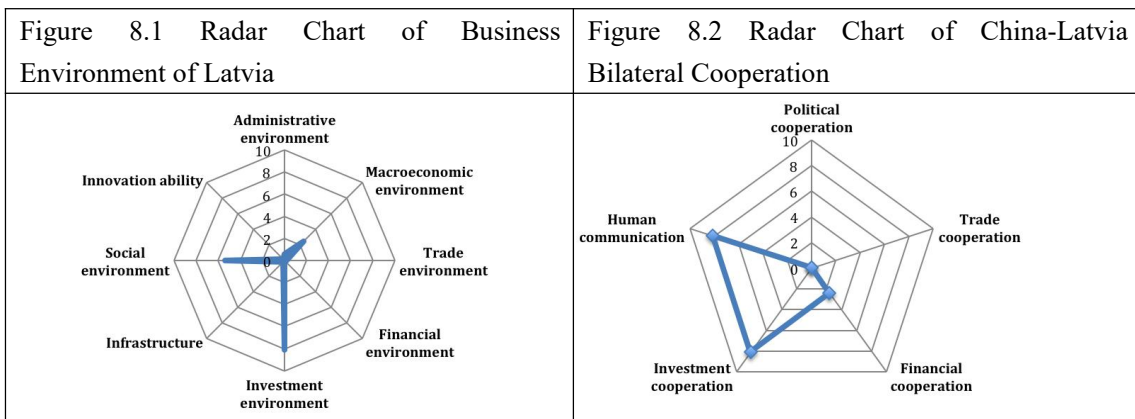
As shown in the Figure 7.1, the business environment of Hungary in 2016 is better than most of the CEE countries while the best modules are administrative environment (10.00), financial environment (10.0) and social environment (10.00). The field of investment environment (4.97) and macro economy environment (3.46) of Hungary are good while the aspects of innovation ability (2.93), trade environment (2.83) and infrastructure (2.83) should be enhanced.

In 2016, Hungary and China has maintained a very close cooperation relationship, and the cooperation field of finance (10.00), investment (10.00) and people-to-people exchange (10.00) has reached to the top level while it is also outstanding in the field of political (9.83) and trade (7.24) cooperation. Therefore, it is listed as the No.1 of comprehensive index of China-CEEC Cooperation.



2.8 Latvia

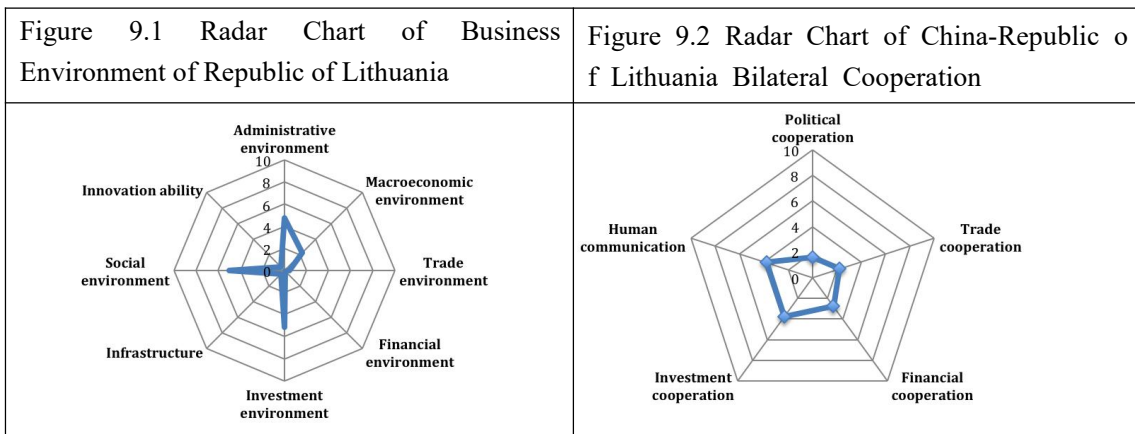
As shown in the Figure 8.1, Latvia is doing good in the field of investment and financing environment (8.10) and social environment (5.39), and has some performance in the field of macro economy (2.45) in 2016. The value of the other modules is less than 1, which indicates that the aspects of administrative environment, trade environment, financial environment, infrastructure and innovation ability are not ideal. The Figure 8.2 shows that the bilateral cooperation of China-Latvia is focused on the field of investment (8.12) and people-to-people exchange (8.12), and performance is modest in financial field (2.40) while the politics (0.00) and trade (0.00) fields should be improved.



