

# Effect of unit of analysis in political research



## Units of Analysis

In social or scientific research, the definition of units of analysis is similar since it is the unit that the researcher will focus on while making his inquiry. According to (Lewis-Beck, Bryman, & Liao, 2003), the appropriate definition of the term as developed in research is that it is the basic unit that is to be investigated. This statement implies that the unit of analysis can be defined in the hypothesis of a study or within the topic of the research. In a case where the research is based on an investigation about the truth of a hypothesis, the unit of analysis becomes the main actors in the hypothesis. In political science, it simply implies the level of actors at which a researcher will aggregate the data.

In any study, the choice of actors or the unit of analysis has a bearing on the final generalization that is given by a study. In this perspective, the emergence of fallacies on the conclusion of a study will be as a result of not properly identifying the unit of analysis. In a study about the geopolitics of a country, for instance, the focus of the research could be trade relations. The selection of the actors in this study due to the interest and ideas about the actor could lead to a level of complications like cross referencing or fallacies (Babbie 2013). This article examines the possible set of units that relate to a research question about the geopolitics of China and its international partners in trade. Specifically, the units of analysis that relate to the research are discussed in details. It also observes the relevance of the units of analysis that will be selected for the investigation on the topic.

Depending on the research question and the motivation of the researcher, the development of the appropriate actors or even the units of analysis could be difficult or just impossible. In this case, the use of cross-referencing is used to create a correlation of the available information to the unit of analysis that has been selected. The difficulty in obtaining the data about the unit of study may also lead to the absence of this ambiguity which seldom happens, the choice of the unit of study is simplified. Problems like the ecological fallacy that results from using data that is meant for a group to make generalization is avoided.

In the case of geopolitical analysis of China and the trade relations, the major unit of analysis is the country which is China. This choice is provoked by the fact that much of the data that will be collected on the topic for purposes of analysis will have to do with a perspective of the geopolitics of China or even its partners. Data about international trade of China and the politics that govern regions like the South China Sea are potential units of analysis in this study.

The ecological fallacy (Babbie 2013) can also be possible in the development of this study by making generalizations that are not about the group that is the overall country China. For instance, in a study about the preference of the wealthy Chinese businessmen and their preferred destinations of investment, a study could use the country data. In this study if the generalization of the research argues that the businessmen prefer to make trade deals with the west as opposed to the African or Asian counterparts, an ecological fallacy is given in the study. The ecological fallacy in this study will be as a result of observing the overall government bilateral trade

agreements and generalizing this at the personal preference level. It is highly likely that the wealthy Chinese business persons can have interests in the African or Asian continents as well.

The specific units of study, in this case, are related to the constituents of geopolitical studies or the major aspects that contribute to the subject domain of geopolitics. These units of study could be related to the concepts like demography and trade that is the main area of study. Other units of analysis can be linked to the climate of the regions, the region, natural resources, the use or imbalance of technology, and politics of the region being evaluated.

For a study about the geopolitical aspects of trade relations of the Chinese especially if the comparison is inclined towards the American-Sino relations, all these factors are potential actors of the units of analysis which is the country. An imbalance of technology, for instance, is likely to trigger trade to favor the country that is in the possession of a high level of technology. Factors like efficiency could be the silent driving forces behind the success of the high technology countries. Ideas like climate could play a role like in the tourism sector. But while noting that the two countries are subcontinents there is a possibility that the overall impact of the climate more or less remains a constant factor. Despite this great mix and variety of the actors, the main actor therefore in this study remains the regional and global politics and the effects of demographics (Riegl & In Landovsky) † 2013.

Justification of the actors

The politics of the region being evaluated in a study has a strong relation to the main actors of the economy that is the unit of study. Particularly, aspects of politics include the ability to dominate the regional bodies in a continent and the control of the same. For instance, in a regional union like the European Union, the decisions are negotiated by the members. The ability to marshal the allies to vote for the interest of a country in economic affairs would have to do with the regional political influence of the country. In a case like this interests also play a major role. The role of interest is that member states will have to consider their position on the global front and the need to progress. In many instances, the interests of a nation are driven by the fact that there is need to achieve economic growth in the nation. As such any progress that is considered to have a negative impact on the economy is taken as an unwanted position by the block. Therefore aspects of political ideologies and intention have an effect on the geopolitical relations.

