

A Study on the Impact of the Humanistic Factors on EU's Internal Trade

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Keywords: EU; Humanistic factors; QAP analysis

Abstract: Since its establishment, the EU has been the leading region in world economic development, and the number of member countries has been increasing. Most of the new EU member countries have improved their economic capacity after joining the EU. Although the EU has achieved economic integration, the humanities of different member states will certainly be different. These human factors will also have a greater impact on trade between the two countries. Under the framework of social network analysis and through QAP regression analysis, this paper analyses the influence of "official language" and "religion" of EU member states on the trade volume between the two countries. We find that "official language" and "religion" have a great correlation with EU's internal trade, and that "official language" has a greater impact on EU's internal trade pattern than "religion".

1. Introduction

Under the background of economic globalization, culture and economy have become the two most important forces in today's world system. At the same time, international economic activities are often influenced by human factors such as language, culture, religion, customs and habits in different regions and countries. In international trade, there are many cases of business failure due to cultural differences. If you want to occupy a place in the fierce competition of international trade, it is necessary to solve the problem of cultural differences with foreign customers, minimize communication problems and avoid low-level mistakes. Therefore, it is necessary to explore the impact of human factors on international economic and trade through some leading trade development regions (such as the European Union) as examples.

2. Current Situation and Characteristics of Intra-EU Trade

Simply speaking, according to the time sequence of EU accession, EU member states can be roughly divided into two kinds: central and peripheral countries. The central EU countries include Germany, France, Italy, Belgium, the Netherlands and Luxembourg. The peripheral countries of the European Union refer to all the member states of the European Union that joined after the accession except the six central countries of the European Union. Most of the EU central countries are countries with strong economies in Europe, and most of them have borders adjacent to or close to each other. The trade volume gap between different EU countries is quite large, and the strong central country is the pillar of EU trade. In 2014, for example, the central European Union (EC) accounted for more than 70% of the EU's internal export trade, while the peripheral countries accounted for only over 20% of the EU's internal export trade, and the peripheral countries accounted for almost one third of the central countries.

According to the proportion of EU member states in the intra-EU trade, we can find that the intra-EU trade is generally circular. Germany has the strongest national strength. Its total trade volume ranks first among the central countries and accounts for the largest proportion of intra-EU trade. From the point of view of German automobile export volume, the export volume is also in the forefront. After all, as a leading country in automotive technology, there is a huge demand for the cars

it produces all over the world. Therefore, the changes of Germany's internal trade volume, trade product structure and geographical direction have a great impact on EU trade. France, Italy, Britain, the Netherlands and Belgium are closely surrounded by Germany, forming the inner ring of the ring structure; Ireland, Spain, Denmark, Austria and Sweden form the central ring of the ring structure.

Intra-EU trade is a very important part of EU trade, accounting for almost two-thirds of the total trade volume of EU member countries. The trade partners of EU member countries are mainly influential economic powers in the EU, such as Germany, France, Britain, Italy and so on. The most striking feature of the EU's economic structure is that the total trade volume of its member countries is determined by the trade volume among member countries. With the improvement and perfection of EU laws and regulations step by step, the flow of people and goods among countries has become more and more free, and the weight of internal trade in total trade has gradually increased. Intra-industry trade is the main trade of EU member countries, and most of them are vertical trade. As the cost of trade in the European Union's unified market becomes lower and lower, its intra-industry trade will develop rapidly, such as bilateral trade between Eastern Europe and the euro zone countries.

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3. Analysis of Humanistic Differences and Characteristics of EU Member States

Owing to the unique economic and political policies of the EU and the large number of its member countries, the EU has a very diverse culture (this paper only discusses language and religion). Its official languages are as high as 23, and religious organizations are more diverse than other areas of economic and political communities. In view of its diverse cultures, the EU has implemented an open policy of "coexistence of multilingual and multireligious organizations".

With regard to language, the EU has implemented a multilingualism strategy, with more than 60 languages. It can also be seen from some legal provisions promulgated by the EU over the years that the EU has been advocating multilingualism. For example, in 1958, the first language of the European Union stipulated that "the official language of the European Union includes the official language of all the member states of the European Union". The Treaty of Amsterdam of 1997 stipulates that "organizations and institutions of the European Union shall reply to letters written to organizations or institutions of the European Union in any language used by citizens of the European Union in the same language".

With regard to religion, the EU has issued a declaration - "The EU recognizes the existence of religious organizations in Europe and the exclusive powers of Member States over their own religious organizations". Although the declaration has no legal effect, its political significance is far greater than its actual effect. The declaration clearly states that from now on, religious organizations in EU Member States will be governed by various countries.

Due to the language and religion policies adopted and implemented by the EU, there are still great differences in languages and religions among EU member states. So what impact will these human differences have on trade among EU member states? Is the impact significant?