2.9 Lithuania

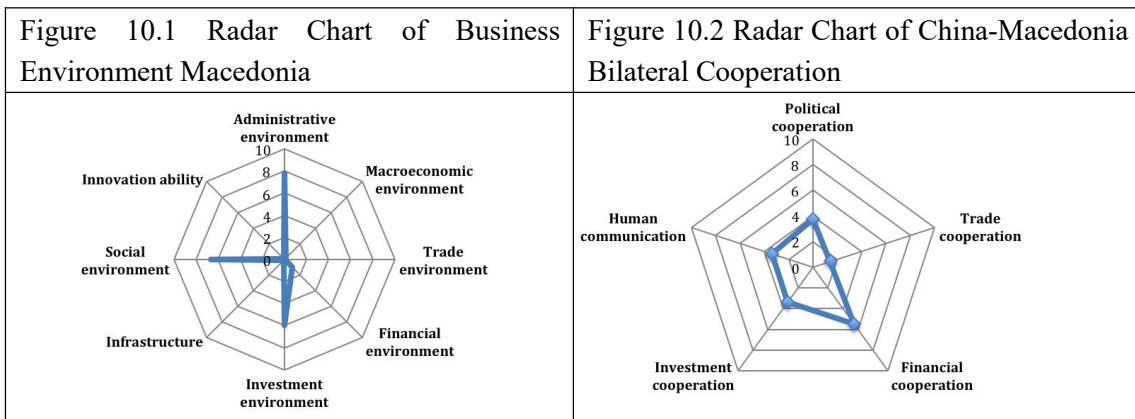
As shown in the Figure 9.1, the investment and financing environment (5.14), social environment (5.00) and administrative environment (4.74) of business environment in Republic of Lithuania in 2016 are modest. The value of macro economy is 2.24 and the others are all less 1, which indicates that the environment of trade, finance, infrastructure and innovation ability of Republic of Lithuania should be improved.

The Figure 9.2 shows that there is a wide distribution in bilateral cooperation between China and Republic of Lithuania, such as the field of investment (3.79), people-to-people exchange (3.79), finance (2.76), trade (2.23) and politics (1.58) while other fields should be improved.



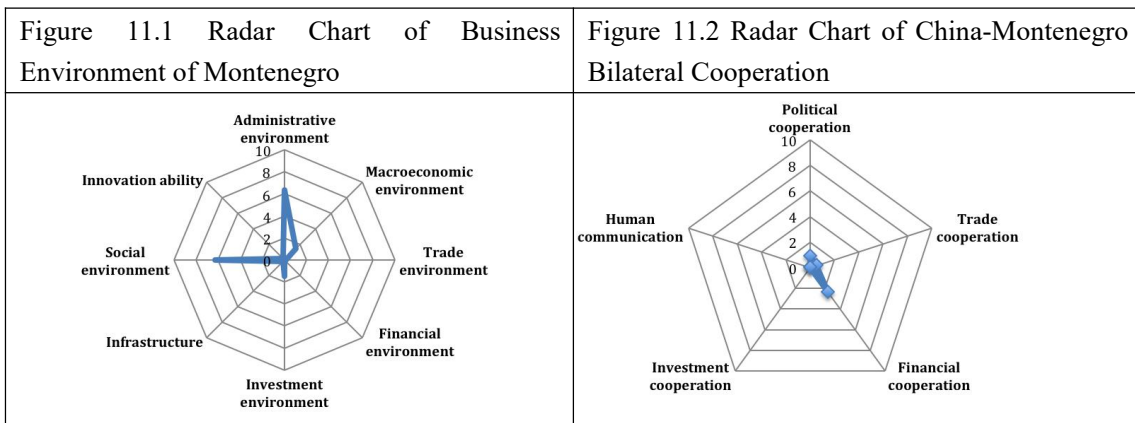
2.10 Macedonia

As shown in the Figure 10.1, the administrative environment (7.81), investment and financing environment (5.96) and social environment (6.66) and administrative environment of business environment in Macedonia in 2016 are good. The values of other modules are all less than 1, which indicates that the environment of macro economy, trade, finance, infrastructure and innovation ability of Macedonia should be improved. The Figure 10.2 shows that there is a wide distribution in bilateral cooperation between China and Macedonia, such as the field of finance (5.49), politics (3.74), investment and financing (3.36) and people-to-people exchange (3.36); however, the field of trade (1.43) should be improved.