In demographics, the profligacy of the United States has come under sharp criticism. This idea has become a central potential of exploitation of the Chinese in dealing with the trade with the American public. Leonard (2006) examines the roles of this demographic factor in the relations of trade created between the two partners. Its findings indicate that the American public has become extremely uncaring of their spending habits in the past that even led to the recession that occurred in the nation. As a result, this actor is a significant variable in examining the geopolitical relations that have to do with trade between the nations. The reason for its importance is related to the level of debt that China holds for the United States. This research study also claims that the height of debt that America hold in China

is substantial and a major driver in the trade relations between the two states.

The selection of the two main actors in this type of research is based on the ability to take a validity assessment and the reliability of a study. In any research, before making a generalization, the review of the measurement is taken. For instance, it would be important to review if all measurements of the information that is contained in the study is properly within the context and requirements of the same study. In this case, main geopolitical factors in the study will have to be tested for their validity and reliability in making generalization of the subject of discussion. This factor means that the actors will have to be listed within the sub-factors that indicate their face or content validity. The face validity of the actors includes factors that the researcher envisions in their study (Babbie 2010). The content validity is deeper in meaning and will cover the major conventional attributes that build or indicate the actor in research. Reliability, on the other hand, deals with the replication of the same study (Kibble 2011). Therefore, the selection of these two actors which are important aspects of the unit of study will be a stronger block in generating the sub-factors that will point to a more reliable and valid study.

#### Selected case study

The unit of analysis, in this case, is at country level. It would be important to select case studies with the same level of units of analysis. In looking at the geopolitical factors and their effects on the international trade with China, this study will select a case study based in the United States and a

Scandinavian country or a developing country. This selection will aim at unveiling the difference in the geopolitical factors that favor or does not favor trade in the two countries. At a more specific level, a comparison of the main actors that are involved will be the main factor. This will aim at unveiling if the two main actors that have been identified by this research are valid or not.

The choice of the United States in the geopolitical study is made mainly because the United States is a major trading partner of the Peoples Republic of China. Therefore, a study in the geopolitical aspects of the relation could make conclusive on the facts relating to the same. Another important aspect is to do with the Chinese economic system that is communist and the inclination towards the western democratic nations. It would be important here to see if the political aspects have anything to do with the level of trade that is generated between the United States and the Chinese counterparts.

In conclusion, the choice of a unit of analysis has a significant bearing on the outcome of a research process. The main contribution of the fact is based on the identification and selection of the units. In a case of improper selection, the problems that are likely to arise are related to the fallacy of the outcome of the study. In ecological fallacy, the generalization of the outcome and the drivers of the same is the main concern. It would be inappropriate to make group conclusion of results as a representative of individual units of analysis and vice versa. In a study of this character, it is also important to review the validity and reliability issues.

## References

Babbie, E. (2013). *The basics of social research* . Cengage Learning.

Babbie, E. R. (2010). *The practice of social research* . Belmont, Calif: Wadsworth Cengage.

Kibble, B. P. (2011). Reliability in Scientific Research: Improving the Dependability of

Measurements, Calculations, Equipment, and Software, by IR Walker: Scope: review.

Level: postgraduate, early career researcher, researcher, scientist, engineers.

*Contemporary Physics* , 52 (6), 615-616.

Lewis-Beck, M., Bryman, A. E., & Liao, T. F. (2003). *The Sage encyclopedia of social science*

*research methods* . Sage Publications.

Leonard, Andrew (2006), *No More Treasury Bonds, Thank You, I'm Full: Is China Tired of*

*Propping up the U. S. Economy?* , 6 January, online:

/china\_bonds> (17 May 2015).

Riegl, M., & In Landovskyì † , J. (2013). *Strategic and geopolitical issues in the contemporary*

<https://assignbuster.com/effect-of-unit-of-analysis-in-political-research/>



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