

CHARLES UNIVERSITY
FACULTY OF SOCIAL SCIENCES

Institute of Political Studies
Department of Political Science

Bachelor's Thesis

2020

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**Does the size of an economy matter (a lot)? The
economic potential of a country as a necessary or
sufficient condition for regional dominance.**

Bachelor's Thesis

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Study programme: Political Science and International Relations

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Year of the defence: 2020

Declaration

1. I hereby declare that I have compiled this thesis using the listed literature and resources only.
2. I hereby declare that my thesis has not been used to gain any other academic title.
3. I fully agree to my work being used for study and scientific purposes.

In Prague on July 29, 2020

Tomáš Boukal

References

BOUKAL, Tomáš. *Does the size of an economy matter (a lot)? The economic potential of a country as a necessary or sufficient condition for regional dominance*. Praha, 2020. 62 pages. Bachelor's thesis (Bc). Charles University, Faculty of Social Sciences, Institute of Political Studies. Department of Political Science. Supervisor RNDr. Jan Kofroň, Ph.D.

Length of the Thesis: 105 630 characters (with spaces)

Abstract

The current economic rise of China entails one question. What significance can we attribute to the size of economy of countries for the accomplishment of regional hegemony? The ongoing debate agrees that economic might is a significant indicator of national power and thus the countries aspiring to dominate their regions should be displayed by lead in the economic sphere over other regional actors. Nevertheless, the consensus on the extent of this relationship has not yet been established. This thesis aims to contribute to the debate by determining whether economic potential constructed on GDP numbers is a necessary condition, a sufficient one, or neither of those, for regional dominance of countries. Based on the examination of historical cases from 1700 to 2010 and regions of Europe, Northeast Asia, and Western Hemisphere, we present a new indicator of regional dominance consisting of six sequential levels. By employing the “Necessary Condition Analysis”, we argue that economic potential is a necessary but not a sufficient condition for higher levels of regional dominance with the effect of necessary condition denoted as “medium”. Further, we provide a robustness check for the computation of economic potential using the Beckley’s “GDP * GDP per capita” measure and Paul Bairoch’s “Total industrial potential” indicator and receive very similar results.

Abstrakt

Nynější ekonomický růst Číny v sobě skrývá následující otázku: Jaký význam hraje velikost ekonomiky států v jejich snaze o regionální hegemonii? Současné poznání argumentuje, že ekonomická síla států je klíčovým indikátorem síly mocenské. Země, které usilují o nadvládu nad regionem, by tak měly být identifikovány dle ekonomických ukazatelů převyšujících své regionální oponenty. Nicméně, v literatuře neexistuje shoda na tom, nakolik tento vztah platí. Úkolem práce je přispět do této debaty položením otázky, zda-li je ekonomický potenciál zemí založený na HDP nutnou podmínkou, postačující podmínkou, či ani jednou z nich, pro regionální dominanci zemí. Na základě analýzy historických dat mezi lety 1700-2010 z regionů Evropy, Severovýchodní Asie a Západní polokoule prezentujeme nový indikátor regionální dominance skládající se z šesti, po sobě jdoucích, stupňů. Následně, použitím „Necessary Condition Analysis” konstatujeme, že ekonomický potenciál je nutnou, nikoliv postačující podmínkou, pro regionální dominanci zemí, a efekt nutné podmínky by se dal označit jako „střední“. Tento závěr je potvrzený i výpočtem ekonomického potenciálu dle indikátoru „GDP *

GDP per capita”, který prezentuje Michael Beckley, a indikátoru „Total industrial potential” podle Paula Bairocha.

Keywords

Economy, regional dominance, GDP, power competition, Necessary Condition Analysis

Klíčová slova

Ekonomika, regionální dominance, HDP, mocenské soupeření, Čína, Necessary Condition Analysis

Název práce

Jak moc záleží na velikosti ekonomiky? Ekonomický potenciál - nutná nebo dostatečná podmínka regionální dominance.

Acknowledgement

Special thanks go to my supervisor RNDr. Jan Kofroň, Ph.D. for his valuable comments, patience, support, and time. I would also like to express my gratitude to Dr. habil. Nicole Franziska Richter, the ambassador of Necessary Condition Analysis, to Mrg. Jakub Stauber for the help with the R program, and to Mgr. Jakub Dopieralla for the help with nuances of written English.

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Acronyms

BoP	Balance of Power
CE-FDH	Ceiling Envelopment with Free Disposal Hull (NCA analysis, ceiling technique)
CR-FDH	Ceiling Regression with Free Disposal Hull (NCA analysis, ceiling technique)
COW	Correlates of War project
GDP	Gross Domestic Product
GNP	Gross National Product
NCA	Necessary Condition Analysis
OLS	Ordinary Least Squares

Introduction

In the aftermath of the Second World War China has found itself in the middle of a civil war which, together with the Great Leap Forward, hindered its economic performance for the following years. At the end of the Cold war, China was the tenth largest economy in terms of Gross Domestic Product, accounting for 1.7 percent of the global GDP, whereas the US accounted for 28 percent of the global share. In 2019, China soared to second position, accounting for 16 percent of the global GDP, whereas the US share decreased to 24%.¹ The Chinese economic development of the recent decades could therefore be summarized by Graham Allison's quote of Václav Havel's words: "*It has happened so quickly that we have not yet had time to be astonished.*"²

The magnitude of Chinese economic growth has drawn the attention of many international relation theorists who have suggested a power shift from the United States to China, or in other words, from the West to the East.³ In those works, the power shift is largely explained by one phenomenon – economic power, or as White puts it: "*China's wealth changes America's relationship with it because the old saying is right: ultimately, wealth is power.*"⁴ The National Intelligence Council in its prognosis for the year 2030 suggests the end of the United States' unipolarity and further "diffusion of power". This work, except for the economic might, expressed by GDP indicator, gives importance to other factors of national power such as population size, military spending, and technology.⁵

Thus, the rise of China in relation to its economic growth entails one question at hand. What role does the size of the economy play in the determination of the future power statuses of states? Here, one side argues that the size of the Chinese economy in terms of GDP predetermines its future world power position.⁶ On the other hand, a second

¹ The values correspond to nominal GDP; "World Development Indicators: GDP (Current US\$)," TheWorld Bank. Accessed July 2, 2020.

<http://databank.worldbank.org/data/reports.aspx?source=2&series=NY.GDP.MKTP.CD#>.

² G.T. Allison, *Destined for War: Can America and China Escape Thucydide's Trap?* (Scribe Publications, 2017), 10. <https://books.google.com.au/books?id=tcG7AQAACAAJ>.

³ See for example: Hugh White, *The China Choice: Why We Should Share Power* (Oxford, United Kingdom: Oxford University Press, 2013) or Fareed Zakaria, *The Post-American World*, New York Times Best Sellers (W.W. Norton & Company, 2008).

⁴ Hugh White, *The China Choice: Why We Should Share Power*, 3.

⁵ National Intelligence Council (U.S.), ed., *Global Trends 2030: Alternative Worlds: A Publication of the National Intelligence Council* (December 2012: National Intelligence Council, 2012).

⁶ The argument of the ending US world predominance based largely on the levels of GDP is particularly noteworthy in the following works: Christopher Layne, "The Unipolar Exit: Beyond the *Pax Americana*," *Cambridge Review of International Affairs* 24, no. 2 (June 2011): 149–64,

group of scholars argues for the notion of an imperfect relationship between GDP and national power. This point is acknowledged by Beckley, who remains sceptical about the future Chinese position in comparison to the US. His arguments focus on the inability of GDP to fully account for the wealth of states, and thus he points to other indicators of power, such as innovation or conventional military might.⁷

Our thesis aims to contribute to this debate by asking the following question: “Is the economic potential of a country a necessary or sufficient condition for higher levels of regional dominance?”⁸ This is because the future power position of China depending on its economic base can be inferred from historical cases. For example, consider the case of Wilhelmine Germany. Prior to the Bismarck unification, German states had produced half the steel when compared to Great Britain: however, by 1914, Germany had a twofold lead.⁹ The economic ascendance of Germany was raising fears in Britain of a possible war, but neither the naval buildup, nor the alliance formation has stopped Germany in an attempt to alter Europe’s balance of power.¹⁰ China at that time represents a completely different situation . Between 1870 and 1913, China had maintained a GDP lead over its two regional adversaries, Japan and the Russian Empire.¹¹ Nonetheless, it was Japan and Russia who imposed unequal treaties on China and who influenced a large portion of regional affairs.¹² These two cases show us that it is not always the case in history that the state with a larger economy had greater influence over international system. Nevertheless, economic power can still be a prerequisite for regional dominance. The extent to which this relationship holds will be the subject of our analysis. We will employ

<https://doi.org/10.1080/09557571.2011.558491>; Allison, *Destined for War: Can America and China Escape Thucydide’s Trap?*.

⁷ Michael Beckley, ‘China’s Century? Why America’s Edge Will Endure’, *International Security* 36, no. 3 (2011): 41–78.

⁸ This research question differs to the one we have put forward in Bachelor thesis proposal where we have asked: “Does the historical cases of regional dominance indicate that the size of an economy was a necessary condition for countries to rise?” This is due to the fact that we have assumed to work with the dataset of “ruling and rising powers” from the Graham Alison’s book *Destined for War: Can America and China Escape Thucydide’s Trap?* However, this approach would result in a small sample and thus possible biasness of results. This is why we incline to the above-mentioned research question. Furthermore, the characteristics of our thesis do change considerably because of this. In the thesis proposal, we have outlined that the rise of China and Chinese power position will be one of the discussed topics. Although, we mention it in the introduction of the thesis and we still see it as the motivation behind the work, we do not discuss rise of China in closer detail for the sake of space and consistency of the thesis.

⁹ Allison, *Destined for War: Can America and China Escape Thucydide’s Trap?*, 51-52.

¹⁰ Allison., 46-63.

¹¹ Angus Maddison, *The World Economy: A Millennial Perspective* (Paris, France: OECD Publishing, 2001), 259, <https://doi.org/10.1787/9789264189980-en>.

¹² Dong Wang, *China’s Unequal Treaties: Narrating National History* (Lanham, MD: Lexington Books, 2008), 10.

the '*NCA model*' as described in the article "Necessary Condition Analysis (NCA): Logic and methodology of 'necessary but not sufficient' causality". Based on this model, we will investigate two main hypotheses. The economic potential of a country is a necessary condition for higher levels of regional dominance; and its alternative, the economic potential of a country is not a necessary condition for higher levels of regional dominance. Close examination and selection of the correct hypothesis can signal to us whether wealth is a determinant for regional dominance, and its significance for national power of states.

The remainder of this thesis is structured as follows. Firstly, the literature will be analyzed to establish the link between economy and national power. In this chapter, we will also examine whether scholars see economic wealth as a necessary or sufficient condition for regional dominance or whether no strong relationship exists at all. To narrow the scope of the arguments presented herein, we will only follow the realist school of thought.¹³ Secondly, the methodology of our research will be presented. We will conceptualize and operationalize our research question, we will specify the variables together with the selected models and describe the properties of data.¹⁴ Here, it is important to note that, due to the lack of relevant data for some regions, our analysis of historical cases cannot go further into the past than the 18th century and, for some time periods in particular, it may appear Eurocentric. Thirdly, we will construct appropriate models and discuss the results they yield. Lastly, the conclusion will be drawn, where we state our limitations and point out to suggestions for further research.

¹³ By focusing only on the realist school of thought, we are trying to narrow the scope of analysis down. This is a change to the Thesis proposal, where we have not indicated this selection and we have mentioned protagonists of liberalism such as Joseph Nye.

¹⁴ Here we have to mention yet another difference to the Thesis proposal. Speaking about independent variable and the properties of data, the proposal states following: "*...the size of the economy of selected countries will be measured using GDP, iron and steel production, energy consumption or the size of a trade.*" With respect to this, we make the following change. We measure the size of economy, which is subsequently used for the computation of economic potential, in GDP terms only. As the robustness check for selection, we apply GDP * GDP per capita, and Total industrial potential indicators. See the methodology of the thesis for further details.

1. Theoretical background: conceptualization of power and the relevance of economic might

In the theoretical background, we work with two main concepts: economic potential of states and dominance of states. As we take the former as a prerequisite for the latter, we first have to analyze whether this prerequisite is adequate. This is why we first look at the concept of power in IR theory and its measurement. Secondly, we theorize our research question which asks whether we can identify economic potential as a “necessary or sufficient condition” for regional dominance of states. To formulate this in harmony with the literature, we are asking if wealth can predetermine the power status of a state, and to what level. Lastly, we will turn our focus to the concept of regional dominance. We will examine whether states seek to dominate the system, what policies they use to attain this goal, and how other members within the system respond to their aspirations.

1.1 The concept of power in the International Relations and its measurement

As Michael Beckley indicates, the question of what makes some countries more powerful than others has been central to the study of international relations.¹⁵ There exist two main approaches to define power: in terms of outcomes, or in terms of resources.¹⁶ The former refers to the influential phrase coined by Robert Dahl: “*A has power over B to the extent that he can get B to do something that B would not otherwise do.*”¹⁷ The latter approach, which remains predominant in the literature, centers on resources at a state’s disposal.¹⁸ The explanation of both perceptions is given by Waltz who is very critical of the former.¹⁹ In his opinion, to define “power” in Dahl’s terms would mean that only “power” is needed to achieve the ends. That does not hold, because we need to consider the capabilities and the “structure of action” of both sides. Thus, it is optimal to define power by the weight of resources, as an agent with large

¹⁵ Michael Beckley, ‘The Power of Nations: Measuring What Matters’, *International Security* 43, no. 2 (1 November 2018): 7–44, https://doi.org/10.1162/isec_a_00328.

¹⁶ Beckley.

¹⁷ Robert A. Dahl, ‘The Concept of Power’, *Behavioral Science* 2, no. 3 (1957): 201–15, <https://doi.org/10.1002/bs.3830020303>.

¹⁸ John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: WW Norton & Company, 2001).

¹⁹ Kenneth Neal Waltz, *Theory of International Politics*. (Waveland Press, 2010), 191-92.

preponderance in capabilities can achieve adequate policies by simply putting the capabilities behind him. Also, the definition in terms of resources appears more appropriate for our research question as we define resources, measured by the size of economy, as the explanatory variable.

What does the groundwork on the resource-based conceptualization of power tell us? How resources affect the desired ends has been the subject of works ranging from behaviour of great powers,²⁰ theories of conflict,²¹ to the development of alliances.²² However, these studies are short of consensus over the most appropriate indicator of national power. Three main components are usually included. These are wealth, military power, and technology.²³ The logic of this composition is straightforward. States need military resources to ensure their security.²⁴ The economic might then serve as a prerequisite for their buildup.²⁵ Lastly, the level of technological capacity gives states an advantage in the domain of weaponry, and it also boosts their economic capability.²⁶

Here, however, we once again fall into the trap of imperfect selection as there does not exist a perfect indicator that would combine all the components of power mentioned above. The problem arises particularly when we want to analyze historical cases from the early modern period of the 18th and 19th centuries. Paul Kennedy, in his classic *The Rise and Fall of Great Powers*, points to the fact that historical statistics of this period are very approximate, and data can be skewed by an inadequate state bureaucracy.²⁷ Furthermore, numerous observations from these periods were calculated many years later. Kennedy overcomes this challenge by complementing the statistical observations with an exhaustive qualitative analysis.

Other works propose different indicators to overcome this limitation. For example, John Mearsheimer ties his theory to “latent power” of states that, in general terms, is defined by the size of population and wealth.²⁸ Again, the problem of choosing the proper indicator arises. Hence, Mearsheimer introduces a composite indicator of the state’s energy consumption, iron

²⁰ Mearsheimer, *The Tragedy of Great Power Politics*.

²¹ Jacek Kugler and William Domke, ‘Comparing the Strength of Nations’, *Comparative Political Studies* 19, no. 1 (1986): 39–69, <https://doi.org/10.1177/0010414086019001002>.

²² Jack S. Levy and William R. Thompson, ‘Hegemonic Threats and Great-Power Balancing in Europe, 1495–1999’, *Security Studies* 14, no. 1 (1 January 2005): 1–33, <https://doi.org/10.1080/09636410591001465>.

²³ Stephen G. Brooks and William C. Wohlforth, “The Rise and Fall of the Great Powers in the Twenty-First Century: China’s Rise and the Fate of America’s Global Position,” *International Security* 40, no. 3 (January 1, 2016): 7–53, https://doi.org/10.1162/ISEC_a_00225; Paul Kennedy, *The Rise and Fall of the Great Powers* (Vintage, 2010); Mearsheimer, *The Tragedy of Great Power Politics*, 55.

²⁴ Mearsheimer, *The Tragedy of Great Power Politics*, 55.

²⁵ Ibid.

²⁶ Brooks and Wohlforth, “The Rise and Fall of the Great Powers in the Twenty-First Century,” 16.; Mearsheimer, *The Tragedy of Great Power Politics*, 61.

²⁷ Kennedy, *The Rise and Fall of the Great Powers*, 145.