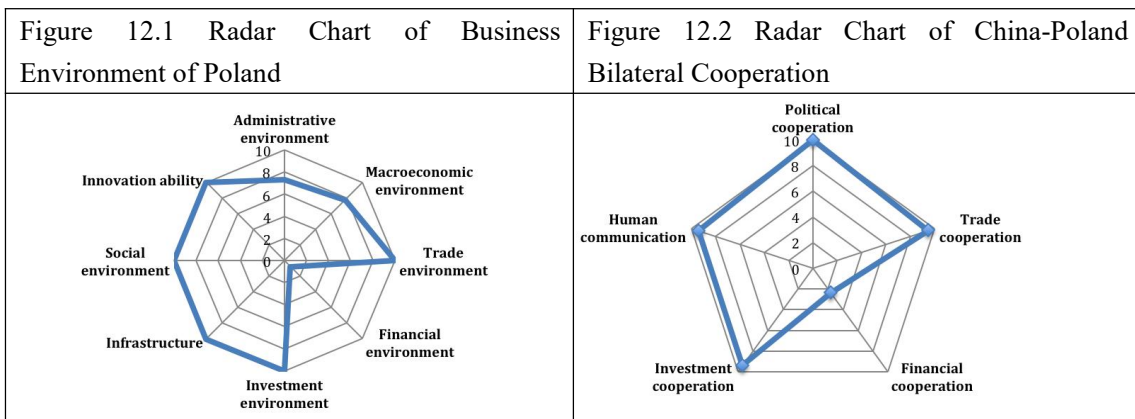
2.11 Montenegro

As shown in the Figure 11.1, Montenegro is doing well in 2016 in the field of administrative environment (6.33) and social environment (6.25). The value of investment and financing and macro economy is 1.52 and 1.47 while the others are all less 1, which indicates that Montenegro should improve the field of trade, finance, infrastructure and innovation ability. As shown in the Figure 11.2, the bilateral cooperation between China and Montenegro is at a low degree, except the financial cooperation (2.35), the value of other fields is all less than 1, which indicates that bilateral cooperation of politics (0.93), trade (0.54), investment (0.00) and people-to-people exchange (0.00) between China and Montenegro is at a low degree.



2.12 Poland

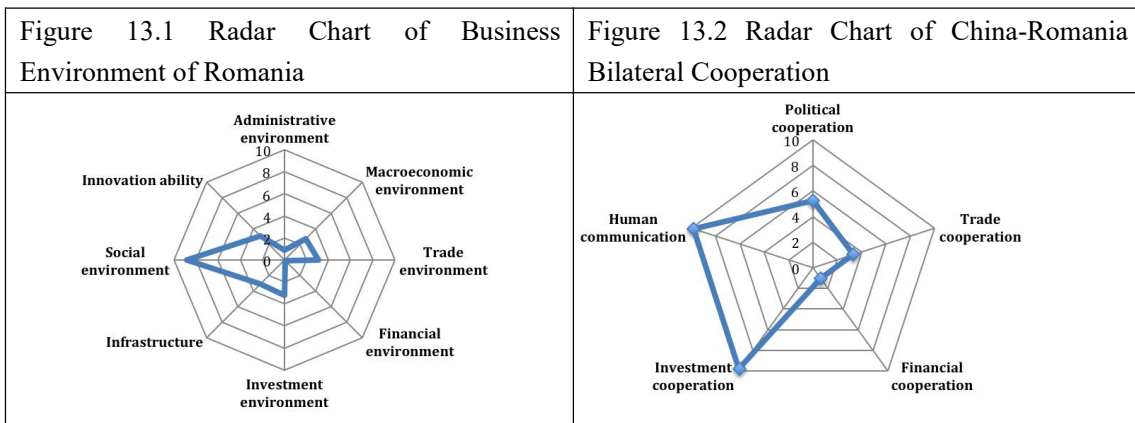
As shown in the Figure 12.1, the business environment of Poland in 2016 is better than most of the CEE countries while the best modules are trade environment (10.00), investment and financing (10.00), infrastructure (10.00) and innovation ability (10.00). And Poland is doing very good in the field of social environment (9.99), macro economy (7.79) and administrative environment (7.34). However, the financial environment (0.79) should be improved. As shown in the Figure 12.2, there is a close cooperation between China and Poland, especially in the field of politics (10.00), trade (9.48), investment (9.39) and people-to-people exchange (9.39) while the cooperation of finance is at a low degree (2.39), as a reason of its lower level of financial environment.



2.13 Romania

As shown in the Figure 13.1, Romania is doing well in 2016 in the social environment (8.84) while the aspects of investment and financing (3.18), trade (3.09), infrastructure (3.09), innovation ability (3.09) and macro economy (2.71) are modest. The value of others is less than 1, which indicates that Romania should improve the political environment and financial environment.

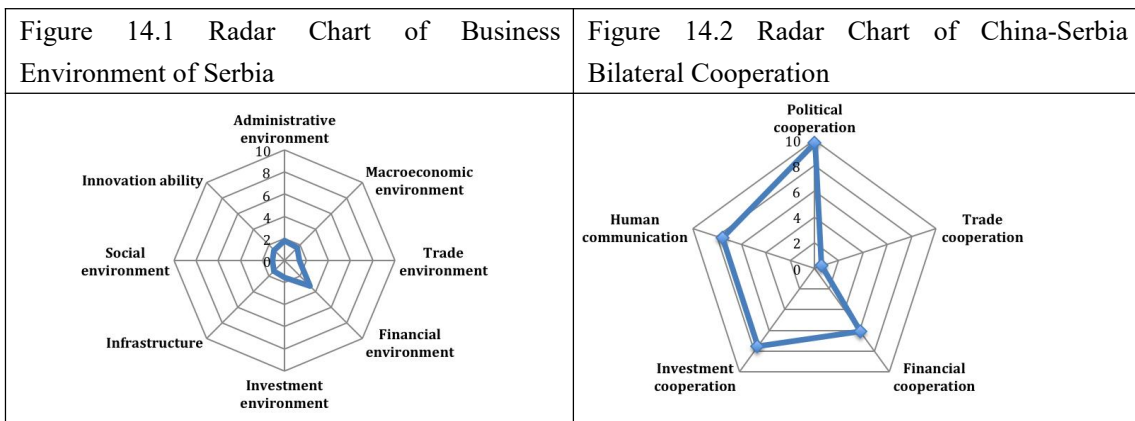
As shown in the Figure 13.2, there is a wide distribution in bilateral cooperation between China and Romania and it is outstanding in the field of investment and people-to-people exchange (9.81). In addition, Romania is doing good in the field of politics (5.23) and trade (3.31) and the financial cooperation should be enhanced.