In response to the above problems, this paper selected 10 EU member countries (Britain, Sweden, Spain, France, Germany, Italy, Ireland, Denmark and Finland) to construct the similarity matrix of official languages (with the same official language as "1" and without the same official language as "0").

Table 1 Official Language Similarity Matrix of 10 EU Member States

	UK	SE	ES	FR	DE	GR	IT	IE	DK	FI
UK	—	0	0	0	0	0	0	1	1	0
SE	0	—	0	0	0	0	0	0	0	1
ES	0	0	—	0	0	0	0	0	0	0
FR	0	0	0	—	0	1	1	0	0	0
DE	0	0	0	0	—	0	1	0	0	0
GR	0	0	0	1	1	—	0	0	0	0
IT	0	0	0	1	1	0	—	0	0	0
IE	1	0	0	0	0	0	0	—	0	0
DK	1	0	0	0	0	0	0	1	—	0
FI	0	1	0	0	0	0	0	0	0	—

On this basis, we construct a religious similarity matrix (with the same religion as "1" and without the same religion as "0").

Table 2 Religious Similarity Matrix of 10 EU Member States

	UK	SE	ES	FR	DE	GR	IT	IE	DK	FI
UK	—	1	0	0	0	0	0	0	1	1
SE	1	—	0	0	0	0	0	0	0	1
ES	0	0	—	1	1	0	1	1	0	0
FR	0	0	1	—	1	0	1	1	0	0
DE	0	0	1	1	—	0	1	1	0	0
GR	0	0	0	0	0	—	0	0	0	0
IT	0	0	1	1	1	0	—	1	0	0
IE	0	0	1	1	1	0	1	—	0	0
DK	1	0	0	0	0	0	0	0	—	1
FI	1	1	0	0	0	0	0	0	1	—

The 10 countries selected in this paper have little in common in terms of official languages. In terms of religion, there are more countries with the same religious beliefs. After all, 10 countries have their own languages, and a few have other languages, but European religions are not as diverse as languages. Among the 10 EU member states, Britain, France, Italy, Denmark and Greece share the same official languages with the other two EU member states, Sweden, Ireland, Finland and Germany share the same official languages with other EU member states, and Spain does not share the same official languages with other EU member states. These facts show that the 10 EU member states selected are still quite different in terms of official languages.

4. QAP Analysis of the Impact of Humanistic Factors on Internal Trade

QAP regression analysis is a method of comparing the similarities of elements in multiple matrices and one matrix. By comparing the elements of the square matrix, the correlation coefficients between the two matrices are given, and the analysis method of nonparametric test for the coefficients is given.

The concrete steps and processes are divided into three steps: (1) the first step is to select the matrix of independent variables and the matrix of dependent variables, and then carry out the standard multiple regression analysis of the corresponding elements of the two matrices through the quadratic assignment program; (2) the second step is to randomly rearrange the rows and columns of the matrix and calculate the test statistics after each matrix rearrangement; (3) the third step is repeated many times. After substitution, the distribution of statistics is generated (the steps are repeated hundreds of times to estimate the standard error of statistics). Then, based on the distribution, the acceptance or rejection domain of the actual values in the distribution is judged, and the test

results of the significance of variables are obtained.

The results show that the regression coefficient of "official language" is 0.065, which is "significant" in statistical sense, indicating that language has a significant impact on trade within the EU. The regression coefficient of religion is 0.007, which is not significant in statistical sense, indicating that religion has no significant impact on intra-EU trade. Therefore, as far as the study of human factors in the 10 member states of the EU is concerned, the influence of language on the intra-EU trade is far greater than that of religion.

Accurate understanding of the information conveyed by different languages is a necessary condition for most effective communication. In the same country, different regions have their own accents, dialects and idioms. There may be misunderstandings in the communication between citizens in different regions, let alone international exchanges. Commodity trade can never depend solely on the quality of goods and attractive prices. If there is no same language between buyers and sellers as a medium of information transmission or can not effectively understand the meaning expressed by both sides, then the transaction can not be carried out quickly and effectively.

Compared with language, religious differences are more inclined to the differences of customs and habits in different regions, and more regionalized. There are only differences in vocabulary and grammar between different languages, and the meanings expressed are very common. Different religions, however, have different classics, beliefs, taboos and dogmas, so religious differences are relatively large. Perhaps because trade within the EU has not yet been refined to religious issues, the impact of religious differences on trade among EU member countries is not significant.

5. Conclusion

This paper mainly studies the impact of human factors on the intra-EU trade, and uses QAP regression analysis to analyze the official language matrix, religion matrix and standardization matrix of export trade volume of 10 EU member states in 2015. Although the selected research data are not many, the QAP regression analysis method is used to replace and analyze the data between the matrices hundreds of times, so the results of the analysis are still of some reference. We find that "official language" and "religion" have a great correlation with EU's internal trade, and that "official language" has a greater impact on EU's internal trade pattern than "religion".

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