²⁸ Mearsheimer, *The Tragedy of Great Power Politics*, 55.

production, and steel production for the period from 1816 to 1960. For the period after 1960, he opts for the GNP of states.²⁹ Levy and Thompson also take into account the poor reliability of economic data before the Industrial Revolution. Hence, they propose “relative size of army” as an indicator to analyze whether great powers have balanced against the strongest player in the system since 1495.³⁰ Furthermore, a different methodology is selected by Kugler and Domke in their study of the relationship between national power and major wars.³¹ They calculate power as the combination of GNP and foreign aid, which is subsequently weighted by the effectiveness of governments to execute given tasks. The debate was further broadened by Michael Beckley who argues for a whole new indicator of power.³² In his opinion, gross indicators such as GDP exaggerate populous countries. If we account for aggregate consumption, a bigger population brings bigger costs. Therefore, Beckley introduces GDP * GDP per capita to more accurately represent the net wealth of states. A similar point was observed by Waltz.³³ During the Cold War, the Soviet Union had to balance against the US despite having significantly smaller GNP. This fact was further amplified by the proportionately larger population for which the Soviets have had to provide.

To summarize, economy appears to be one of the main components of power that predetermines both power status and the course of actions of states. Even though the literature does not agree on the most appropriate indicator of economic domain, the study of power suggests that the size of economy does matter. We now look at the “necessary or sufficient” diction. We delve into theory to ascertain whether economic potential can be taken as rather a necessary or a sufficient condition for the regional dominance of countries or neither of those. In this stage of the thesis, the perception of the word “dominance” also answers to the great power competition.

1.2 The economic potential of states as a condition for dominance

Even though a majority of studies on great power competition are either Eurocentric or focus on the last two or three centuries, we may find cases outside this realm that confirm the importance of wealth for domination-seeking players. Between 356 and 221 BC, the Qin

²⁹ Mearsheimer, 67.

³⁰ Levy and Thompson, “Hegemonic Threats and Great-Power Balancing in Europe, 1495-1999,” 16-17.

³¹ Kugler and Domke, ‘Comparing the Strength of Nations’.

³² Beckley, ‘The Power of Nations’.

³³ Kenneth Neal Waltz, *Theory of International Politics*. (Waveland Press, 2010), 180.

Empire was able to rise from a great power to a regional empire.³⁴ The key to the Qin ascendance was the emphasis on national strength and its two main components *fuguo* (economic wealth) and *qingbing* (strong army). Furthermore, the ancient Chinese statesmen believed that administrative policy is a pathway to power and wealth. Hence, policies were introduced to boost economic gains in order to maximize power and secure territorial expansion. The rise of the Qin Empire suggests that, even in distant history, we may find cases where economic capabilities could be identified as sufficient condition for dominance.

From history to the present, the fundamental role of economic potential was acknowledged by President Nixon in 1971 when he used it as the explanation for opening the doors to Mainland China.³⁵ According to Nixon, the economic potential of China over the next 10 to 15 years would be significant, although at that time Chinese production was smaller than Japan's. However, in his words, the economic opening would result in enormous potential and would alter the balance of power as the number of great powers would grow to five: The United States, Western Europe, the Soviet Union, Mainland China, and Japan. Nixon believed that those powers would determine the future of the global economy, and as economic power creates foundations for other aspects of power, they would determine world affairs in the last third of the century as well.

However, many scholars of IR describe economic potential rather as a necessary condition for power status. Kenneth Waltz in particular sees wealth just as one of many conditions when he writes:

*“The economic, military, and other capabilities of nations cannot be sectored and separately weighted. States are not placed in the top rank because they excel in one way or another. Their rank depends on how they score on all the following items: size of population and territory, resource endowment, economic capability, military strength, political capability and competence.”*³⁶

This is very consistent with his description of the origins of the First World War.³⁷ Austria and Germany looked to the east and witnessed Russia's advancement in many industrial sectors and massive population growth. The French also looked east and saw a country which outruns

³⁴ Stuart Kaufman, Richard Little, and William Wohlforth, “The Balance of Power in World History,” August 22, 2007, 122-47, <https://doi.org/10.1057/9780230591684>.

³⁵ Richard Nixon, “The President's Remarks to News Media Executives Attending a Background Briefing on Domestic Policy Initiatives,” Weekly Compilation of Presidential Documents, July 5, 1971, 1034-36.

³⁶ Waltz, *Theory of International Politics*, 131.

³⁷ Kenneth Neal Waltz, *Man, the State, and War: A Theoretical Analysis*, 2nd ed. (New York: Columbia University Press, 1962), 218-19.

it in both economic and population terms and still gaining by leaps. Lastly, the British looked to the mainland and saw a challenge to its naval and economic power which outstripped the British in some areas, and in others was putting the British long-lasting superiority into a question. From this analysis it is easily noticeable that Waltz considers economy to be a significant component of power, but not the only one. A similar picture is drawn by Stephen Walt.³⁸ His explanation of alliance formation is tied to power distribution in the system, wherein power is composed of economic and military means, population, technological advancement, and political cohesion. Such definition supports the notion that economic potential is a necessary condition.

In contrast to Walt and Waltz, Paul Kennedy attributes higher weight to the economy.³⁹ He maintains that for the last five centuries the changes in the system have occurred as a response to economic and technological progress. This is because the changes in global military balances often go along with the shifts in productivity. Thus, the rise and fall of powers have always followed the same pattern. The side with higher material capabilities is the winning side. This is why Kennedy suggests a “great power” should be defined in terms of necessary means, by thriving economic base.⁴⁰ The only step that precludes it from being a sufficient condition is the security dilemma.⁴¹ The decision of a state to go to war can eat up a large portion of resources and the state risks being overtaken by other actors. Hence, we may claim that if the preponderance in economic domain would be large enough to overcome this dilemma, the condition would appear as sufficient.

An almost identical stance to Kennedy’s is adopted by John Mearsheimer.⁴² We can summarize his theory in the following way. Military force is a sufficient requirement for domination in the system. And the build-up of military force is largely sufficed by population and wealth of state. However, as outlined by Kennedy, states sometimes do not decide to translate their economic potential into military establishments. This is the case of Japan, which has for the past several decades been equipped with abundant economic resources, which have not yet been translated into military domain, as Japan continues to rely on the US. The reason behind such behavior lies in the security position of Japan, as a larger contribution to force would not bring Japan any serious advantage over its rivals. Besides, this logic can be explained

³⁸ Stephen M. Walt, *The Origins of Alliances*, Cornell Studies in Security Affairs (Ithaca: Cornell University Press, 1987), 265.

³⁹ Kennedy, *The Rise and Fall of the Great Powers*, 439.

⁴⁰ Kennedy, 539.

⁴¹ Kennedy, 539-40.

⁴² Mearsheimer, *The Tragedy of Great Power Politics*, Chapter 3: Wealth and Power.

by the American domination over the Western Hemisphere. The USA in the 19th century, despite having comparable industrial potential to its European counterparts,⁴³ maintained a proportionally smaller army, because both Mexico and the Native tribes did not pose such a threat to their security.⁴⁴ Another proposition adopted by Mearsheimer is the unequal level of efficiency by which states translate economic power into military power.⁴⁵ To give an example: at the time of the German invasion into the Soviet Union, Germany displayed a clear advantage in economic size, nevertheless the Soviet Union was still able to outproduce it. Thus, even though some countries do not decide to exploit their economic potential fully, in Mearsheimer's theory wealth has greater significance than in theories of Walt or Waltz, as it is an almost sufficient component of military power which alone is assumed to be sufficient for domination.

In this section, we have shown the role of the economy in the determination of power statuses of states. We have found examples where the theory grants almost a sufficient role to economic position of states. Nevertheless, some scholars remain more sceptical about its significance and claim a necessary status. Up to this point, we have worked with the concept of dominance very broadly, not connecting it with any definition. That is the aim of the next section. We will examine the behavior of the great powers. We will ask whether they aim to dominate the system, which policies they pursue to attain such goal, and how other actors in the system respond to hegemonic ambitions.

1.3 The concept of dominance

In order to define the concept of dominance, we first have to look on the behavior of states. As we are following the realist school of thought, we anticipate it is the anarchical order that drives the behavior of states. Anarchy leads states to put security as their highest goal, beyond which states can pursue other motives from "*the ambition to conquer the world to the desire merely to be left alone*".⁴⁶ However, the examined theory does not agree on the idea of whether a quest for security leads states to adopt offensive or defensive policies in nature. According to defensive realists such as Waltz, the system inclines towards balance in which states insist on maintaining their position and not necessarily on maximization of power.⁴⁷ The

⁴³ Paul Bairoch, "International Industrialization Levels from 1750 to 1980," *Journal of European Economic History* 11, no. 2 (1982): 292.

⁴⁴ Mearsheimer, *The Tragedy of Great Power Politics*, 78-79.

⁴⁵ Ibid.

⁴⁶ Waltz, *Theory of International Politics*, 91, 126.

⁴⁷ Waltz, 91.

same stance is adopted by Walt, who argues that states balance against the most immediate threat.⁴⁸ According to this logic, states join alliances to ensure their survival against stronger adversaries. The powerful states should therefore refrain from assertive behavior in order to prevent a countervailing coalition.⁴⁹ The opposite view is offered by Schweller, who shows that minor powers often bandwagon to gain profit.⁵⁰ However, as the Soviet decision to invade Poland on Germany's side shows, even great powers may bandwagon.⁵¹

A more radical argument on the policies of states is proposed by Gilpin. He adopts a cost-benefit analysis taken from economics and applies it to the behavior of states.⁵² As in economics, states will try to maximize their own utility and expand their power so long as marginal gains are greater or equal to marginal costs. Because of it, the international system can be seen through adjustments in the political, economic, and technological realms resulting in gains and losses for individual actors.⁵³ Furthermore, actors witnessing the increase in their power seek an expansion of their territory and political influence which in return increases their power even more. However, Gilpin maintains that this relationship is not linear. Further expansion entails higher costs. That is also why we have seen so few universal empires in history.⁵⁴ This leads Gilpin to the conclusion that the primary goal of states is territorial or economic expansion through which they enhance their security and economic position.⁵⁵

This argumentation is pushed to the extreme by Mearsheimer. Same as Gilpin, he claims that states will seek to increase their power at the expense of others. Yet, Mearsheimer anticipates Walt's argument regarding the balance of power. In his logic, it is the instability of the system that encourages actors will to take advantage of the unequal distribution of power before the balance is restored:

*"Thus, a great power will defend the balance of power when looming change favors another state, and it will try to undermine the balance when the direction of change is in its own favor."*⁵⁶

Mearsheimer's offensive position is asserted through his view on survival. Same as other realist scholars, he sees it as the ultimate goal of states, but unlike them, he claims that survival cannot

⁴⁸ Walt, *The Origins of Alliances*, 7, 18; Stephen M. Walt, "Alliance Formation and the Balance of World Power," *International Security* 9, no. 4 (1985): 4-5, <https://doi.org/10.2307/2538540>.

⁴⁹ Walt, "Alliance Formation and the Balance of World Power," 4-5.

⁵⁰ Randall L. Schweller, 'Bandwagoning for Profit: Bringing the Revisionist State Back In', *International Security* 19, no. 1 (1994): 72-107.

⁵¹ Walt, "Alliance Formation and the Balance of World Power," 8.

⁵² Robert Gilpin, *War and Change in World Politics* (Cambridge University Press, 1981), 10.

⁵³ Gilpin, 10-12.

⁵⁴ Gilpin, 106-107.

⁵⁵ Gilpin, 23.

⁵⁶ Mearsheimer, *The Tragedy of Great Power Politics*, 3.

be assured unless you become the strongest actor in the system.⁵⁷ Hence, Mearsheimer's theory assumes that states, if they are supplied with abundant resources, will eventually pursue an expansionist policy. This is acknowledged in the following assertion about future Chinese behavior: "*if China becomes an economic powerhouse it will almost certainly translate its economic might into military might and make a run at dominating Northeast Asia.*"⁵⁸

If we summarize the discussion above, we obtain two contesting views. One side sees the balance of power as sufficient for survival and the second side does not. Hence, at least for some scholars, states will attempt to dominate the system and thus, hegemony is desired and obtainable goal. To paraphrase Wohlforth et al., the fundamental logic in both balancing and domination can be in the assertion that, because states take power as a path towards security, they frequently pursue expansionary policy.⁵⁹

If the expansionary policy is the type of a behavior that states might practice, we must ask where this policy ends. In other words, is there a final goal at the end of states' expansionist policies? This brings us to the definition of dominance. For now, dominance can be defined as a system in which one actor dominates over all actors. This brings us to the question, what actors can we find in an international system? A system is comprised of interacting units that we call states or, in the case of this thesis, also countries.⁶⁰ Those units differ based on the share of capabilities they possess. Based on this narrative, we arrive at the distinction between lesser and great powers.⁶¹ From this, a feasible interpretation of a dominant power can be derived. For a great power aspiring to dominate a system it has to hold true that there is a significant power gap between it and other great powers. This is what Mearsheimer calls a "potential hegemon".⁶² Then, hegemony can be derived as a system with only one state with such military resources that no other state has the potential to jeopardize its position in a prolonged conflict.⁶³ This is in accordance with Gilpin, who assumes almost every system evolves towards imperial or hegemonic structure, wherein "*a single powerful state controls or dominates the lesser states in the system*".⁶⁴ To put all the options next to each other on a continuum: at the lowest rank, we start with a lesser power. If a lesser power acquires necessary resources "*to put up a serious*

⁵⁷ Mearsheimer, 3.

⁵⁸ Mearsheimer, 4.

⁵⁹ Kaufman, Little, and Wohlforth, "The Balance of Power in World History," 8.

⁶⁰ Waltz, *Theory of International Politics*, 79-93.

⁶¹ Waltz, 97-98. In fact, Waltz does not mention the exact definition of greater and lesser powers in this section. He establishes the distinction of units based on "*their greater or lesser capabilities to perform similar tasks*". But as scholars commonly refer to lesser and greater powers in their works (see: Mearsheimer, *The Tragedy of Great Power Politics*), we have decided to adopt this proposition here.

⁶² Mearsheimer, 44-45.

⁶³ Mearsheimer, 40.

⁶⁴ Gilpin, *War and Change in World Politics*, 29.

fight against the most powerful state in a system” we obtain a great power.⁶⁵ When a great power exhibits a power gap over other actors in a system, we call it a “potential hegemon”. Finally, as the maximum point of the continuum, we have a hegemon, who “dominates all lesser states in the system”.

Nevertheless, some scholars adopt a more defensive view of the prospects of dominance. States do increase their power, however any rise in power is carefully scrutinized by other actors as it creates a security threat.⁶⁶ Thus, the path towards hegemony is often halted by the formation of a balance of power. In the opinion of Wohlforth et al., if the BoP argument holds, hegemonies will not form in a system with multiple powers.⁶⁷ However, as Eilstrup-Sangiovanni shows, the BoP argument is not as deterministic as Wohlforth et al. perceive it, but is more probabilistic in nature.⁶⁸ The conclusion for BoP theorists is therefore a tendency towards balancing behavior.⁶⁹

The stress on the word tendency is very essential for the debate. It implies that hegemonies have their place in international systems. And despite the fact that hegemony may not be created, some states may show signs of it. This begs the question of whether there is any unifying condition for those states aspiring to dominate? Above, we have established that for Mearsheimer and Gilpin the condition lies in a material power gap. Can we see the same condition for BoP theorists? For this reason we put forward the “polarity” concept as defined by Waltz.⁷⁰ If a balance is maintained, the system is either bipolar or multipolar, depending on the number of poles.⁷¹ In this system, the expected policy for each actor is towards the preservation of the system.⁷² However, the demise of the Soviet Union has shown us otherwise. This brings us to the unipolarity concept. In terms of capabilities, we can define the system as unipolar if it comprises of one state, whose preponderance in capabilities over other states places it in a different rank.⁷³ Thus, we see both sides of the debate arriving at the same conclusion. It is the material primacy that largely defines hegemonic structures. Nevertheless, the theoretical conceptualization of dominance is still incomplete.

⁶⁵ Mearsheimer, *The Tragedy of Great Power Politics*, 5.

⁶⁶ Kaufman, Little, and Wohlforth, “The Balance of Power in World History,” 8.

⁶⁷ Kaufman, Little, and Wohlforth, 157.

⁶⁸ Mette Eilstrup-Sangiovanni, “The End of Balance-of-Power Theory? A Comment on Wohlforth et al.’s ‘Testing Balance-of-Power Theory in World History,’” *European Journal of International Relations* 15, no. 2 (June 2009): 369, <https://doi.org/10.1177/1354066109103145>.

⁶⁹ Waltz, *Theory of International Politics*, 118; Levy and Thompson, “Hegemonic Threats and Great-Power Balancing in Europe, 1495-1999.”

⁷⁰ Waltz, 129.

⁷¹ Brooks and Wohlforth, “The Rise and Fall of the Great Powers in the Twenty-First Century,” 10.

⁷² Waltz, *Theory of International Politics*, 204.

⁷³ Brooks and Wohlforth, “The Rise and Fall of the Great Powers in the Twenty-First Century,” 14.