2.14 Serbia

As shown in the Figure 14.1, Serbia is doing modest in 2016 in the financial environment (3.24). The value of other modules is between 1 and 2, which indicates that the level of business environment of Serbia is lower and the risk awareness should be enhanced.

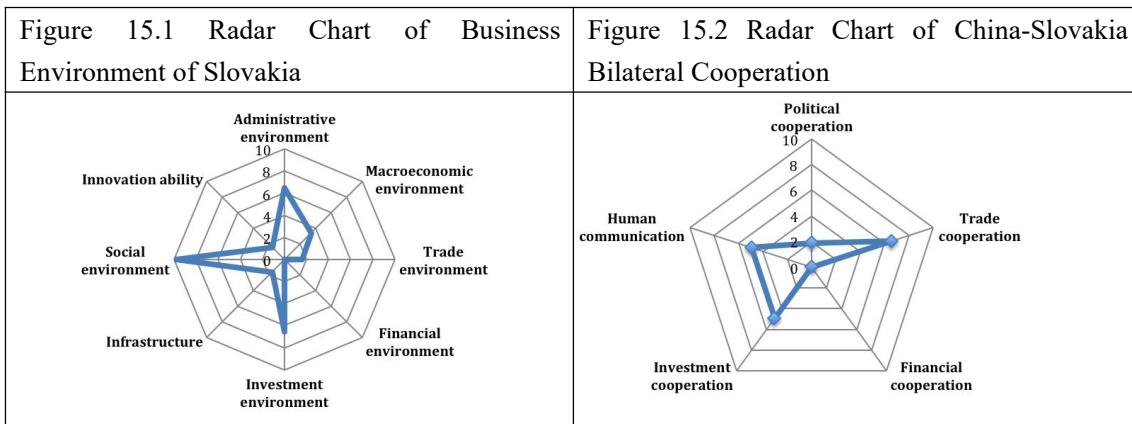
As shown in the Figure 14.2, the bilateral cooperation between China and Serbia is at a higher level. Most of the cooperation fields are doing well, including politics (9.81), investment (7.59), people-to-people exchange (7.59) and finance (6.15), while the trade cooperation should be improved.



2.15 Slovakia

As shown in the Figure 15.1, the field of social environment (9.84) is outstanding, and investment and financing (6.54) and administrative environment (6.50) of Slovakia in 2016 is good. In addition, the macro economy environment (3.41) is modest while the other fields are at a lower level, especially the financial environment (0.00).

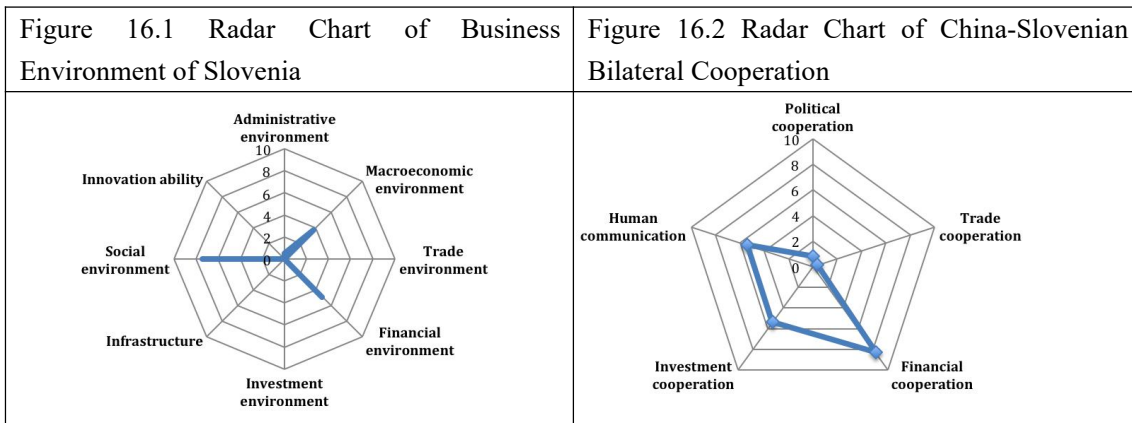
As shown in the Figure 15.2, the bilateral cooperation between China and Slovakia is comparatively good, especially the field of trade (6.00), investment and people-to-people exchange (4.96), and the political cooperation (1.90) should be improved. In addition, the financial cooperation (0.00) is at a low level, which is related to the financial environment.



2.16 Slovenia

As shown in the Figure 16.1, Slovenian is doing well in 2016 in the field of social environment (7.41). The field of financial environment (4.90) and macro economy environment (3.72) are doing just fine while the values of other modules are at the lowest point, especially the field of trade, investment and financing, infrastructure and innovation ability (0.00).

As shown in the Figure 16.2, Slovenian is doing well in the field of finance (8.34), the field of investment (5.40) and people-to-people exchange (5.40) are good while the politics (0.79) and trade (0.36) cooperation should be enhanced.



3. Horizontal Comparison

3.1 Business Environment of CEE Countries

Comparing with the year of 2011, the general business environment of CEE countries in 2016 do not change too much while there are many differences among the countries.

The CEE countries' ranks of business environment are as follows: Hungary works best in the field of administrative environment, followed by Czech Republic, Estonia, Macedonia and others while Slovenia and Albania are at the bottom; Poland works best in the field of macro economy, followed by Czech Republic, Slovenia, Hungary and others while Albania and Macedonia are at the bottom; Poland works best in the field of trade environment, followed by Czech Republic, Romania, Hungary and others while Macedonia and Slovenia are at the bottom; Hungary works best in the field of financial environment, followed by Slovenia, Albania and others while Latvia and Slovakia are at the bottom; Poland works best in the field of investment and financing, followed by Latvia, Czech Republic and others while Croatia and Slovenia are at the bottom; Poland works best in the field of infrastructure, followed by Czech Republic, Romania, Hungary and others while Macedonia and Slovenia are at the bottom; Hungary works best in the field of social environment, followed by Poland, Slovakia, Czech Republic while Serbia and Estonia are at the bottom; Poland works best in the field of innovation ability, followed by Czech Republic, Romania, Hungary and others while Macedonia and Slovenia are at the bottom.

The top 5 countries in business environment in 2016 are Poland, Czech Republic, Hungary, Slovenia and Slovakia.

3.2 China-CEE Countries Bilateral Cooperation

Along with the "16+1 Cooperation" deepening, the bilateral cooperation level of China – CEEC has been enhanced a lot in comparison with the year of 2011. Concerning to the cooperation level, investment and people-to-people exchange has established a close cooperation, followed by the political and financial cooperation while the trade cooperation should be improved.

In the bilateral cooperation of China – CEEC in 2016: Poland works best in the political cooperation, followed by Hungary, Serbia while Slovenia, Latvia are at the bottom; Czech Republic works best in the trade cooperation, followed by Poland, Hungary and others while Slovenia and Latvia are at the bottom; Hungary works best in the financial cooperation, followed by Albania, Slovenia, Serbia and others while Romania and Slovakia are at the bottom; Hungary works best in the investment cooperation, followed by Romania, Poland, Latvia and others while Macedonia and Montenegro are the bottom; Hungary works best in the field of people-to-people exchange, followed by Romania, Poland, Latvia and others while Macedonia and Montenegro are at the bottom.

The top 3 countries in bilateral cooperation of China - CEEC in 2016 are Hungary, Poland and Czech Republic.

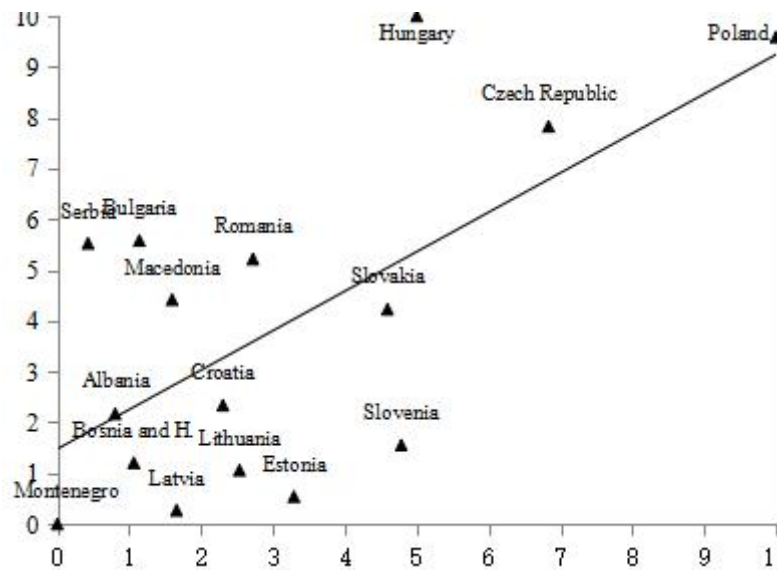
4. Coordinate Chart Analysis

Based on the evaluation result of the data of business environment of CEE countries and the Bilateral Cooperation of China – CEEC, the Paper establishes a coordinate chart to determine the status of economic and trade cooperation between China and CEE countries. The x- axis is the business environment of CEE countries and the y-axis is the bilateral cooperation of China – CEEC. We can not only monitor the level of bilateral cooperation and the business environment intuitively but also analyze their dynamic relation by the chart. Thus, we can provide advice to those whose business environment is fine and the cooperation should be improved, what's more, we can provide pre-warning suggestion to those who own fine cooperation with least business environment.