While considering the case of unipolarity, we have mentioned the downfall of the Soviet Union or in the words of Waltz: “*Upon the demise of the Soviet Union, the international political system became unipolar.*”⁷⁴ It is important to stress that the unipolarity described here is perceived as global.⁷⁵ But even scholars who see the current international system as global do not apply it to all historical periods. The other contestants for hegemony such as France under Napoleon or Germany under Wilhelm II and Adolf Hitler were regarded only regionally, not globally.⁷⁶ However, there exist opinions that world hegemony has not occurred yet. To paraphrase Mearsheimer, effective control over the whole system is not feasible, mostly due to the difficulty of projecting power across large bodies of water.⁷⁷ The view finds also finds support in the BoP theory which often points out to the proximity of the threat. This is because distance decreases the ability to project power.⁷⁸ The case can be demonstrated by the sensitiveness of British statesmen to Wilhelmine Germany’s naval buildup:

“*If the British press pays more attention to the increase of Germany’s naval power than to a similar movement in Brazil—which the Emperor appears to think unfair—this is due no doubt to the proximity of the German coasts and the remoteness of Brazil, ...*”⁷⁹

With the exception of proximity, geography hides another problem yet to be resolved. As Levy and Thomson note, there can be two forms of hegemony: economic and territorial.⁸⁰ The former is largely associated with maritime powers and is less threatening to other actors. The latter presupposes a direct and immediate challenge to others as the territorial hegemonies are recognized through their armies.⁸¹ The continental powers are therefore much more prone to balancing, as can be seen in the case of Great Britain, against which no coalition was formed in the 1870s despite the fact that its economic and naval preponderance was at its peak.⁸² This is what John Mearsheimer summarizes as the “primacy of land power”.⁸³ These two arguments

⁷⁴ Kenneth N. Waltz, “Structural Realism after the Cold War,” *International Security* 25, no. 1 (July 1, 2000): 27. & Brooks and Wohlforth, ‘The Rise and Fall of the Great Powers in the Twenty-First Century’.

⁷⁵ Except for Waltz, *Theory of International Politics*, the argument can be found in: Stephen G. Brooks and William Curti Wohlforth, *World out of Balance: International Relations and the Challenge of American Primacy* (Princeton: Princeton University Press, 2008); William C. Wohlforth, “The Stability of a Unipolar World,” *International Security* 24, no. 1 (1999): 5–41.

⁷⁶ See for example: Christopher Layne, ‘The Waning of U. S. Hegemony—Myth or Reality? A Review Essay’, ed. Stephen G. Brooks et al., *International Security* 34, no. 1 (2009): 147–72; Brooks and Wohlforth, *World out of Balance*.

⁷⁷ Mearsheimer, *The Tragedy of Great Power Politics*, 41, 140-41.

⁷⁸ Walt, “Alliance Formation and the Balance of World Power,” 10.

⁷⁹ Great Britain Foreign Office, G.P. Gooch, and H.W.V. Temperley, *Anglo-German Tension; Armaments and Negotiation, 1907-12*, British Documents on the Origins of the War, 1898-1914 (H.M. Stationery Office, 1967), 184. Accessed June 20, 2020. <https://books.google.cz/books?id=gMJxXhM7VtoC>.

⁸⁰ Levy and Thompson, ‘Hegemonic Threats and Great-Power Balancing in Europe, 1495-1999’.

⁸¹ Mearsheimer, *The Tragedy of Great Power Politics*, 83.

⁸² Eilstrup-Sangiovanni, ‘The End of Balance-of-Power Theory?’ 356.

⁸³ Mearsheimer, *The Tragedy of Great Power Politics*.

may be critical for the methodology of our research, to which we turn next. But let us first summarize the theoretical background of the concept of dominance as has been presented above.

We have established two different views on the behavior of states. The first considers states as expansion seekers, the second opts for balancing behavior. Nonetheless, we have shown that domination is a possible outcome for both sides of the debate. The last proposition discussed is whether domination is ascribed to global or regional systems. We have established that both balancing behavior and bids for dominance can be interpreted from a regional perspective. If we add this concept to the whole narrative of this thesis, the literature mentions the following. The size of economy does play a significant role in the formation of world affairs. The prevalent argument is that economy is a necessary condition for regional dominance, even though some scholars see it as very close to sufficient. Lastly, the hegemony and the power position of states rests largely on the capabilities of states. Thus, dominance ties back to the size of the economy.

2 Methodology

In this section, we will follow up on the established theoretical background, which we use for the conceptualization of the research characteristics. This includes defining our dependent and independent variables, proposing the most appropriate model, and scrutinizing the quality of data. The operationalization of variables is especially important, so as not to yield biased results. The first set problems of operationalization is outlined in the next section, where we state the general course of action for our research.

2.1 The concept of dominance

The aim of our thesis is to answer the following question: “*Is the economic potential of a country necessary or sufficient condition for higher levels of regional dominance?*”. We denominate our independent variable by the term the *economic potential of a country*. To clarify our terminology, *the economic potential of a country* is used as a reference to literature that often connects the shifts in power-balances to the changes in productivity-balances of states. These shifts often occur with a certain time lag and thus, speaking about potential can be more appropriate.⁸⁴ For the variable depending on the *economic potential*, we use a variable coding whether or not a state has attained the status of *regional dominance* and to what level.

The depiction of independent and dependent variables gives us a sketch of the following steps. First, we will identify cases in history when countries were showing signs of *regional dominance*. Second, for those countries, we will observe their value of *economic potential*. In our research, *economic potential* does not correspond to a gross value that would estimate the actual size of economy (such as GDP) as some could assume. Instead, we use these gross values to create a ratio that shows the relative size of economy of one country with respect to the regional shares. Third, we evaluate the observed values by a model. Based on the model, we should be able to determine the answer to our research question and select the appropriate hypothesis. That is to say, the economic potential of a country constitutes a sufficient condition for regional dominance, a necessary role for it, or neither of those.

Before we discuss the variables and the model in closer detail, let us shortly point to a challenge arising from the above-described procedure. Regional dominance, as was discussed

⁸⁴ For example, the idea that wealth does not influence the power status directly, but indirectly through the buildup of military force which is then “*the ultima ratio of international politics*” can be found in Mearsheimer, *The Tragedy of Great Power Politics*, 56.

in the literature, is often defined in terms of capabilities. We can borrow the rationale of Brooks and Wohlforth, who see unipolarity as a system of one actor whose share of capabilities is preponderant in all relative spheres such as size of population, resource endowment, economic capacity, or military might.⁸⁵ This is a problem because we are also constructing our independent variable in the form of capabilities. Such approach would cause a bias in our results as they would self-explain themselves. As we want to stick to the measure of our explanatory variable in terms of capabilities, there are two main ways to overcome the issue of self-explanation.

The first is to introduce a dataset including observations that could serve as cases of regional dominance. For example, the dataset with corresponding properties was introduced by Graham Allison in the book *Destined for War: Can America and China Escape Thucydides's Trap?* where the author compiles a list of sixteen observations comprising of a “ruling” power and a “rising” power in a certain period and over a certain region.⁸⁶ Even though the “ruling” and “rising” power could play the role of the dependent variable, the small sample size and thus probable biasness of final results make this approach inapplicable. Instead, we choose to create a new indicator mapping the stages of regional dominance of countries in history. We tie this indicator to John Mearsheimer’s theory that was laid down in his book *The Tragedy of Great Power Politics*.⁸⁷ Before we discuss the properties of the indicator, we have to point out the data limitation. The whole research will be bounded by the years 1700 and 2010, because of the lack of sufficient economic statistics for the earlier historical periods. Furthermore, as we build upon the work of John Mearsheimer, the analysis will focus only on three regions the Western Hemisphere, Northeast Asia and most importantly Europe. While this might create a potential selection bias, we assume the theory is deductive in nature and results will be robust to this selection.

2.2 Dependent variable: regional dominance of a country

As was shown in the theoretical part, the concept of regional dominance is largely perceived as a binary variable. Either, the international system has signs of dominance or it does not. One possible augmentation of this concept is to include various levels of power statuses states can achieve. We take *status* as a rank or a position that actors attribute to another

⁸⁵ Stephen G. Brooks and William Curti Wohlforth, *World out of Balance: International Relations and the Challenge of American Primacy* (Princeton: Princeton University Press, 2008), 12-13.

⁸⁶ Allison, *Destined for War: Can America and China Escape Thucydides's Trap?*

⁸⁷ Mearsheimer, *The Tragedy of Great Power Politics*.

actor in the same system.⁸⁸ Thus, the coding of the variable would move from binary to ordinary, leading to a significant increase in our sample size and closer examination of the role of economic potential as the indicator of different levels of power. But how should we distinguish those levels? Little systematic data or methodology on this method are available. This is for example acknowledged by Levy and Thompson in their research:

“We measure hegemonic threats in terms of the degree of concentration of military capabilities. Ideally, it would be useful to have an indicator of all instances in which the leading European state had expansionist ambitions, or, more precisely, when others perceived it as posing such a threat. The measurement of these indicators during the last five centuries, for peacetime as well as wartime, would be a formidable task.”⁸⁹

Still, the argumentation of Levy and Thompson implies one important aspect. A plausible indicator can be constructed on the grounds of expansionist ambitions of a country. In this matter, offensive realism points to the following. Dominance is sought by actors as it brings significant security benefits.⁹⁰ Therefore, the system is characterized by actors with expansionist behavior, where dominance over the system is their final goal.

We use this reasoning as fundamental for the construction of the new indicator evaluating the dependent variable. To give it even more precise contours, we will apply the theory laid down by John Mearsheimer. Let us discuss why. Firstly, Mearsheimer does not stick to Waltz’s balance of power theory, but rather maintains that states will exploit the instability of the system to look for opportunities to expand their power. Secondly, he assumes that wealth plays a significant role in the determination of the power status. Lastly, his theory subjects the concept of dominance to regionality and does not see global hegemony as feasible. However, Mearsheimer’s theory still carries with it one significant drawback to our thesis. It assesses the power status of states based on economic numbers. As we have mentioned in earlier stages of the thesis, we cannot construct our dependent variable based on economic numbers, otherwise, our analysis would suffer from endogeneity. Nevertheless, it is still possible to construct our analysis around Mearsheimer’s theory as it offers a great descriptive foundation based on the qualitative evaluation of great powers.⁹¹ Thus, we are able to propose different levels of regional dominance with the minimum score being low or no expansionist ambitions and the maximum score being hegemony over region. Therefore, based on Mearsheimer’s theory, and

⁸⁸ J. David Singer and Melvin Small, “The Composition and Status Ordering of the International System: 1815-1940,” *World Politics* 18, no. 2 (1966): 237, <https://doi.org/10.2307/2009697>.

⁸⁹ Levy and Thompson, “Hegemonic Threats and Great-Power Balancing in Europe, 1495-1999,” 16.

⁹⁰ Kaufman, Little, and Wohlforth, “The Balance of Power in World History,” 12, 19.

⁹¹ Mearsheimer, *The Tragedy of Great Power Politics*, Chapter 6: Great Powers in Action.

taking into account the constraints that are connected to it, we arrive at a completely new indicator determining the regional dominance of country. We decide to introduce 6 sequential levels of dominance running from 0 to 5 with conceptual propositions listed below.

2.2.1 Conceptualization of regional dominance of a country

The key criterion applicable to all cases is that a country has to qualify at least as a great power within the system. Other criteria for each level are considered in the following list, where Y stands for the value of the dependent variable:

- $Y = 0$ represents a country that has a qualitative and quantitative basis to be a **great power**, but **shows no signs of dominance**. We replicate Mearsheimer's definition that a great power has "*to put up a serious fight against the most powerful state in the world*".⁹² Thus, we presume *great power* has substantial military capabilities and economic base. In our opinion, speaking only about great powers is sufficient as the main part of international affairs is determined by states with substantial capabilities.⁹³ Furthermore, we restrict this level of dependent variable only to those cases when a country was not showing any signs of expansionist policy, which are subsequently defined. Japan in the present times would be very close to this definition. However, as Japan is converting only a small portion of its economy to military domain, its great power status is disputed.⁹⁴
- $Y = 1$ denotes a great power that pursues '**secondary**' **type of expansionist policy**. The term secondary refers to a policy that is not directly aimed at achieving hegemony. Thus, the expansionist ambitions of a great power that pursues a *secondary type of expansionist policy* are largely concentrated on minor powers inside or outside the system. Thus, other great powers should not respond with acts such as external or internal balancing. The policy can be inherent to "offshore balancers" such as Great Britain, which never aimed at achieving hegemony. On the other hand, its policy included active prevention of any major power concentration of power on the continent.⁹⁵
- $Y = 2$ refers to the event when a country is subjected to an **external balancing** of other great powers. We can build on the study of Levy and Thompson who argue that balancing is a common behavior for states.⁹⁶ Great powers tend to balance against the higher concentration of

⁹² Mearsheimer, *The Tragedy of Great Power Politics*, Chapter 6: Great Powers in Action.

⁹³ Ibid.

⁹⁴ Mearsheimer, 396-400.

⁹⁵ Mearsheimer, *The Tragedy of Great Power Politics*, 261-66.

⁹⁶ Levy and Thompson, 'Hegemonic Threats and Great-Power Balancing in Europe, 1495-1999'.

power and thus avoid any dominant formation in the system.⁹⁷ We limit the external balance only to the creation of alliances. These alliances have to be represented by at least two great powers and the power targeted by the alliance formation has to be recognized. According to Mearsheimer, such characteristics can be observed in Europe between 1815 and 1902 when the European structure was a balanced multipolarity.⁹⁸ Towards the end of the 19th century, the policy of European states started to be influenced by the prospects of possible dominant formation of power and a complex alliance system was endorsed. In 1879, the Dual Alliance between Germany and Austria was concluded.⁹⁹ After 14 years, the block against central powers was formed by the alliance between France and Russia.¹⁰⁰

- $Y = 3$ corresponds to a country subjected to internal balancing of states. The internal balancing is another policy that can be exploited in order to prevent the creation of a dominant structure. As John Mearsheimer establishes, states often have to internally balance against their adversaries, due to the constraints that are common to external balance. Firstly, external balancing is slow as it is necessary to concert the conceptions of all members, even if a great urgency for the coalition exists. Secondly, external balancing can appear as inefficient as all participants try to minimize their burdens. Thereby, the agreement can be flawed by the individual efforts to pass the buck to others.¹⁰¹ This can make the reliance of states on themselves superior to external balancing. Furthermore, devoting a larger portion of military expenditures and thus holding its economic base at bay entails a larger cost for state and signalizes a larger devotion to balance against an aggressor than external balancing.¹⁰² Both these propositions imply that a country subjected to internal balancing should be classified higher than the country which is only subjected to *external balancing*. However, the research on internal balancing is rather scarce. In fact, we have not been able to find a single study attempting to quantitatively account for internal balancing. This is a significant limitation as internal balancing fits perfectly with the conceptualization of our dependent variable. To account for this issue, we turn to literature on arms races, where the quantitative research is exhausting.

Given this, we assign $Y = 3$ to a country that appears as a **revisionist power in an arms race**. The literature defines the arms race as simultaneous military expansions between at least

⁹⁷ Levy and Thompson, 6.

⁹⁸ Mearsheimer, *The Tragedy of Great Power Politics*, 350-51.

⁹⁹ Douglas M. Gibler, *International Military Alliances, 1648-2008*, Correlates of War Series (Washington, D.C: CQ Press, 2009), 181-82.

¹⁰⁰ Gibler, *International Military Alliances, 1648-2008*, 198.

¹⁰¹ Mearsheimer, *The Tragedy of Great Power Politics*, 156-57.

¹⁰² Ibid.

two countries, whose security positions are poised against each other.¹⁰³ The term revisionist then stands for the initiator of the arms race. There are two main motivations behind the initiation. It can be the objective of a country to change the status quo, or a country will try to defend the current status quo which will lead to the reaction of others.

Y = 4 stands for an event wherein a great power wages a **war in the pursuit of hegemony**. This is very similar to what Mearsheimer describes as a “potential hegemon”. In the literature, we have established that potential hegemons are observed by leads in material capabilities. In the words of Mearsheimer, potential hegemons “*need not to have the wherewithal to fight all of its rivals at once, but it must have excellent prospects of defeating each opponent alone, and good prospects of defeating some of them in tandem*”.¹⁰⁴ What can be inferred from this argument? The good prospects of becoming a regional hegemon should drive states to take a chance on war to improve their own security. In fact, at this stage, only one step remains to becoming a regional hegemon, and that is to win the war in pursuit of hegemony. Here, we slightly differ from Mearsheimer. For example, in Mearsheimer’s eyes, we can classify Germany as being a potential hegemon by 1903, because of its material capabilities.¹⁰⁵ But as we omit the capability position, we cannot classify Germany as being Y = 4 before to the year 1914, when Germany decided to wage the war in the pursuit of hegemony.

- Y = 5 represents **hegemony** over a region. In the theoretical background, we have set that a regional hegemon “dominates the lesser states/powers in the system”. This definition is satisfactory.

With the last level defined, the conceptualization of our dependent variable is complete. We now proceed to empirical measures for each of the defined levels. We also provide the literature that will serve us as a guideline.