4.1 Coordinate Chart Analysis Based on Distribution

According to the evaluation result of business environment of CEE countries and the Bilateral Cooperation of China - CEEC in 2016, the x-axis stands for the business environment and the y-axis stands for the bilateral cooperation, as shown in the Figure 17.1:

Figure 17.1 Coordinate Chart of China-CEEC Cooperation Evaluation System in the Year 2016

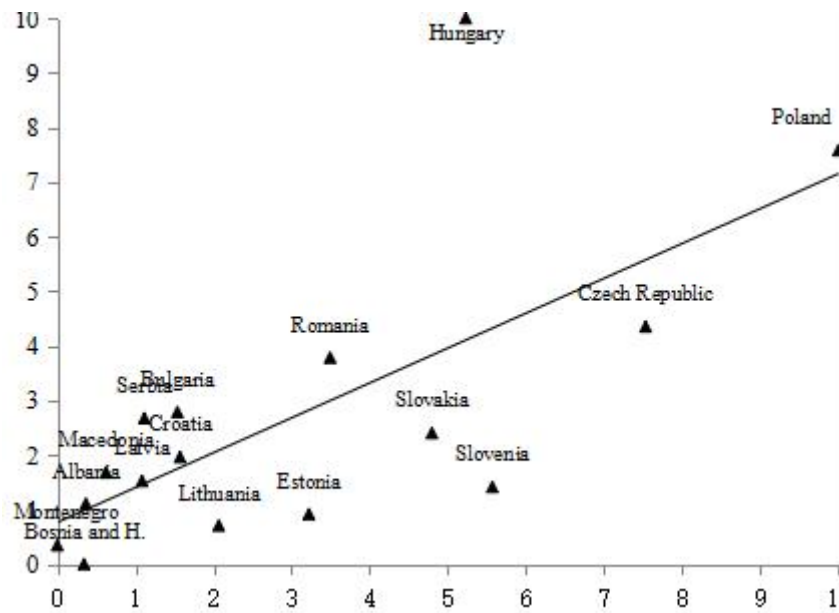


As shown in the Figure 17.1 Coordinate Chart of China-CEEC Cooperation Evaluation System in the Year 2016, Poland, Hungary and Czech Republic are at the top-right area; Slovakia and Slovenia are at the middle area while the other countries are at the bottom-left area of the chart. We should note that the top-right area indicates the business environment of the country and its cooperation with China are better while the bottom-left area indicates otherwise.

4.2 Dynamic Analysis Based on Time

According to the evaluation result of business environment of CEE countries and the Bilateral Cooperation of China - CEEC in 2011, the x-axis stands for the business environment and the y-axis stands for the bilateral cooperation, as shown in the Figure 17.2:

Figure 17.2 Coordinate Chart of China-CEEC Cooperation Evaluation System in the Year 2011



The areal distribution of the coordinate chart of 2011 is similar to the chart of 2016, however, the countries of the bottom-left area are more concentrated while the countries of the top-right area are relatively decentralized of 2016. There are two main reasons:

On the one hand, the entire business environment of CEE countries doesn't change much as Table 1 shows that the value of 2011 and 2016 is 48.54 and 48.75 respectively. However, some countries improve their business environment faster, including Macedonia, Croatia and Bosnia and Herzegovina; Latvia, Republic of Lithuania and Albania have improved its environment modestly while Slovenia, Romania, Czech Republic and Serbia regressed. In comparison with the situation of 2011, Albania, Bosnia and Herzegovina, Croatia, Estonia, Latvia, Republic of Lithuania and Macedonia has improved their business environment while Bulgaria, Czech Republic, Hungary, Romania, Serbia, Slovakia and Slovenia regressed, Bosnia and Herzegovina and Poland stayed the same.

Table 1 Business Environment of 16 CEE Countries

	Total	Albania	Bosnia H.	Bulgaria	Croatia	Czech	Estonia	Hungary	Latvia	Lithuania	Macedonia	Montenegro	Poland	Romania	Serbia	Slovakia	Slovenia
2011	48.54	0.37	0.34	1.54	1.57	7.53	3.22	5.23	1.08	2.07	0.62	0.00	10.0	3.49	1.11	4.80	5.57
2016	48.75	0.81	1.06	1.14	2.30	6.83	3.29	5.00	1.66	2.53	1.60	0.00	10.0	2.72	0.43	4.59	4.79

Source: calculation by the authors.

Note: Regarding on the value, 10 is the best and 0 is the worst.

On the other hand, the bilateral cooperation of China – CEEC has been deepened a lot, as Table 2 shows that the value of 2011 and 2016 is 43.22 and 61.50 respectively. With the deepening of “16+1 Cooperation” during the last 5 years, we obtained many achievements so that the cooperation level had been improved. Czech Republic works best, followed by Serbia, Bulgaria and Macedonia while

Poland, Slovakia, Romania, Bosnia and Herzegovina and Albania also do some enhancements. Certainly, some countries obtained relatively few results, such as Estonia, Latvia and Montenegro. In particular, the bilateral cooperation between China and Hungary always maintains the best in recent years.