2.2.2 Operationalization of regional dominance of a country

For the lowest level of expansionist policy - *great power showing no signs of dominance*, we look, for now, only on the determination of great powers as the “signs of dominance” part will be resolved retrospectively. The classification of great power is largely left to Mearsheimer theory.¹⁰⁶ However, as our research delves more into history, we need an

¹⁰³ Paul F. Diehl, “Arms Races to War: Testing Some Empirical Linkages,” *The Sociological Quarterly* 26, no. 3 (1985): 334-35.

¹⁰⁴ Mearsheimer, 44-45.

¹⁰⁵ Mearsheimer, 188.

¹⁰⁶ See for example: Mearsheimer 4-6; Mearsheimer, Chapter 6: Great Powers in Action.

additional source. The supplement can be found in Levy's characterization of the modern great power system.¹⁰⁷ The difference between the two approaches can be seen mainly after the year 1945.¹⁰⁸ The final list of great powers can be seen in *Table 2.1*

For those nations, fulfilling the condition of being the *secondary type* of expansionist policy is examined. Here we look at any assertive policy within or outside the region that does not initiate responses such as balancing. On the other hand, the expansionary policy can encompass the prevention of the major formation of power such as a bid for hegemony. Also, the assertive policy aimed at the expense of *lesser powers* such as colonization is included. Each such policy is qualitatively examined, although no generalization criteria are adopted for this concrete level. Due to the qualitative nature, we mostly use open encyclopedias such as the Encyclopædia Britannica or Wikipedia.

Table 2.1 The list of the great powers as they have entered and left the systems

Power	1700-1713	1713-1721	1721-1740	1740-1808	1808-1839	1842-1861	1861-1890s ¹	1890s-1918	1918-1940s ²	1940s-2010
France	*	*	*	*	*	*	*	*	*	
England/Great Britain	*	*	*	*	*	*	*	*	*	
Austrian Hapsburgs/ Austria-Hungary	*	*	*	*	*	*	*	*		
Spain	*	*	*	*						
The Netherlands	*									
Sweden	*	*								
Prussia/Germany				*	*	*	*	*	*	
Italy							*	*	*	
Russia/the Soviet Union			*	*	*	*	*	*	*	*
Japan								*	*	
China	*	*	*	*	*				*	*
United States								*	*	*

¹ Japan entered the great power system in 1895, the USA in 1898. Thus, the 1890s is used for simplification.

² China reentered the system not in 1945, but in 1949. Thus, the 1940s is used.

*Source: Author's compilation*¹⁰⁹

¹⁰⁷ Jack S. Levy, *War in the Modern Great Power System : 1495-1975* (Lexington: The University Press of Kentucky, 1983), 9-49, <https://search.ebscohost.com/login.aspx?authtype=shib&custid=s1240919&profile=eds>.

¹⁰⁸ The list is quite unproblematic up to the year 1945. There is exception of China up to the year 1839 (not counted by Levy), but Mearsheimer assumes its hegemony (see: Mearsheimer, *The Tragedy of Great Power Politics*, 212). The second difference is Japan, which has entered the great power system by 1895. (see: Mearsheimer, *The Tragedy of Great Power Politics*, 212). The problem arises in Europe after 1945. Levy maintains that Germany, Great Britain, and France persisted as great powers (Jack S. Levy, *War in the Modern Great Power System : 1495—1975*, 9-49). However, Mearsheimer claims the opposite (see: Mearsheimer, *The Tragedy of Great Power Politics*, 347). We adopt the Mearsheimer's view.

¹⁰⁹ Compilation based on the works: Mearsheimer, *The Tragedy of Great Power Politics*; Levy, *War in the Modern Great Power System : 1495--1975*.

The *external balancing* is operationally defined on the basics of Levy and Thomson's research. In accordance with them, we focus only on formal (written) "*military alliance that required one state to intervene militarily in support of another in the event that the latter one is attacked*".¹¹⁰ We obtain data on military alliances from Gibler's work.¹¹¹ In order to satisfy our definition, the military alliance has to consist of at least two great powers and has to be of a "Defense Pact" which relates to the quotation above. In the conceptualization, we have mentioned that a country has to be a subject of the alliance. This requirement can be fulfilled by the description that Gibler includes for each alliance. If it is not mentioned who is subject to the balancing behavior, the alliance is omitted. In addition, we allow for alliances across multiple systems such as the Anglo-Japanese alliance from 1902 against Russia.¹¹²

To identify the cases of *arms races* in history, we will mainly look at increases in military expenditures. This is consistent with Mearsheimer's definition of internal balancing, according to which, internal balancing should be observed through major boosts in spending or other acts such as conscription.¹¹³ Due to the nature of data, we decide to account for both measures that Mearsheimer mentions, but in different periods. For the period of 1820 – 2010, the COW database on National Material Capabilities gives us great coverage of annual military spending.¹¹⁴ Nevertheless, prior to 1820, we cannot exploit the COW database and we turn to data on military personnel.¹¹⁵ We use the dataset of Rasler and Thompson, which gives us the accounts on military personal in five annual averages.¹¹⁶

Furthermore, we have to determine the magnitude of an increase either in expenditures or personnel. The lowest threshold is set by Gibler et al., according to whom, the nation has to display at least an 8 percent increase in military spending to qualify as part of the arms race.¹¹⁷ Additionally, military spending is often observed across some period. Because our data on military personnel takes the form of five annual averages, we choose to measure the increase

¹¹⁰ Levy and Thompson, "Hegemonic Threats and Great-Power Balancing in Europe, 1495-1999," 21.

¹¹¹ Gibler, *International Military Alliances, 1648-2008*.

¹¹² Gibler, 212.

¹¹³ Mearsheimer, *The Tragedy of Great Power Politics*, 157-58.

¹¹⁴ We use the military expenditures values, J. David Singer, "Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816-1985 (v5.0)," *International Interactions* 14, no. 2 (1988): 115-32.

¹¹⁵ For example, the military personnel data for the identification of arms races has been used by: Douglas M. Gibler, Toby J. Rider, and Marc L. Hutchison, 'Taking Arms against a Sea of Troubles: Conventional Arms Races during Periods of Rivalry', *Journal of Peace Research* 42, no. 2 (2005): 131-47.

¹¹⁶ We obtain this data from: Karen A. Rasler and William R. Thompson, *The Great Powers and Global Struggle, 1490-1990*, 1st ed. (University Press of Kentucky, 1994). These data are in the form of five-annual averages. Thus, for the selection of arms races we look on the changes in military personal between the two periods. This method is also used for the selection of the 20% threshold.

¹¹⁷ Douglas M. Gibler, Toby J. Rider, and Marc L. Hutchison, "Taking Arms against a Sea of Troubles: Conventional Arms Races during Periods of Rivalry," *Journal of Peace Research* 42, no. 2 (2005): 131-38.

in military expenditures over a period of 5 years.¹¹⁸ Thereby, by slightly changing Gibler et al.'s rule of annual increase, we set our final criterion as follows. A nation has to surpass 40% growth in military expenditures over a period of 5 years to qualify as taking part in an arms race. To link this criterion with data on military personnel, we use the argument that, between 1816 – 1860, standing armies constituted a large portion of defense budgets.¹¹⁹ We set this period as a base for the identification of a threshold for increases in military personnel. Our argument is that every observed increase of military capabilities has to be seen both in terms of military expenditures and personnel. This gives us the threshold of a 20% increase in military personnel, which we select for the 1700 – 1819 period.¹²⁰

The more difficult part is to determine the *revisionist power in an arms race*. For this, we exploit the literature that links the military buildups with wars and disputes in order to identify the participating nations in a given arms race.¹²¹ Again, we have to split the observations into the periods of 1700 – 1819 and 1820 – 2010. For the former, we use the COW dataset on Militarized Interstate Disputes (MIDs).¹²² For each country, displayed by growth in military spending, we look at whether it has a dispute with any of the great powers. Here, we only look at the levels of hostility classified as “use of force” or “interstate war”. If there exists such a dispute, we code the state as “revisionist” as the originator of the dispute.¹²³ When one side of the dispute is a country which pursues the policy *of war in the pursuit of hegemony*, the dispute is no longer counted as we assume that this type of policy is the greatest source of danger.¹²⁴ It is possible that the country with increased military expenditures has disputes with more than one great power. Then the dispute marked with the “highest action” is selected. If the highest

¹¹⁸ For example, 3-years period is used in: Douglas M. Gibler, Toby J. Rider, and Marc L. Hutchison, “Taking Arms against a Sea of Troubles: Conventional Arms Races during Periods of Rivalry.” However, 5-years period is selected by Diehl, “Arms Races to War: Testing Some Empirical Linkages.”

¹¹⁹ Paul F. Diehl, “Arms Races to War: Testing Some Empirical Linkages,” *The Sociological Quarterly* 26, no. 3 (1985): 337.

¹²⁰ We obtain this data from: Karen A. Rasler and William R. Thompson, *The Great Powers and Global Struggle, 1490-1990*, 1st ed. (University Press of Kentucky, 1994). These data are in the form of five-annual averages. Thus, for the selection of arms races we look on the changes in military personal between the two periods. This method is also used for the selection of the 20% threshold.

¹²¹ Paul F. Diehl, “Arms Races and Escalation: A Closer Look,” *Journal of Peace Research* 20, no. 3 (1983): 205–212.

¹²² Zeev Maoz et al., ‘The Dyadic Militarized Interstate Disputes (MIDs) Dataset Version 3.0: Logic, Characteristics, and Comparisons to Alternative Datasets’, *Journal of Conflict Resolution* 63, no. 3 (5 July 2018): 811–35, <https://doi.org/10.1177/0022002718784158>.

¹²³ It is possible that both states in the dispute are revisionist, then both are included. If the dataset does not specify, which state is revisionist, the dispute is not included.

¹²⁴ Mearsheimer, *The Tragedy of Great Power Politics*, 41. Also, when a country is having a dispute with more actors and one of them pursues the policy of war in the pursuit of hegemony (could be in different region) the dispute is no longer counted.

action is the same for both disputes, both are included.¹²⁵ For the period between 1700 – 1819 no such dataset on disputes exists. Thus, we have to omit this criterion and look only at wars.¹²⁶ We are aware that these changes give roots to inconsistency of the model. To account at least partially for this, we will later introduce a dummy variable for this period. Furthermore, the identification of increases in military expenditures, same as the disputes or revisionist powers, can be found in the Excel sheet that we append to the thesis.

The next level of expansionary policy we want to identify is *war in the pursuit of hegemony*. This classification has to encompass all cases when great powers waged such war, if victorious, they would be likely to achieve hegemony. In history, large coalitions with large armies and fleets were needed to thwart these attempts at hegemony.¹²⁷ The war is also an important criterion. In Mearsheimer's opinion, the Soviet Union materially emerged after World War II as a potential hegemon, however, as the Soviet leaders chose not to opt for *war in the pursuit of hegemony*, the Soviet Union cannot be classified as $Y = 4$.¹²⁸ Within these constraints, we classify the following great powers.¹²⁹

- i. France, 1701-1714, War of the Spanish Succession
- ii. France, 1793-1815, the French Revolutionary Wars (later the Napoleonic Wars)
- iii. Germany, 1914-1918, the First World War
- iv. Germany, 1938-1945, the Second World War
- v. Japan, 1941-1945, the Second World War

Lastly, we look on the operational definition of *regional hegemony*. We may propose that a *regional hegemon* is a state which wins the *war in the pursuit of hegemony*. As this event has not occurred in the observed period, we provide the set of regional hegemons as seen by John Mearsheimer.¹³⁰

- i. Ch'ing Dynasty (China), 1700 – 1839, the (Northeast) Asia region
- ii. The United States, 1898 – 2010, the Western Hemisphere region

¹²⁵ The last modification is towards Russia. If the dispute is within a region, only this region is included. When it is outside of the region, we include every region in which the country is present.

¹²⁶ The identification of wars is largely done with the help of Wikipedia and Encyclopædia Britannica. We also use the description of wars to determine the revisionist power by ourselves.

¹²⁷ Kennedy, *The Rise and Fall of the Great Powers*, 102-103.

¹²⁸ For the claim, that the Soviet Union was in the post-1945 period potential hegemon in both Europe and Northeast Asia see, Mearsheimer, *The Tragedy of Great Power Politics*, 198.

¹²⁹ For the case i. see: Kennedy, *The Rise and Fall of the Great Powers*, 102-06; Jeremy Black, *Great Powers and the Quest for Hegemony: The World Order since 1500*, War, History and Politics (London ; New York: Routledge, 2008), 73; and Christopher Layne, "The Waning of U. S. Hegemony—Myth or Reality? A Review Essay," ed. Stephen G. Brooks et al., *International Security* 34, no. 1 (2009): 150. For the cases ii.-v. see Mearsheimer, *The Tragedy of Great Power Politics*, 349-50, 213-6; 216-19; 219-24 respectively.

¹³⁰ Mearsheimer, *The Tragedy of Great Power Politics*, 212, 235.

This completes the definition of our dependent variable. The final overview of the conceptualization and operationalization can be seen in *Table 2.2*.

Table 2.2 Classification of the dependent variable

Level	Denomination of each level	Conceptualization	Operationalization
Y = 0	Great power showing no signs of dominance	A state with substantial military capabilities and economic base, which does not pursue any dominant policies.	The selections of states as they appear in Mearsheimer's or Levy's works for which any superior level of expansionist policy has been found.
Y = 1	Secondary type of expansionist policy	Assertive policy aimed at any state inside or outside the system.	Any display of the conceptualized policy recorded in open encyclopedias such as Wikipedia.
Y = 2	Country subjected to external balancing	An actor is subjected to the creation of alliance of at least two other great powers.	Formal alliance of a defense type according to Gibler's work. The subject of the alliance has to be mentioned in Gibler's qualitative description.
Y = 3	Revisionist power in an arms race	Country which is an initiator of a simultaneous military expansion with another country over a dispute.	Major increases in military expenditures or military personnel and the subsequent determination of revisionist power.
Y = 4	War in the pursuit of hegemony	Great power war, if victorious, the great power would have prospects to become regional hegemon.	Qualitative analysis of individual cases, largely based on Mearsheimer's list of potential hegemons, with the condition of waging a war.
Y = 5	Regional hegemony	Country, that "dominates the lesser states/powers in the system".	Set of regional hegemons as offered by Mearsheimer.

Source: Author's compilation

One can object that the coding is missing one of the most significant instruments of international relations – war. We have only looked at the *wars for pursuit of hegemony*, and some wars are included as part of *internal balancing*. But we have not included all cases of great power wars.¹³¹ This is because the classification of a war between great powers can be a very challenging task. For example, Levy in his conceptualization of war includes criteria such as the number of participating great powers, duration, and severity.¹³² This is one of the many limitations that we leave open to further research. Our claim is that when a country is making a run at regional dominance, we should see a response on the dependent variable notwithstanding the inclusion of war.

¹³¹ For further details on the great power wars on the European in history, see for example: Levy and Thompson, 'Hegemonic Threats and Great-Power Balancing in Europe, 1495-1999'.

¹³² Jack S. Levy, *War in the Modern Great Power System: 1495-1975* (Lexington: The University Press of Kentucky, 1983), 77-83.

Another issue is the low number of great powers for some periods and regions. To give an example, we would hardly find any other country in the region of the Western Hemisphere that would pass our criteria for the dependent variable than the United States. This makes the measurement of the independent variable impossible and we need to search for a country with the next highest *economic potential* and include it. This problem can arise even in a non-hegemonic system. In those, we make sure that at least 3 countries are always present. This is in order to still be able to detect cases of *arms races* and *external balancing*. This can be the case of Northeast Asia, where after the demise of the Ch'ing Empire, only one power would be present – Russia. There is one more reason why we add this rule. We may find countries attaining large values on the independent variable that are not great powers. We add these cases to our dataset and assign them $Y = 0$ on our dependent variable. This is because they do not qualify as great powers. Further details can be seen in “AppendixDV” which is append as external file to this thesis. Here all observations with corresponding values on the dependent variable are displayed.¹³³

2.3 Economic potential of a country and its measurement

The theory states that power can be explained by various independent variables. Except for wealth, the literature often identifies military capability and technological prowess as being other main determinants of regional power status. In this work, we have decided to focus on economic realm only. As is indicated in the introduction, such selection is embraced to predict the future development of China's power status. But, even though China is aspiring to be the global leader in terms of economic size, its technological advancement and military power still lags behind others greatly.¹³⁴ This is considered in our selection of the independent variable. As *economic potential* is both a crucial explanatory variable for domination of great powers and China attains the most significant share on this variable out of other components of power, our choice of the independent variable seems to be very straightforward.

The goal of our research is to determine whether countries with greater economic potential attain higher levels on our dependent variable. If we look back to the theoretical background, we see that there is no overarching consensus on how to measure the economic might of countries. Nevertheless, the currently most used indicator of economic progress

¹³³ It is important to note, that in this appendix the data are not listed as time-series but cross-sections. Thus, the time span between each of the observation is included. This is subject to the pages 33-34.

¹³⁴ Beckley, 'China's Century?'

worldwide is the Gross Domestic Product.¹³⁵ This indicator can be defined as the income of everyone in the economy or the total expenditures on economy's marketed good and services, where the latter approach seems appropriate for historical statistics that is central to our study.¹³⁶ As the Chinese power status and its future development is often tied to this index as well,¹³⁷ we adopt GDP as a base measure around which we construct our independent variable. To explain, the GDP in gross terms is not the final value of economic potential that is the ratio enabling us to compare the economies of countries across the years and regions. Because we take data on GDP from multiple sources and also the values of GDP have been growing over time, the cross-country comparison across years would be inconsistent. Thereby, we propose the following ratio serving as our independent variable.

Let $countryGDP_{i,r,t}$ be a value of GDP for country i , in a region r , in a time period t . Secondly, for a given region r we look on the sum of regional GDP at time period t , calculated as $\sum_{i=1}^n countryGDP_{i,r,t}$ where n is the number of countries that have fulfilled the criteria for dependent variable in a given r and t . The resulting ratio of economic potential is then the share of one country's GDP to the regional sum of GDP denoted by x .

$$\frac{countryGDP_{i,r,t}}{\sum_{i=1}^n countryGDP_{i,r,t}} = x$$

Every ratio then constitutes a single observation of our independent variable and shows how the economy of one state fares in comparison to others. This approach is similar to Mearsheimer's, who compares the wealth of states based on their regional shares.¹³⁸ Taking into account the theoretical background, we should see the following values of x . Countries aspiring to dominate their region should be identified by a preponderance in economic sphere. As the x attains values from 0 to 1, the lowest *levels of regional dominance* should have x close to 0. Subsequently, we should see the value of x increase with higher *levels of regional dominance* and they should approach the value of $x = 1$.

This approach has two main limitations. Firstly, the regional sum of GDP is calculated only with respect to those countries fulfilling the criteria for dependent variable. The reason for that is the scarcity of economic data. The regional sum of GDP is thus naturally underestimated. This may be especially problematic for some regions and time periods in which the sum is

¹³⁵ Nicholas Gregory Mankiw, *Macroeconomics*, 5. ed (New York, NY: Worth Publ, 2003), 15-18.

¹³⁶ Herman J. de Jong and Nuno Palma, "Historical National Accounting," in *An Economist's Guide to Economic History* (Springer, 2018), 396.

¹³⁷ Beckley, 'China's Century?'

¹³⁸ Mearsheimer, *The Tragedy of Great Power Politics*, 65-76.

calculated only with respect to two countries. Starting with the 20th century we would probably be able to provide the regional sum for all countries, but we choose not to in order to stay consistent with our method. The second limitation lies in the selection of the GDP as a base indicator for the measurement of *economic potential*. Some scholars choose different measures of economic power for different time periods.¹³⁹ In addition, some point out to the argument that, over time, we observe increasing costs of transformation of economic resources into the military strength of states.¹⁴⁰ But we assume that the role of economy for the nature of power has remained unchanged throughout the observed period. As our objective is to observe a particular historical trend and use it to predict future development, we decide to be consistent with our index. If the size of economy played a role two centuries ago, it should play it now, too.

Instead, we account for this phenomenon in a slightly different way. We will check for the robustness of *economic potential* by constructing the ratio with different indicators of gross wealth of a country. Firstly, bearing in mind Beckley's critique of gross indicators such as GDP, we validate our estimation by Beckley's composite indicator of *GDP*GDP per capita*. This indicator should more properly account for countries with a large population and low level of development. It can be especially handy for China as is discussed by Beckley.¹⁴¹ Secondly, we will account for the economic potential of countries in terms of their manufacturing power. In the theoretical background, we have been exposed to the idea that economic might is the main foundation of military force which is then the ultimate criterion of international politics. John Mearsheimer addresses the inappropriateness of gross indicators such as GNP for comparison of two countries with different levels of industrialization.¹⁴² Thus, we check for this assumption by Paul Bairoch's data and his indicator of *Total industrial potential*.¹⁴³ We choose the index of the industrial potential because the data are reflecting both the relative industrial production and the population of countries. For instance, the level of productivity can be higher in one

¹³⁹ Mearsheimer, 67.

¹⁴⁰ Brooks and Wohlforth, "The Rise and Fall of the Great Powers in the Twenty-First Century, 9."

¹⁴¹ Beckley, "The Power of Nations, 22-26." Beckley claims that this index accounts more appropriately for countries with large populations. Thus, consider Chinese situation between 1839 to 1911. It was an economic superpower with the largest GDP. Despite this fact, China in the period lived through series of defeats called the "century of humiliation". The Beckley's explanation lies in the GDP*GDP per capita indicator. This is because in "net terms" Chinese productivity levels were much smaller and what appeared to be a lead expressed by GDP turned to lag if expressed by GDP*GDP per capita.

¹⁴² Mearsheimer, *The Tragedy of Great Power Politics*, 62-67. In many aspects Mearsheimer's argument is same to Beckley. More industrialized countries should have higher surplus of wealth at their disposal. This is what Beckley sees in the inclusion of *GDP per capita*. Secondly, Mearsheimer's uses the argument developed that industries can produce the cutting-edge weaponry.

¹⁴³ Bairoch, 'International Industrialization Levels from 1750 to 1980'.

country, but the population difference can account for the disparity.¹⁴⁴ Thereby, the indicator can be useful as a partial proxy for industrial development and it can indicate that more necessary conditions are required for the occurrence of *higher levels of regional dominance*. Furthermore, the *Total industrial potential* offers us a great utility in its consistency. Unlikely to GDP or GDP per capita, where we take data from multiple sources, the calculation and data source for *Total industrial potential* stays the same.

2.4 The properties and source of our data

At first, we need to examine by which time periods and regions our data are constrained. We have indicated that the whole examined period stretches from 1700–2010. The economic data prior to the year 1700 are very scarce and, as a result, we would hardly be able to construct any consistent model. Secondly, the regions under scrutiny have to contain at least one great power in the observed period. Based on these two limitations, we get the following time periods for subsequent regions:

- i. Europe, 1700-2010
- ii. Northeast Asia, 1700-2010
- iii. the Western Hemisphere, 1898-2010

As we have set the regions and timespan for our dependent variable, we can proceed to data properties of the independent variable. The most challenging limit here is the accuracy of economic data in earlier centuries. It is crucial to note that the historical statistics can be very approximate in nature as some of the calculations were undertaken by statisticians many years later.¹⁴⁵ The reconstructions of production levels between the years 1850 and 1950 are reasonably plausible, however for the period before 1850 stronger assumptions have to be implemented to produce solid estimates.¹⁴⁶ The most overarching dataset relating to this period, as well as to periods to our present times, was conducted by Angus Maddison.¹⁴⁷ His work functions as the principal source of data for GDP and population estimates in our thesis. Also,

¹⁴⁴ Bairoch, 280-81.

¹⁴⁵ Kennedy, *The Rise and Fall of the Great Powers*, 145.

¹⁴⁶ For larger discussion see: de Jong and Palma, 'Historical National Accounting'. In the paper, the key obstacles of obtaining the reliable reconstructions of the "pre-statistical age" are summarized. Furthermore, two methods for measurement of GDP are proposed. The first method is widely used for countries with transparent state bureaucracy such as Britain or the Netherlands where the output of a country can be measured. In other countries such as France or Spain, the GDP is then measured indirectly through consumption and agricultural production.

¹⁴⁷ Maddison, *The World Economy*.

Maddison's data served as the basis for other statisticians, who either re-estimated or extended his calculations to earlier periods. This is precisely why we include the data collected by the Madison Project for cases not exhausted by Angus Maddison.¹⁴⁸ This regards mostly the pre-1850 period. Except for these two sources, for the whole Europe between 1820 – 1918, we introduce GNP as calculated by Bairoch.¹⁴⁹ This enables us to incorporate data for the Austrian Habsburg Empire. We claim that the important nature of GNP is its gross nature, which does not differentiate it much from the actual GDP. As we need to obtain both GDP per capita and GDP, we also put forward population estimates. If we are unable to find them in the above-mentioned sources, we turn to Paul Kennedy or to the COW dataset.¹⁵⁰ For some individual cases, we are still forced to propose an additional source of data or an approximation. This is the reason why we include source of every figure or its approximation in the external file "AppendixIV". To be as consistent as possible throughout the course of our research, we lay down one additional condition. For each observed period and region, the source of data for the GDP or GNP data has to be the same across all cases. This condition ensures consistency because we measure our independent variable as ratios. And these ratios have to be consistent only across a given time and region. The source of data for Paul Bairoch's figures of Total industrial potential has been already mentioned in the previous section and thus we leave it out.

The final property of our consideration is the timespan between each observation. As was indicated above, the complicated nature of economic data prevents us from using time-series data. Instead, we opt for cross-sectional data, where each year gives us a cross-section. The question is after how many years we should observe each cross-section. We assume that the accumulation of economic wealth of states is relative in time. The annual economic growth is not simply large enough to produce changes in the levels of dominance of states on year-to-year bases. We pay attention to Bairoch's works, who includes observations roughly after every 20 years. Again, the scarcity of data prevents us to use 20 years between the years 1700 – 1800, here we propose the 50-year period. Starting with the year 1820, we will stick to a 20-year gap between each period. We make the exception for the observations of 1913 and 1938 as they substitute the years 1920 and 1940. These years enable us to observe the state of economy just prior to the bid for hegemony and thus, they are not affected by the war-economy

¹⁴⁸ For more information about the Madison Project see: Jutta Bolt and Jan Luiten Van Zanden, "The Maddison Project: Collaborative Research on Historical National Accounts," *The Economic History Review* 67, no. 3 (2014): 627–51.

¹⁴⁹ Paul Bairoch, "Europe's Gross National Product: 1800-1975," in Wikipedia. "List of regions by past GDP (PPP)." Last modified March 17, 2020. [https://en.wikipedia.org/wiki/List_of_regions_by_past_GDP_\(PPP\)](https://en.wikipedia.org/wiki/List_of_regions_by_past_GDP_(PPP)).

¹⁵⁰ Kennedy, *The Rise and Fall of the Great Powers*; Singer, 'Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816–1985'.

circumstances. Slightly different years are observed for Bairoch’s industrial potential, where we are limited by the Bairoch’s database. We also need to say how the dependent variable will be measured in those years. For the years up to 1819, we look at 20 years post the observed year. For the years after 1820, we look at 10 years after the observed year. Only if any expansionary policy is seen during these periods is the dependent variable appropriately coded. We select this constraint to account for the theoretical background and the proposition of Mearsheimer that economic power influences the national power indirectly through the buildup of military forces. Thus, the signs expansionist behavior can appear with a time-lag to the actual state of economy. The summary can be seen in *Table 2.3*.

Table 2.3 List of observed years for each indicator

	Observed years	Coding of dependent variable
<i>GDP & GDP*GDP per capita indicators</i>	1700, 1750, 1800	Any display of <i>expansionary policy</i> 20 years after the observed year
	1820, 1840, 1860, 1880, 1900, 1913, 1938, 1960, 1980, 2000	Any display of <i>expansionary policy</i> 10 years after the observed year
Bairoch, Total industrial potential	1750, 1800, 1830, 1860, 1880, 1900, 1913, 1938, 1963,1980	The same rules as above.

Source: Author’s compilation

2.5 Final assumption of our estimation and the proposed model

As the title of our thesis foretells, the conclusion should determine whether the economic potential of a country plays a necessary or sufficient role for regional dominance or neither of those. The theory assumes a positive relationship between the two variables. At the outlet of our analysis we laid down the following research question: “*Is the economic potential of a country necessary or sufficient condition for higher levels of regional dominance?*” As we have chosen to measure the dependent variable through levels of regional dominance, we postulate the following hypotheses.

- H1. *The economic potential of a country is a necessary condition for higher levels of regional dominance.*

H2. *The economic potential of a country is not a necessary condition for higher levels of regional dominance.*

Here, the first hypothesis encompasses two possibilities:

H1a. *The economic potential of a country is a necessary but not sufficient condition for higher levels of regional dominance.*

H1b. *The economic potential of a country is a sufficient condition for higher levels of regional dominance.*

We include these two possibilities separately as they call for a more complex qualitative discussion. This is because the H1 does not say how strong the relationship is: it only points to its existence. Therefore, if H1 is designated as correct, the degree of the relationship has to be analyzed and, subsequently, we can point either to H1a or H1b.

These hypotheses can be illustrated in the following, very simplified, example. Assume a condition v and an outcome w , where v represents the level of economic potential of a country and can have a value of 0 (not high) or 1 (high). Outcome w denotes the state of achieving dominance in the region, 0 being a state of non-achievement and 1 being absolute achievement. For H2 holds, when for many $x = 0$, $y = 1$ can appear. However, in H1 for all $x = 0$ holds, $y = 0$. And subsequently, for H1a, it is not crucial how many $y = 1$ we get for $x = 1$. But we can suggest the presence of H1b if and only if we would get for a large number of $x = 1$ a large number of $y = 1$.¹⁵¹ But at first, we need to find an appropriate model for the hypotheses H1 and H2 only.

The most common method for the estimation of the relation between two variables is the linear regression and the Ordinary Least Squares method. However, in our case, OLS has one significant limitation. Our dependent variable is a type of a limited dependent variable, concretely, an ordinary variable attaining values from 0 to 5.¹⁵² This differs from standard usage of OLS where we assume the continuous meaning of a dependent variable such as wage or GDP. We can solve for the limited dependent variable by running the Tobit model if we would find a corner solution: if not, we would apply the Poisson regression model.¹⁵³ It is very likely that our model would satisfy the criteria for corner solution. In the previous section, we have proposed to incorporate additional observations with $Y = 0$, notwithstanding the size of

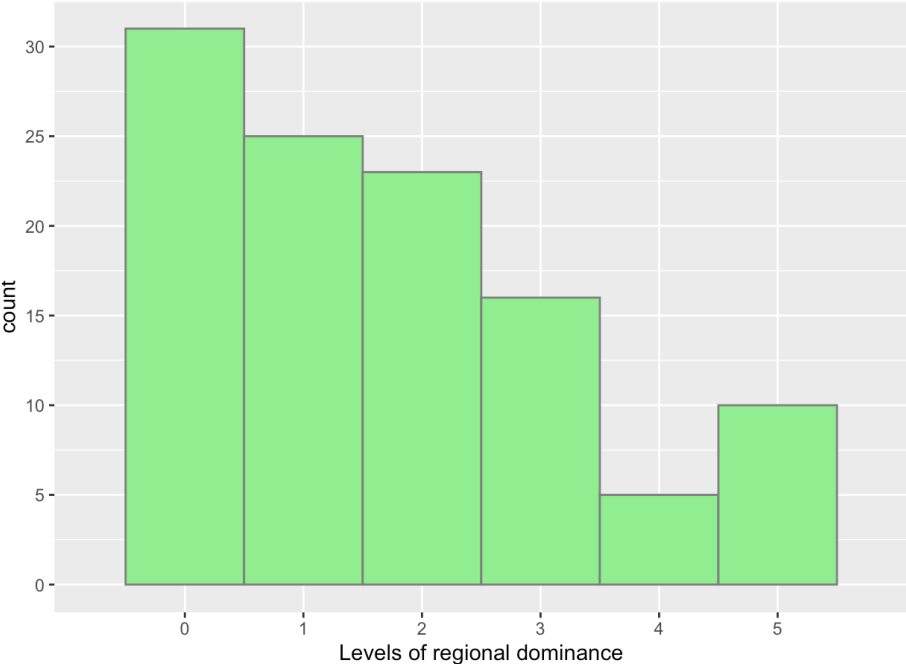
¹⁵¹ The example is largely inferred from: Jan Dul, 'Necessary Condition Analysis (NCA): Logic and Methodology of "Necessary but Not Sufficient" Causality', *Organizational Research Methods* 19, no. 1 (15 July 2015): 10–52, <https://doi.org/10.1177/1094428115584005>.

¹⁵² Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*, 4. ed., internat. student ed., (Mason, Ohio: South-Western, Cengage Learning, 20), 225-38, 574-75.

¹⁵³ Wooldridge, Chapter 17.

economy. This method suggests that we have censored our data from below.¹⁵⁴ Furthermore, the argument can be presented on the Figure 2.1, where the distribution of the values is shown. The logical choice therefore points to the Tobit model.

Figure 2.1 Histogram of the dependent variable (considering years for the GDP indicator)



Source: Author's compilation

Nevertheless, the Tobit model is still not very appropriate. Similarly to the OLS, the Tobit model would likely produce inconsistent estimates due to the omitted variable bias.¹⁵⁵ Why some variables are presumably omitted? The literature says there should be at least three independent variables to reach unbiased results. Together with the economic realm, we should consider military power and the level of technological prowess. Thus, the aforementioned arguments point out to the unreliability of standard regression methods. This is why we also present the Necessary Condition Analysis.¹⁵⁶ The advantage of the NCA is that it can present the unbiased relationship just for one variable out of many. Let us consider, on the basis of literature, that economic might, military might, and technological prowess are together sufficient for regional dominance. Then we can focus just on the economic realm and determine

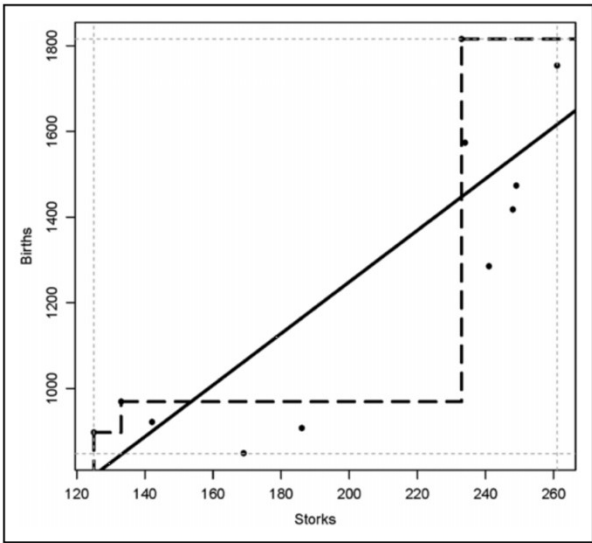
¹⁵⁴ Michal Pešta, 'Tobit Regression', Matematická sekce, Matematicko-fyzikální fakulta, Univerzita Karlova. Accessed 5 May 2020, <http://www.karlin.mff.cuni.cz/~pesta/NMFM404/tobit.html>.