Table 2 Bilateral Cooperation of China – 16 CEE Countries

	Total	Albania	Bosnia H.	Bulgaria	Croatia	Czech	Estonia	Hungary	Latvia	Lithuania	Macedonia	Montenegro	Poland	Romania	Serbia	Slovakia	Slovenia
2011	43.22	1.11	0.00	2.78	1.96	4.35	0.92	10.0	1.52	0.71	1.68	0.35	7.58	3.78	2.67	2.40	1.41
2016	61.50	2.17	1.20	5.58	2.34	7.83	0.54	10.0	0.27	1.06	4.42	0.00	9.59	5.21	5.52	4.23	1.55

Source: calculation by the authors.

Note: Regarding on the value, 10 is the best and 0 is the worst.

4.3 Coordinate Chart Analysis Based on Trend Line

The solid line in Figure 17.1 and Figure 17.2 represents the business environment and bilateral cooperation by OLS, we also can treat it as the trend line of the relationship between them and it will show the dynamic changes. We can conclude according to the trend line as follows:

Firstly, the slope changes of the trend line. It shows the corresponding ration of business environment and bilateral cooperation. In comparison with 2011, the trend line slope is higher in 2016, which indicates that the improvement effect of bilateral cooperation of China – CEEC is greater than the improvement effect of business environment of CEE countries from 2011 to 2016. Therefore, it proves that the “16+1 Cooperation” is centered on “cooperation driven” during this period. Meanwhile, it also provides theoretical foundation for the fact that this cooperation improve definitely the bilateral cooperation level.

Secondly, in regard to the trend line, the coordinate changes. When the coordinate of the country is located above the trend line, it indicates that the bilateral cooperation level between China and that country is better than its’ business environment level so that the country can improve the level by the implementation of bilateral cooperation. As of 2016, the coordinate of Albania, Serbia, Bulgaria, Macedonia, Romania, Hungary, Czech Republic and Poland is all above the trend line, so they can maintain their existing foundation and utilize their advantages to improve their business environment; when the coordinate is located below the trend line, it shows otherwise and the bilateral cooperation should be improved. As of 2016, the coordinates of Montenegro, Bosnia and Herzegovina, Latvia, Croatia, Lithuania, Estonia, Slovakia and Slovenia are all below the trend line so that we can focus more on these countries in future cooperation.

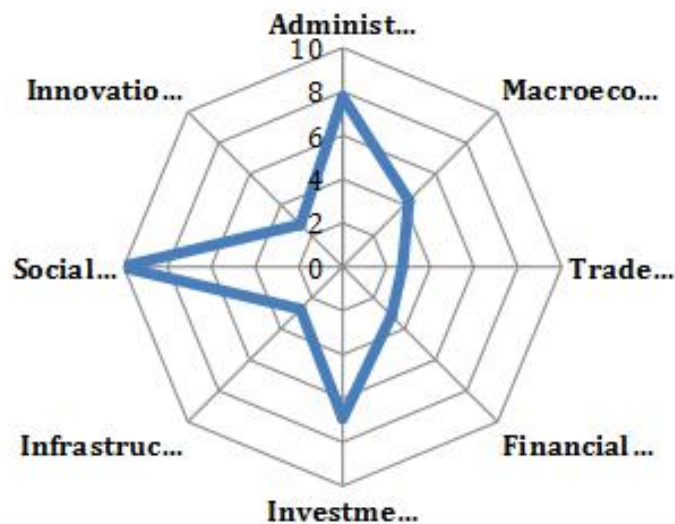
In addition, as we have seen, the coordinate of Czech Republic in 2011 is located below the trend line and it is located above the trend line in 2016 by the deepening of “16+1 Cooperation”, which indicates that this cooperation really improves the bilateral cooperation level of China- Czech Republic.

5. Conclusion

The Paper takes analysis based on business environment of CEEC and Bilateral Cooperation of China – CEEC and concludes as follows:

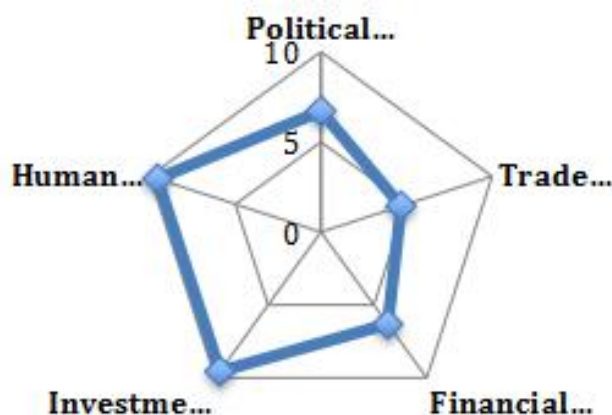
(1) Overall, the social dimension of business environment of CEE countries is good, followed by the political environment and investment and financing environment, while the environment of macro economy, finance, trade, infrastructure and innovation ability should be improved. Thus, the “16+1 Cooperation” should be based on political cooperation, take the infrastructure as a breakthrough and the financial cooperation as the leverage to enhance bilateral cooperation and improve the level of infrastructure of CEE countries in order to achieve inter-connectivity and promote trade. The existing programs also prove the scientific nature such as the Construction of Industrial Park, Ports Infrastructure Cooperation and the Hungary-Serbia Railway.