¹⁵⁵ Wooldridge, *Introductory Econometrics*, 89-94.

¹⁵⁶ Dul, 'Necessary Condition Analysis (NCA): Logic and Methodology of "Necessary but Not Sufficient" Causality'.

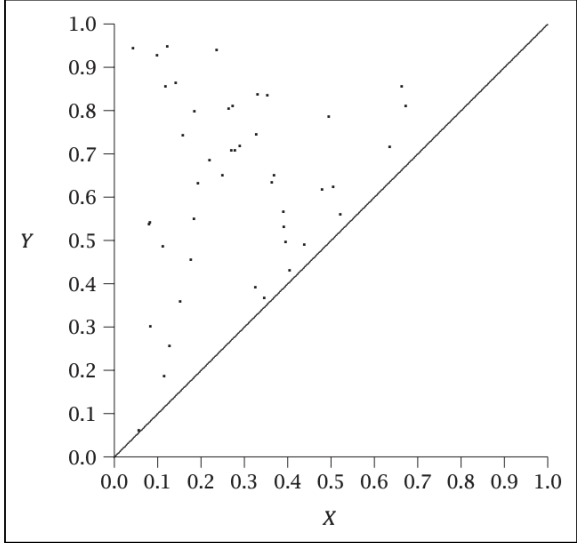
whether it is necessary for regional dominance. Thus, the final outcome which regards only necessity and the omitted variable trap is not a problem. Furthermore, the determination of necessary or sufficient causality has one additional advantage. It assumes some level of heteroskedasticity, which is contrariwise very problematic for traditional models such as Tobit.¹⁵⁷ Lastly, the NCA enables us to discuss the degree between the observed variables called the “effect size”. It can attain the values of “small effect”, “medium effect”, “large effect”, and “very large effect”. Because the NCA analysis can be quite a new method, we provide an illustration on *Figure 2.2* and *Figure 2.3*. On the *Figure 2.2*, we can see the presence of a necessary condition but not sufficient condition. The necessary condition is indicated by the empty space above the ceiling line (the dashed line in the *Figure 2.2*) and is drawn over the highest observable values. The ceiling line presented here is denoted as the “Ceiling Envelopment – Free Disposal Hull” (CE-FDH). The CE-FDH line is more commonly used for discrete data. For continuous data the “Ceiling Regression - Free Disposal Hull” (CR-FDH)

Figure 2.3 Presence of a necessary condition



Taken from: Dul, “Necessary Condition Analysis (NCA): Logic and Methodology of ‘Necessary but Not Sufficient’ Causality,” 30.

Figure 2.3 Presence of a sufficient condition



Taken from: Gary Goertz, Tony Hak, and Jan Dul, “Ceilings and Floors: Where Are There No Observations?,” 9.

line is more commonly used. As we have a continuous scale for the independent variable and ordinary scale of six levels for the dependent variable we opt for CR-FHD effect size. Both CE-FDH and CR-FDH then measure the effect size of the observed variables. The larger empty zone usually refers to larger effect size.

¹⁵⁷ Charles Brown and Robert Moffitt, ‘The Effect of Ignoring Heteroscedasticity on Estimates of the Tobit Model’ (National Bureau of Economic Research, 1983), <https://www.nber.org/papers/t0027>.

The *Figure 2.3* then indicates the presence of a sufficient condition. This is because the NCA analysis establishes sufficiency as the complement to necessity. Thus, if the presence of *economic potential* is necessary for the presence of higher *levels of regional dominance*, then the absence of *economic potential* is sufficient for the absence of higher *levels of regional dominance*.¹⁵⁸ To summarize, we are convinced that the NCA analysis can present the most appropriate result, which has also led us to the construction of hypotheses in such a way.

Lastly, we propose to add a set of dummies to our model. We have to remind readers that dummies for the NCA model have to be constructed differently. Because we have set the independent variable as a ratio, we have to make sure to single out corresponding observations also from the composition of the independent variable. In other words, a country satisfying the criteria of a dummy variable cannot appear as the country with the highest gross economic numbers in the ratio. Should we not solve for this, the “effect size” of the NCA could be underestimated. The construction of dummies for the OLS and Tobit model stays the same, as those methods are able to detect the effect. We suggest to include the following dummies in our models:

- **Dummy for the years 1820-2010:** As we have indicated above, the operationalization techniques for this period can differ a little due to the limited availability of data. Thus, we are adding this dummy for the inconsistencies that may arise.
- **Dummy for “offshore balancers”:** As John Mearsheimer notes, some countries such as Great Britain were having enormous economic potential but did not attempt to dominate a region.¹⁵⁹ This may be due to the “stopping bodies of water” that were constraining the ability of Great Britain to project its power on the European continent. Thus, Great Britain was only behaving as an offshore balancer in Europe. Nevertheless, many scholars have questioned this logic.¹⁶⁰ This is because we may find powers such as Japan which were also separated by sea but decided to bid for regional dominance. Despite this clear limit of the theory, we decide to stay consistent with Mearsheimer and include only Great Britain as the offshore balancer.
- **Dummy for the presence of another power in a region:** After the end of World War II, the US decided to keep troops in both Europe and Northeast Asia.¹⁶¹ Such action from

¹⁵⁸ Dul, ‘Necessary Condition Analysis (NCA): Logic and Methodology of “Necessary but Not Sufficient” Causality’; Gary Goertz, Tony Hak, and Jan Dul, ‘Ceilings and Floors: Where Are There No Observations?’, *Sociological Methods & Research* 42, no. 1 (February 2013): 3–40, <https://doi.org/10.1177/0049124112460375>.

¹⁵⁹ Mearsheimer, *The Tragedy of Great Power Politics*, 235-36.

¹⁶⁰ Glenn H. Snyder, ‘Mearsheimer’s World-Offensive Realism and the Struggle for Security: A Review Essay’, *International Security* 27, no. 1 (2002): 149–73.

¹⁶¹ Mearsheimer, 252-61.

outside of the system can deter the regional powers from pursuing the hegemonic aims.¹⁶² Also, the presence of power changes the behavior of all other powers in the region, as the main object of their policy starts to be to expel the foreign power out of the region.¹⁶³ This is why we cannot assign the dummy just to the country where the foreign country's power is present, but we have to assign it to the whole region. Except for the already mentioned presence of US troops in Japan and Germany in the post-1945 world, we also include China between 1840-1949 as a dummy. Throughout this period, China was facing many foreign concessions on its territory.¹⁶⁴

- **Dummy for Europe:** As we have indicated, the research in this area may appear as Eurocentric. Many theories that we discuss have been developed primarily on the concert of European powers. Thus, focusing only on the powers located in Europe can improve the final results. Secondly, other regions can have certain limitations. One example for all is the political stability of China between the 1840s to 1940s.¹⁶⁵ This can misinterpret the final results as China has a significant economic lead in gross terms over other regional actors.

¹⁶² Mearsheimer, 49.

¹⁶³ Robert Strauss Center. "Can China Rise Peacefully?" With Dr. John Mearsheimer." *YouTube* video, 1:12:37. April 1, 2013. Accessed June 20, 2020. <https://www.youtube.com/watch?v=IhNjFRCEPr8>.

¹⁶⁴ David Scott, *China and the International System, 1840-1949: Power, Presence, and Perceptions in a Century of Humiliation* (Albany, NY: State University of New York Press, 2008). For the influence of foreign powers, see the following pages: 24-29, 49-52, 132-51, 198-205, 220-35, 244-258, 274-292.

¹⁶⁵ Scott.

3 Results

In this section, we present the empirical results of our research in four stages. First, we show brief descriptive statistics to demonstrate the relationship between *economic potential* and *levels of regional dominance*. Second, we provide the results of regression analysis using the OLS and Tobit model with the inclusion of dummies. Third, we turn to the results of the NCA analysis. We conclude with the discussion over the presented results and point to the most appropriate hypothesis.

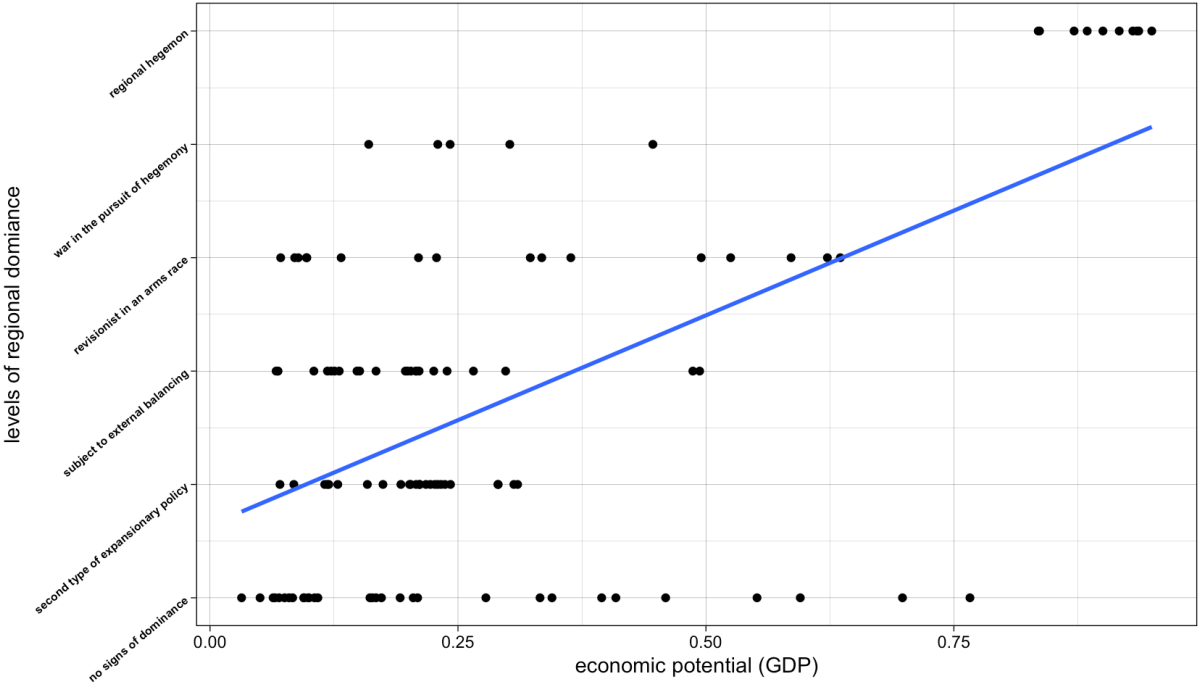
3.1 Descriptive statistics

In this part, we focus only on the properties between our dependent variable – *levels of regional dominance* and our independent variable – *economic potential* based on the GDP indicator. We believe that, for descriptive purposes, working with just one indicator is satisfactory. For all other parts, we include also *GDP * GDP per capita* and *Bairoch's Total industrial potential* as a check for robustness. For the GDP we get 110 observations in total, out of which 62 corresponds to the European region, 36 corresponds to Northeast Asia, and 12 corresponds to the Western Hemisphere. The lowest value of *economic potential* is observed for Canada in 1900 and has the value of 0,032. Accordingly, the highest number stands for the USA in 1900 and has a value of 0,95. The median of *economic potential* sits as 0,21 share of regional economy.

Now, we focus on the relationship between the independent and dependent variables. As mentioned in literature, we should expect a positive relationship between both variables. Meaning, higher *economic potential* of countries should be associated with higher *levels of regional dominance*. This is recognizable from *Figure 3.1* which confirms the positive relationship as it indicates the linear trendline. Furthermore, we can see that the relationship particularly applies to the last *level of regional dominance*. However, for the lower stages of dominance, this trend is not clearly observable. The same pattern is established in the *Figure 3.2*, which elaborates more closely on the distribution of the dependent variable with respect to the independent variable. Using the boxplot analysis, we see that the median value for each *level of regional dominance* is increasing only slightly, when the most considerable increase in the median value is attributed to the highest level of regional dominance. The highest range of values for the independent variable is then apparent for $Y = 0$. In the preceding chapter, we

have presented boxplot (Figure 2.1) where $Y = 0$ is also the most numerous. This again points out to the selection of Tobit model over OLS. In later stages of the analysis, we actually show that the number of observations for this level decreases significantly with the introduction of dummies to the models. Furthermore, this can signify that the dummies can account for the variability in our data and point to more precise estimates. Moving from the most numerous to the least, we have found only 5 observations in total for $Y = 4$, meaning only a small number of powers has decided to wage war in the pursuit of hegemony. This can have impact on our regression as the estimates will be driven primarily by other levels. Nevertheless, the NCA analysis is robust to small number of observations as it looks only on their distribution. Lastly, we see a large range of values for $Y = 3$, with a median higher than the $Y = 4$. This is what we would not expect based on the literature. Although, we see that a country which is revisionist in an arms race does not always have to possess higher economic wealth. This can also signify, we have not chosen a fitting substitute for the identification of internal balancing.

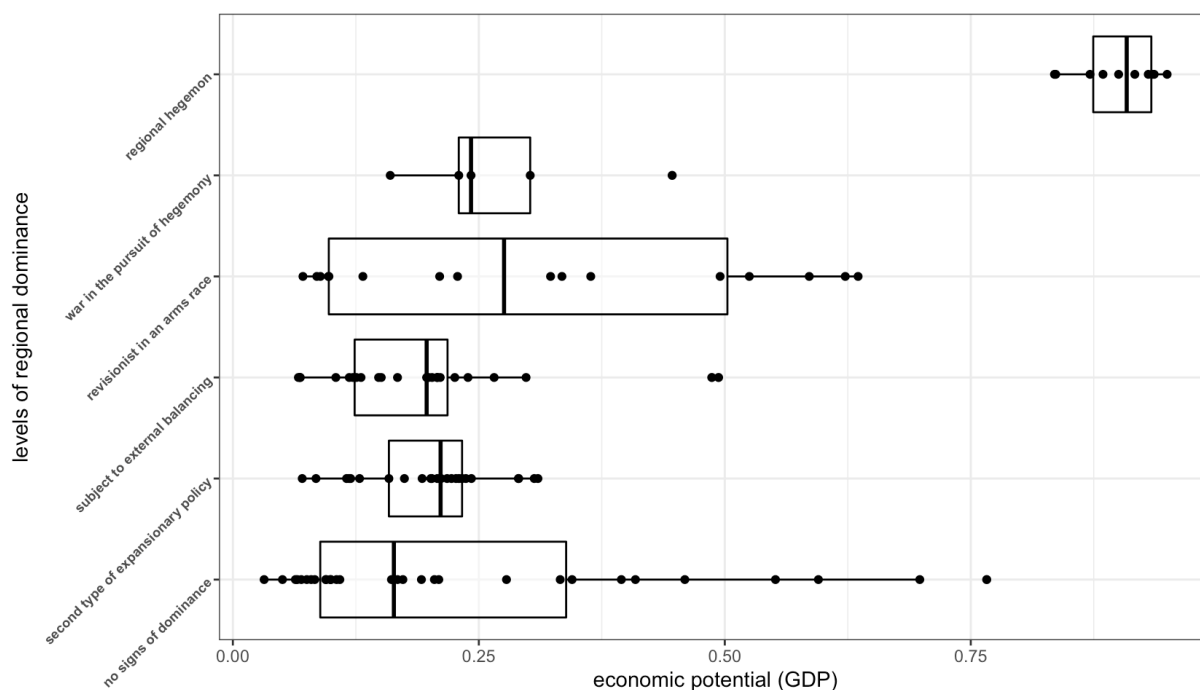
Figure 3.1 Scatter plot, economic potential on levels of regional dominance (GDP indicator)



Source: Author's compilation¹⁶⁶

¹⁶⁶ The Figures 3.1 and 3.2 have been compiled in program R using the following package: Hadley Wickham, *Ggplot2: Elegant Graphics for Data Analysis*, Second edition, Use R! (Cham: Springer, 2016), <https://ggplot2.tidyverse.org>.

Figure 3.2 Box plot, Distribution of levels of regional dominance on economic potential (GDP indicator)



Source: Author's compilation

3.2 Regression analysis

In this part, we present the results of our regression models. For each estimation method (OLS, Tobit) and for each indicator of *economic potential* (GDP , $GDP * GDP$ per capita, *Total industrial potential*) we provide one table, wherein we show the effects of examined variables on the dependent variable and corresponding standard errors in parentheses. The methodological assumption of heteroskedasticity comes true for all the OLS models and thus we provide robust standard errors instead. This might cause difficulties for the Tobit model which is unable to account for heteroskedasticity. Thus, we advise to treat the statistics with special care. All models are confirming the positive relationship between *economic potential* and *levels of regional dominance* as assumed in the literature. Similarly, all models report *economic potential* as being very significant for our dependent variable which indicates that wealth may be a crucial criterion for regional dominance of countries. The estimates of the variables for OLS method are then presented by *Tables 3.1 to 3.3*.

Table 3.1 OLS model (regression analysis) based on the GDP indicator

Predictors	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance
	Estimates	Estimates	Estimates	Estimates	Estimates
(Intercept)	0.64 *** (0.18)	0.71 *** (0.18)	1.02 *** (0.19)	1.04 *** (0.29)	0.77 * (0.36)
economic potential, GDP	3.70 *** (0.56)	3.66 *** (0.55)	3.89 *** (0.43)	3.89 *** (0.43)	4.10 *** (0.50)
dummy for offshore balancers		-0.53 (0.28)	-0.72 ** (0.23)	-0.72 ** (0.23)	-0.84 ** (0.26)
dummy for presence of another power			-1.08 *** (0.27)	-1.07 *** (0.28)	-0.94 ** (0.28)
dummy for years 1820-2010				-0.03 (0.27)	-0.04 (0.27)
dummy for Europe					0.33 (0.27)
Observations	110	110	110	110	110
R ² / R ² adjusted	0.336 / 0.330	0.348 / 0.335	0.451 / 0.436	0.451 / 0.430	0.458 / 0.432

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 3.2 OLS model (regression analysis) based on the GDP*GDP per capita indicator

Predictors	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance
	Estimates	Estimates	Estimates	Estimates	Estimates
(Intercept)	0.80 *** (0.18)	0.88 *** (0.18)	1.19 *** (0.19)	1.21 *** (0.31)	0.95 * (0.39)
economic potential, GDP*GDP per capita	3.16 *** (0.55)	3.23 *** (0.54)	3.47 *** (0.43)	3.47 *** (0.44)	3.67 *** (0.53)
dummy for offshore balancers		-0.91 ** (0.28)	-1.12 *** (0.22)	-1.12 *** (0.22)	-1.27 *** (0.27)
dummy for presence of another power			-1.09 *** (0.28)	-1.08 *** (0.29)	-0.95 ** (0.31)
dummy for years 1820-2010				-0.03 (0.30)	-0.04 (0.29)
dummy for Europe					0.33 (0.32)
Observations	110	110	110	110	110
R ² / R ² adjusted	0.283 / 0.276	0.316 / 0.303	0.420 / 0.403	0.420 / 0.398	0.427 / 0.399

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 3.3 OLS model (regression analysis) based on the Total industrial potential indicator

Predictors	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance
	Estimates	Estimates	Estimates	Estimates	Estimates
(Intercept)	0.75 *** (0.16)	0.84 *** (0.17)	1.10 *** (0.17)	1.07 *** (0.28)	0.55 (0.32)
economic potential, Total industrial potential	3.86 *** (0.45)	3.86 *** (0.44)	4.16 *** (0.34)	4.16 *** (0.34)	4.61 *** (0.41)
dummy for offshore balancers		-0.82 * (0.32)	-0.94 ** (0.29)	-0.94 ** (0.29)	-1.21 *** (0.32)
dummy for presence of another power			-1.08 *** (0.28)	-1.09 *** (0.29)	-0.80 ** (0.29)
dummy for years 1820-2010				0.03 (0.29)	0.00 (0.28)
dummy for Europe					0.64 * (0.25)
Observations	90	90	90	90	90
R ² / R ² adjusted	0.402 / 0.395	0.431 / 0.418	0.536 / 0.520	0.536 / 0.514	0.562 / 0.536

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Source: Authors' compilation¹⁶⁷

¹⁶⁷ Tables 3.1 to 3.6 have been created in program R using the package: Daniel Lüdtke. *SjPlot - Data Visualization for Statistics in Social Science*. (Zenodo, 2018), <https://doi.org/10.5281/ZENODO.1308157>.

Considering the results of the OLS estimation, it appears the model using the *Total industrial potential* indicator (Table 3.3) explains the largest variation in dependent variable predicated on adjusted R^2 . Also, this model finds the largest effect for *economic potential*. Particularly, holding all other independent variables constant, the increase in *economic potential* by 0,1 points would result in an increase in *levels of regional dominance* by 0,46. Considering all models, we also find negative significant effect for the *dummy for offshore balancers* and *dummy for the presence of another power in a region*. This is in accordance with the theory, as we would presuppose an external power tries to halt any attempt to dominate a region. The same is true on the part of *dummy for offshore balancers* where country should not be displayed by higher *levels of regional dominance*. Lastly, the *dummy for Europe* is found significant just for the *Total industrial potential* indicator and *dummy for years after 1819* appears insignificant for all the models.

Moving to the Tobit regression which we find more appropriate for the ordinal scale of dependent variable. The results are presented in Tables 3.3 to 3.6. Based on Nagelkerke pseudo R^2 , the model with *Total industrial potential* indicator (Table 3.6) stands out as the best for regression. When we take into consideration all explanatory variables, this model gives us the following coefficients. An increase in *economic potential* by 0,1 is associated with a 0,528 unit increase in the predicted value *levels of regional dominance*. Similarly, the effect of *dummy for the presence of another power in a region* comes with 0.99 unit decrease in the latent dependent variable. However, regarding the Tobit model, the effects on the latent dependent variable are not what we are trying to explain, as we are interested in the true values of *levels of regional dominance*. Employing the partial effects, we get that a 0,1 increase in *economic potential* has a partial effect of 0.48 and *dummy for the presence of another power* has a partial effect of - 0.9.¹⁶⁸ For this model, we also find significant effects on the side of *dummy for offshore balancers* and *dummy for Europe*. These variables seem to be correlated with each other as the definition of offshore balancers encompass only Europe. Thus, we use the likelihood ratio test to examine their joint significance, which gives us an even stronger effect as we would need p-value bellow 0,01 to reject the null hypothesis. Similarly to the OLS, the *dummy for years after 1819* is found to be insignificant.

¹⁶⁸ We get the partial effects using the following R package: Henningsen, Arne. CensReg: Censored Regression (Tobit) Models. R package version 0.5. 2017, <http://CRAN.R-Project.org/package=censReg>.

Table 3.4 Tobit model (regression analysis) based on the GDP indicator

Predictors	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance
	Estimates	Estimates	Estimates	Estimates	Estimates
(Intercept)	0.23 (0.26)	0.29 (0.27)	0.74 ** (0.26)	0.72 (0.38)	0.22 (0.50)
economic potential, GDP	4.13 *** (0.67)	4.09 *** (0.67)	4.34 *** (0.61)	4.34 *** (0.61)	4.76 *** (0.67)
dummy for offshore balancers		-0.39 (0.52)	-0.70 (0.48)	-0.70 (0.48)	-0.91 (0.50)
dummy for presence of another power			-1.48 *** (0.33)	-1.49 *** (0.35)	-1.22 ** (0.39)
dummy for years 1820-2010				0.04 (0.39)	-0.00 (0.39)
dummy for Europe					0.60 (0.39)
Observations	110	110	110	110	110
R ² Nagelkerke	0.258	0.262	0.383	0.383	0.397

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 3.5 Tobit model (regression analysis) based on the GDP * GDP per capita indicator

Predictors	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance
	Estimates	Estimates	Estimates	Estimates	Estimates
(Intercept)	0.39 (0.26)	0.48 (0.26)	0.93 *** (0.25)	0.91 * (0.38)	0.41 (0.51)
economic potential, GDP*GDP per capita	3.54 *** (0.65)	3.59 *** (0.63)	3.87 *** (0.58)	3.87 *** (0.58)	4.29 *** (0.64)
dummy for offshore balancers		-0.82 (0.53)	-1.17 * (0.50)	-1.17 * (0.50)	-1.43 ** (0.52)
dummy for presence of another power			-1.51 *** (0.35)	-1.52 *** (0.37)	-1.25 ** (0.40)
dummy for years 1820-2010				0.03 (0.40)	-0.01 (0.40)
dummy for Europe					0.62 (0.40)
Observations	110	110	110	110	110
R ² Nagelkerke	0.217	0.233	0.357	0.357	0.371

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 3.6 Tobit model (regression analysis) based on the Total industrial potential indicator

Predictors	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance	levels of regional dominance
	Estimates	Estimates	Estimates	Estimates	Estimates
(Intercept)	0.46 (0.24)	0.56 * (0.24)	0.92 *** (0.22)	0.91 ** (0.34)	0.09 (0.46)
economic potential, Total industrial potential	4.22 *** (0.63)	4.20 *** (0.62)	4.56 *** (0.56)	4.56 *** (0.56)	5.28 *** (0.62)
dummy for offshore balancers		-0.82 (0.49)	-1.06 * (0.45)	-1.06 * (0.45)	-1.43 ** (0.45)
dummy for presence of another power			-1.45 *** (0.32)	-1.46 *** (0.33)	-0.99 ** (0.36)
dummy for years 1820-2010				0.01 (0.36)	-0.05 (0.35)
dummy for Europe					0.98 ** (0.37)
Observations	90	90	90	90	90
R ² Nagelkerke	0.333	0.354	0.488	0.488	0.529

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Source: Authors' compilation

What can be inferred from the above? Firstly, the *Total industrial potential* indicator appears to match our models the best. The possible explanations are the consistency of this indicator across years and also, it can serve as a partial proxy variable for technological development which is by many authors considered to be another key component of national power. Vice versa, the indicator of $GDP * GDP \text{ per capita}$ has the lowest explanatory power. Thereby, we have been unable to validate Beckley's critique of gross indicators, although many of our observations are characterized by large populations and relatively lower values of GDP per capita. Secondly, the *economic potential* is found to be very significant for *levels of regional dominance* in all the presented models. As the effect of this variable is positive, we can confirm the narrative established in the literature background, which attributes large weight to the size of economy in the explanation of dominance of states. This can indicate the presence of necessary or sufficient condition, but a closer examination is required. Also, *dummy for the presence of another power in a region* has been observed as significant and having negative effect. This affirms the Mearsheimer's argument that powers will proactively try to prevent any dominant formation of power even outside of their region. Lastly, some models attribute a significant influence to *dummy for offshore balancers* and *dummy for Europe*.

3.3 NCA analysis

In methodology, we have reviewed that the regression models have certain limits for our type of data. Firstly, we have debated the issue of heteroskedasticity which comes true for the OLS regression. The NCA analysis is robust to this type of data dispersion and in fact, heteroskedasticity may indicate the presence of a necessary condition. Secondly, the brief observation of the data from *Figures 3.1* and *3.2* suggests that the regression analysis can be driven by some values of the dependent variable more than others as is the case with low number of observations for $Y = 4$ and vice versa for $Y = 0$. The Tobit regression can partially account for it, mainly from the perspective of $Y = 0$ values, but underestimation of results is still a possible outcome. This is not issue for the NCA as it looks at the dispersion of values rather than at their quantity. Thus, we see the NCA analysis as the most fitting for the estimation.

The results of the analysis are then shown for all three indicators of *economic potential*, however, we focus only on those independent variables that have been established as significant by previous analysis. We provide the results in *Table 3.7*, where the effect sizes are provided

in the right column.¹⁶⁹ In the table, we first present *economic potential* and continue with the dummies according to their significance. The results show that with the inclusion of more dummies the effect size grows larger except for the European region only. This gives us an indication as to how to treat the graphical representation of NCA which is presented by the *Figures 3.3 to 3.8*. Here we show the model with *economic potential* and the model with the inclusion of dummies for *offshore balancers* and *presence of another power in a region*, where the effect size appears to be the largest.

Table 3.7 NCA Results, effect sizes for particular independent variables.

Independent variable		Effect size(s)	
		CE-FDH	CR-FDH
GDP indicator	Economic potential	0.227	0.243
	Economic potential with <i>dummy for the presence of another power</i>	0.242	0.246
	Economic potential with <i>dummy for the presence of another power</i> and <i>offshore balancers</i>	0.254	0.266
	Economic potential with <i>dummy for the presence of another power</i> , <i>offshore balancers</i> , and <i>Europe</i>	0.159	0.133
GDP*GDP per capita	Economic potential	0.205	0.177
	Economic potential with <i>dummy for the presence of another power</i>	0.23	0.24
	Economic potential with <i>dummy for the presence of another power</i> and <i>offshore balancers</i>	0.261	0.256
	Economic potential with <i>dummy for the presence of another power</i> , <i>offshore balancers</i> , and <i>Europe</i>	0.207	0.215
Total ind. potential	Economic potential	0.209	0.223
	Economic potential with <i>dummy for the presence of another power</i>	0.209	0.223
	Economic potential with <i>dummy for the presence of another power</i> and <i>offshore balancers</i>	0.231	0.228
	Economic potential with <i>dummy for the presence of another power</i> , <i>offshore balancers</i> , and <i>Europe</i>	0.111	0.056

Source: Author's compilation¹⁷⁰

¹⁶⁹ With respect to the graphical visualization, we decide to shorten *dummy for the presence of another power in a region* to *dummy for the presence of another power*.

¹⁷⁰ The results of NCA (Table 3.7 and Figures 3.3 to 3.8) were created by the R package: Jan Dul, *Necessary Condition Analysis. R Package Version 3.0*. 2018, <http://cran.r-project.org/package=NCA>.

Figure 3.4 NCA Plot, economic potential - GDP indicator

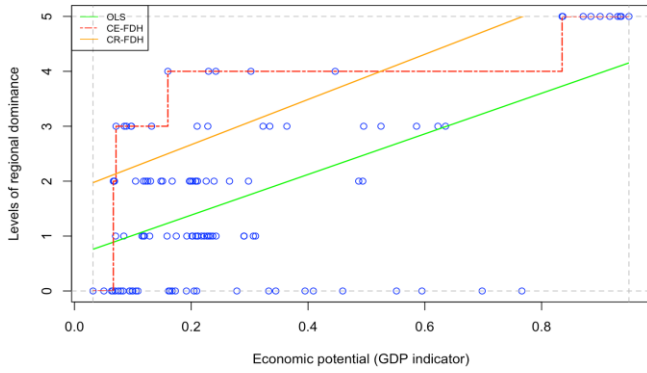


Figure 3.3 NCA Plot, Economic potential with respective dummies - GDP indicator

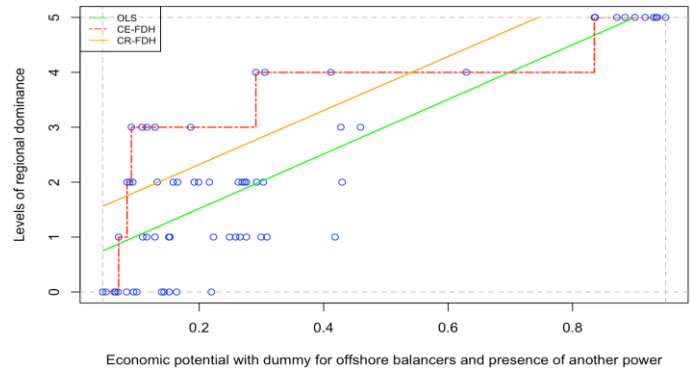


Figure 3.6 NCA Plot, economic potential - GDP * GDP per capita indicator

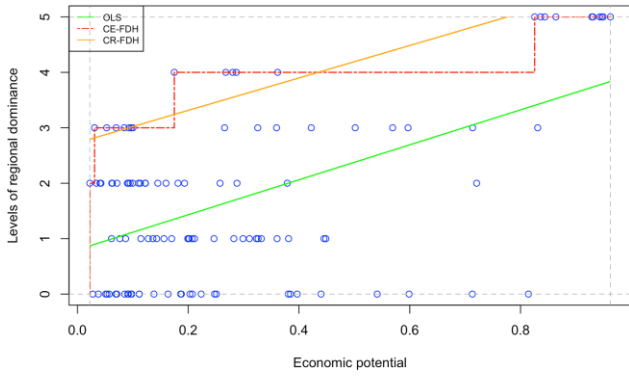


Figure 3.5 NCA Plot, economic potential with respective dummies - GDP * GDP per capita indicator