Figure 18.1 Radar Chart of Business Environment of 16 CEE Countries



(2) The cooperation of investment and people-to-people exchange between China and CEE countries is outstanding, followed by the cooperation of politics while the financial and trade cooperation should be enhanced. The Paper suggests that trade promotion and financial cooperation should be the breakthrough point for deepening “16+1 Cooperation” on the basis of the cooperation of politics, investment and people-to-people exchange. It is need to develop trade and financial cooperation with the key countries. Giving priority to develop the cooperation with Romania, Serbia, Bosnia and Herzegovina, Albania, Latvia and others while maintain the cooperation level with Poland, Czech Republic and Hungary. Consolidate the bilateral relationship among best partnerships in the aspect of financial cooperation and provide priorities to the countries with advantage in finance and investment, such as Hungary and Poland.

Figure 18.2 Radar Chart of China-CEEC Bilateral Cooperation



(3) Concerning to the cooperation of the CEE countries, Poland, Czech Republic and Hungary have become the leader of bilateral cooperation of China – CEEC Cooperation Mechanism. In the future, we should promote the sheep-flock effect as follows. Firstly, the bilateral cooperation level between China and Serbia, Bulgaria, Macedonia, Romania is high while their business environments are not good enough. In this case, the bilateral cooperation should control the risk, especially in the lower economy level countries, such as Macedonia. Secondly, the bilateral cooperation level between China and Slovakia and Slovenia are lower while their business environments are better so that there is a space for development and they can be treated as a potential for the next period of “16+1 Cooperation”. Thirdly, Latvia, Croatia, Republic of Lithuania and Estonia are weaker at the aspect of business environment and bilateral cooperation; therefore, we should improve the business environment by promoting the bilateral cooperation.

(4) Concerning to the analysis of the CEE countries, the cooperation between China and CEE countries almost matched their business environments. For example, Poland is in the advanced level of business environment while its financial environment and the bilateral cooperation of China-Poland are relatively primitive. The business environment of Serbia is still very backward while its financial environment is modest and there is a close cooperation relationship between China and Serbia. In addition, the individual priorities of the cooperation between China and CEE countries should also take into account the business environment. For example, Czech Republic requested to be the financial center of the cooperation of China- CEEC while its financial module is the least one in the business environment. Although the cooperation between China and Czech Republic has been developing rapidly, therefore, it is necessary to enhance the control of risk. Similar issues are relevant in Macedonia and other countries.

Annex

Annex1 Indicators of Evaluation System of Business Environment of CEE Countries

Second level index	Third level index	Code
Administrative environment X1	World economic freedom index	X10
	Corruptible index	X11
	Military expenditure	X12
	Political cycle	X13
	Early election	X14
	Cost of starting a business process	X15
	Strength of legal rights	X16
Macroeconomic environment X2	Official reserve assets	X20
	Transformation index of the Bertelsmann	X21
	GDP	X22
	GDP per capita	X23
	GDP growth annual	X24
	Inflation rate	X25
	Gross fixed capital formation	X26
	Industry, value added	X27
	Services, etc., value added	X28
	Doing Business Index of World Bank	X29
Trade environment X3	Export value	X30
	Import value	X31
	Trade competitive advantage index	X32
	Share of World Trade	X33
	Customs duty rate	X34
	Logistics performance index	X35
Financial environment X4	Exchange rate	X40
	Real interest rate	X41
	Bank nonperforming loans to total gross loans	X42
Investment environment X5	Sovereign debt rating	X50
	Domestic credit provided by financial sector	X51
	Net domestic credit	X52
	Investment rate	X53
	Central government debt, total	X54
	Gross savings	X55
	Stock of FDI	X56
	Stock of OFDI	X57
Infrastructure X6	Internet users	X60
	Rail lines	X61
	Railways, goods transported	X62
	Air transport, freight	X63
	Electric power consumption	X64

	Health expenditure, public	X65
	Port infrastructure quality	X66
	Container port traffic	X67
Social environment X7	Population, total	X70
	minimum wage	X71
	Health expenditure per capita	X72
	Population ages 15-64	X73
	Population density	X74
	Household final consumption expenditure per capita	X75
Innovation ability X8	Patent applications	X80
	Trademark applications	X81
	Research and development expenditure	X82

Annex 2 Indicators of Evaluation System of Chin-CEEC Cooperation

Second level index	Third level index	Code
Political cooperation Y1	Partnership	Y10
	High level relationship	Y11
	Diplomatic visit	Y12
	Joint statement	Y13
Trade cooperation Y2	China's export value to the country	Y20
	China's import value from the country	Y21
	China's exports account for the country's market share of imported products	Y22
	The country's exports account for the market share of China's imports	Y23
Financial cooperation Y3	Monetary and bond cooperation	Y30
	Open a branch bank	Y31
	RMB offshore market construction	Y32
	Exchange rate	Y33
Investment cooperation Y4	China's OFDI to the country, flow	Y40
	China's OFDI to the country, stock	Y41
Human communication Y5	Cultural center	Y50
	Cultural center Confucius College	Y51
	Think Tank	Y52