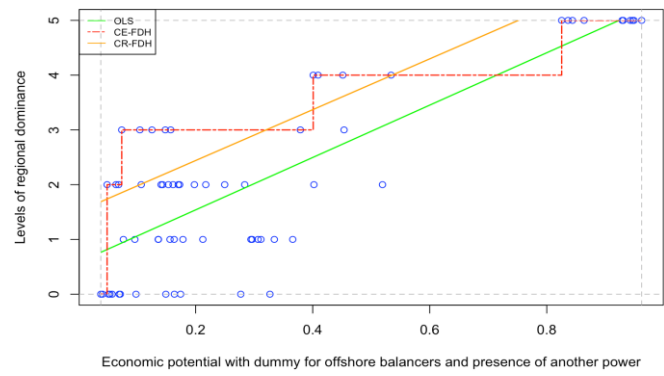


Figure 3.7 NCA Plot, economic potential - Total industrial potential indicator

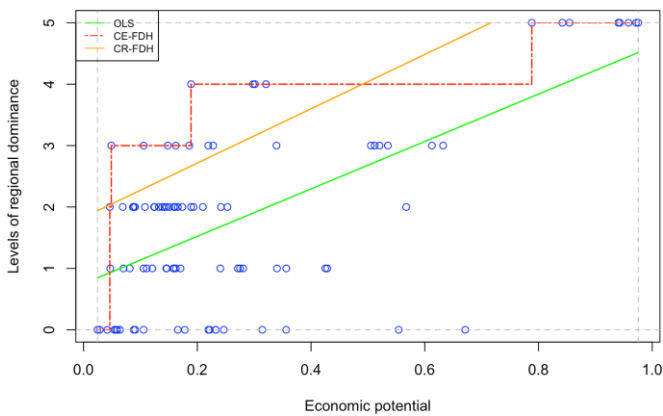
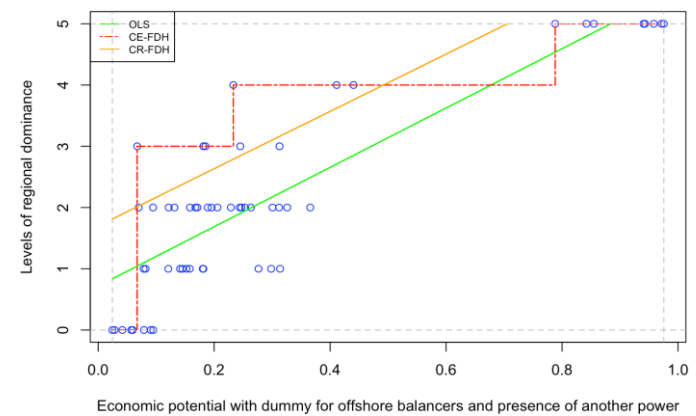


Figure 3.8 NCA Plot, economic potential with respective dummies - Total industrial potential indicator



Source: Author's compilation

Let us firstly focus on the results in the *Table 3.7*, where we consider all combinations. As the effect sizes are above zero, we suggest the presence of necessary condition with a medium size, thus pointing to hypothesis H1: *The economic potential of a country is a necessary condition for higher levels of regional dominance*. The inclusion of *dummy for Europe* considerably decreases the effect sizes. The possible explanation can be that no great power achieved the status of *regional hegemony* in Europe and thus we are missing the values for $Y = 5$. The opposite holds for the two other dummies. It can be inferred that *presence of another power in a region* or *offshore balancers* may preclude economically strong countries from achieving higher levels of regional dominance. Based on the effect sizes (particularly CR-FDH), *GDP* indicator suggests the strongest presence of necessary condition which may seem contradictory to OLS and Tobit models where *Total industrial potential* indicator has the greatest explanatory power.

These results can be further examined by the graphical representation where we will be mostly focusing on the *GDP* indicator where the effect size is the greatest. Each of the figures depicts an empty space in the upper left corner that indicates the presence of a necessary condition. The empty space is particularly visible for the last level of regional dominance - *regional hegemony*. The visible empty space is also apparent for the *war in the pursuit of hegemony* ($Y = 4$). This is strengthened by the inclusion of dummy variables. What does this mean in practice? We have established that coding of dominance should also encompass expansionary policy of states or balancing against the dominant formation of power. But this link cannot be proved. The balancing behavior is particularly interesting. From the plots, it appears that *economic potential* does not initiate the creation of balancing alliances. Similarly, wealth should not play a role in the initiation of arms races. However, this can be explained by the fact that we have proposed the concept of arms races to account for internal balancing where, possibly, a stronger link could be found. To summarize, for a country to bid for a regional hegemony and to become a *regional hegemon* it is necessary to have at least some preponderance in *economic potential*. This leads us to the discussion over the individual hypotheses.

3.4 Selection of the most appropriate analysis

H2. *The economic potential of a country is not a necessary condition for higher levels of regional dominance.*

Both OLS and Tobit models have found a positive and significant effect for the *economic potential* which may suggest a presence of necessary condition. Also, the *Figures 3.3 to 3.8* reveal an empty area pointing to the presence of necessary condition. Furthermore, this statement can be confirmed based on *Table 3.7*, where we see the effect sizes of the NCA analysis. For the *GDP* indicator, regardless of the dummy, we get the effect size of 0,243. This proves the presence of a necessary condition with an effect that can be designated as “medium”. This is affirmed by the other two indicators that serve as a robustness check. In addition, we decide to run the significance test for the effect size with the null hypothesis ‘presence of necessary condition and the obtained results are not related’. We have enough evidence to reject this null hypothesis even at the $p\text{-value} < 0.001$ and thus we claim the presence of necessary condition as meaningful. Therefore, we decide to reject the H2 hypothesis: *The economic potential of a country is not a necessary condition for higher levels of regional dominance*. We have expected this result. Role of economy is outlined by all scholars and thus H2 was highly improbable. Thus, we put forward the next hypothesis.

H1. *The economic potential of a country is a necessary condition for higher levels of regional dominance.*

As we have mentioned in the methodology section, this hypothesis can be separated in two, the H1a: *The economic potential of a country is a necessary but not sufficient condition for higher levels of regional dominance*, and H2b: *The economic potential of a country is a sufficient condition for higher levels of regional dominance*. Let us firstly focus on the H2b. The effect size for CR-FHD is “medium”¹⁷¹ thereby providing evidence of the presence of other necessary conditions to produce a sufficient outcome. The graphical representation appears even more decisive. If we negate the H1 hypothesis we get that the absence of *economic potential* is sufficient for the absence of higher *levels of regional dominance*. The corresponding figures show that the absence of *economic potential* actually results in the presence of higher *levels of regional dominance*. As with the necessary condition, merely the absence of *economic potential* cannot result in the $Y = 4$ and $Y = 5$ (*war in the pursuit of hegemony* and *regional hegemony*). This gives us the evidence to reject the presence of the sufficient condition. Thus, the most appropriate hypothesis is the H1a: *The economic potential of a country is a necessary but not sufficient condition for higher levels of regional dominance*. But again, we have to emphasize

¹⁷¹ The “medium” effect is found for all models with the exception of the model with Total industrial potential indicator and inclusion of dummy for Europe. We do not put much weight to this model, as *dummy for Europe* is excluding all $Y = 5$. Therefore, we claim “medium” effect.

that the necessary condition applies mainly to the last two *levels of regional dominance* and the other levels remain largely intact.

How are our findings consistent with the whole research? Firstly, the CR-FHD does not find considerably stronger effect sizes when we include the dummies into models. This might appear unexpected, especially when we consider the OLS and Tobit regression, where these dummies are statistically significant. On the other hand, we may claim that the economic potential itself is the main driver of the necessary condition.

Secondly, we have proposed two other indicators of *economic potential* for the purpose of robustness checks. The Beckley's *GDP*GDP per capita* indicator should account for countries with a large population but comparatively lower GDP per capita. This can be the example of China, which is nowadays especially relevant, and many studies have attempted to predict its future power position. Thus, in our opinion, this indicator should not be omitted. In addition, we have included Bairoch's indicator of *Total industrial potential*. The indicator provides a good basis for countries with higher levels of technological advancement and also, its composition remains the same across the whole sample size and thus its consistency is superior to the other two indicators. For both of these, we have found similar effects to the *GDP* indicator and thus they confirm the presented outcomes. In fact, *Total industrial potential* has the greatest explanatory value for the regression analysis. This may be unexpected because the *GDP* indicator has found a larger significance of necessary condition. We propose the following explanation. As *Total industrial potential* can partially account for levels of technological development, we may suggest the presence of more necessary conditions to produce a single sufficient condition. One of those conditions can be the level of technological development. This proving the narrative of literature when technology is assumed to be one of the necessary conditions by Brooks and Wohlforth, or Walt. Also, Mearsheimer argues that technology should not be left out from the analysis.¹⁷² As we have indicated in the methodological section, the NCA analysis is more appropriate for the examination of only one independent variable. Thus, the *GDP* indicator which considers the size of economy only then finds larger effect sizes for economic potential. What we have been unable to prove is the accuracy of *GDP * GDP per capita indicator*, which we consider to be the least fitting for the analysis. Thus, the Beckley's critique of gross indicators which may inaccurately account for populous states remains unproven by our research.

¹⁷² See page 32 of the thesis for larger discussion.

Lastly, we need to examine how our results meet the assertions portrayed in the literature background. The literature maintains that the size of economy is a major factor for national power of states. The argument established by the theory is that *economic potential* should be a necessary condition for regional dominance and thus, also for the higher *levels of regional dominance*. Scholars such as Mearsheimer or Kennedy see the importance of wealth even more strongly and present just a few constraints that prevent the size of the economy from having a sufficient status for regional dominance. The OLS and Tobit regressions seem to validate this argumentation, as the effect of *economic potential* is found to be very significant for all the presented models. Nevertheless, the results of NCA analysis are to some extent in contrast with the literature. Even though we find a presence of necessary but not sufficient condition, based on the literature, we would probably expect a larger effect size. The “medium” effect can be in line with Walt or Waltz who see many necessary conditions for dominance, however, is in contradiction to other scholars such as Kennedy, Gilpin, and Mearsheimer. We have already outlined that for the lower *levels of regional dominance*, we find almost no necessary presence. Thus, the link that countries are balancing against higher concentration of power cannot be proved. We find this contradictory to BoP theory mentioned by Waltz or Walt.

In fact, we see no support for the empirical conclusion of Levy and Thomson who, based on military data instead of economic, have asserted that states balance against the hegemonic threats. In spite of this result, more research on the comparison of military capabilities in contrast to economic capabilities and their influence on balancing behaviour should be done. This comparison can be also important from the perspective of our dependent variable. Above, we have mentioned, there may be the presence of multiple necessary conditions. The role of military might for regional dominance is assumed to some extent by all the authors. Furthermore, the role of military and economy can be intertwined as expressed by Mearsheimer.¹⁷³ Testing both variables against each other can therefore present new findings.

Also, our results that states balance against the sources of danger are not in accordance with argument of Mearsheimer which served as our descriptive basis. The argumentation applies to both the creation of alliances and occurrences of arms races. However, a more fitting indicator of internal balancing could contradict this claim. For the two highest *levels of regional dominance* we observe the presence of necessary condition. Thus, *war in the pursuit of hegemony* appears to be consistent with Mearsheimer’s argument that potential hegemons should be observed by a significant power lead in economic capabilities. And even more

¹⁷³ See page 19.

importantly, the largest necessary effect of *economic potential* emerges for *regional hegemony*. For this level, the argumentation of literature is confirmed as *regional hegemons* are displayed by notably higher size of economy. This can point to Gilpin's view mentioned in the literature, according to which states that achieve hegemony exploit their position to gain even more wealth.

Conclusion

In this thesis, we have delved into the relationship between the size of the economy and regional dominance. The analyzed literature puts a large emphasis on economies of states for the determination of their power status. Scholars such as Kennedy, Wohlforth, and Mearsheimer then see wealth as a major prerequisite for the dominance of states. To test the relationship between these variables accordingly, we have put forward a new indicator measuring six different levels of regional dominance. We have set this variable as dependent and test it against the economic potential which plays the role of the independent variable. Using the OLS and Tobit estimation we have obtained a positive and significant relationship between these variables and confirmed the arguments of the theoretical background. Furthermore, we have proposed the NCA analysis which we have found as the most fitting method for the estimation of this type of relationship. The obtained results have found support for the following hypothesis: “The economic potential of a country is a necessary but not sufficient condition for higher levels of regional dominance.”

The observed necessary effect is denoted as “medium” and applies mainly to higher levels of regional dominance. Therefore, we argue that there are other components of power that lead to regional dominance of countries. The same argument is confirmed by the selection of indicators. Bairoch’s Total industrial potential that may account for technological prowess explains the largest variance of data in the presented regressions. Thus, our research agrees with the arguments of Walt, Waltz, or Wohlforth, who claim there are many components of power such as military capabilities, technological advancement, or national cohesion. The rationale of Mearsheimer or Gilpin is in contradiction as we would expect a much higher effect size for NCA or the presence of sufficient condition. Furthermore, the graphical representation shows another important aspect. It refutes the balance of power theory which assumes that countries should balance against hegemonic threats, where almost no link for economic potential is found. Thus, the size of economy of one state does not initiate balancing behavior of other states and we would have to again search for other indicators. However, this claim may be given by the fact that we have substituted the concept of internal balancing by the examination of arms races. We see this as a major limitation to our research as the assessment of internal balancing would be more suitable for the analysis.

What are then the resulting implications? We have seen the main motivation behind our thesis in the prognosis of the future behavior of China. We have presented the argumentation

of Hugh White, Christopher Layne, and Graham Allison, who all suggest the rise of China to the dominant position in Asia-Pacific based on Chinese GDP. Our results show that assessing the power of states and their subsequent dominance purely on economic data is largely insufficient. Therefore, the future ascendance of great powers to dominant position should be observed from more angles and by taking into account other components of national power. In this regard, we agree with the article of Brooks and Wohlforth “The Rise and Fall of the Great Powers in the Twenty-First Century”, where the same inference about China is developed. On the other hand, GDP as the indicator of economic might has been found to be very suitable for the analysis. We find no support for the rationale of Beckley who suggests the economic power should be observed through indicators robust to populous countries.

The area for further research remains wide. We have presented just one explanatory variable – economic potential - to analyze the levels of regional dominance. This is the main limitation of the research, as we do not look at other components of power mentioned by the literature, such as the level of technological prowess or military capabilities. The small effect of necessary condition suggests the presence of other necessary conditions for levels of regional dominance in particular. Incorporating these variables into the presented models would therefore be a substantial improvement upon the research. This approach would significantly increase the explanatory power of the models. Even more importantly, this approach would make possible the comparison of different components of power, and therefore, the effect of economic potential could be given into a wider context.

Another critical issue lies in the consistency of economic data. In our thesis, we have exploited economic data from various sources and with many approximations. A more objective analysis could be performed using only one statistic across the years. Furthermore, for the period between 1700 – 1819, we have been forced to use additional approximation to account for limited data. We have proposed dummy for this period which appears as insignificant, however, more consistent results would be obtained by using the same methods across all time periods. This issue could be further improved by using time-series data instead of cross section for random points in time. By observing only random years and thus sampling our population we risk that some properties of data can be overlooked. This method however cannot be circumvented if the objective is to observe more historical periods. In this regard, we see the work of many historical statisticians such as the Maddison Project as very promising to future research projects.

Summary

The presented literature sees the size of economy of states as a crucial determinant of national power. Scholars such as Mearsheimer, Gilpin, or Kennedy argue that wealth is very close to be a sufficient condition for regional dominance. Other scholars such as Waltz or Walt are more conservative in their assessment and claim necessary status. Our thesis aims to contribute to this debate and empirically examine whether the economic potential of states can be seen as a necessary condition, a sufficient condition, or neither of those, for regional dominance. The analysis is bounded by the years 1700 and 2010 and encompasses three regions: Europe, Northeast Asia, and Western Hemisphere. To achieve the largest possible sample space and discuss the results in more detail we present a newly created indicator of regional dominance consisting of six sequential levels. The independent variable denoted as economic potential is then constructed as the ratio of one country's GDP to the regional sum. For the purpose of robustness check, we also construct the ratio using Beckley's "GDP * GDP per capita" and Paul Bairoch's "Total industrial potential" indicators.

We present two main methods to analyze the relationship between economic potential and levels of regional dominance. The first is the regression analysis which suggests that economic potential has a positive and very significant effect on levels of regional dominance. Judging economic potential is either a necessary or sufficient condition for higher levels of regional dominance. The more appropriate method for testing is the NCA analysis to which we turn next. We conclude that economic potential is a necessary but not sufficient condition for higher levels of regional dominance with the effect of necessary condition denoted as "medium". The presence of the necessary condition is particularly visible for higher levels of regional dominance when the state was either bidding for hegemony or achieved it. The other two indicators (GDP * GDP per capita, Total industrial potential) are confirming this proposition.

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List of External Appendices

We append an external Zip file to this thesis with the name "Appendix". This Zip file contains 3 files.

- "Appendix Codebook" file
- "AppendixIV" file
- "AppendixDV" file

"AppendixIV"

This appendix serves for identification of sources of economic data. Although, we outline the sources in methodology, some data are still based on approximations and the sources for time periods and regions differ. Thus we provide for each value its source. For more information about this appendix check "Appendix Codebook".

"AppendixDV"

This appendix serves for identification of value that the dependent variable attains on our indicator. As we have proposed this indicator as a new, we assume questions can arise about coding of particular observations. For more information about this appendix check "Appendix Codebook".

"Appendix Codebook"

Here you find detailed specification of "AppendixIV" and "AppendixDV" files.

"Appendix for replication purposes"

All these Appendices have only descriptive purposes and they do not present the final results, when the detailed process is described in methodology. However, for the purpose of replication of direct results we provide link to "Appendix for replication" file, where all the calculations are provided in Excel sheets. This file is stored on Academia.edu under the following link:

https://www.academia.edu/43743682/Appendix_for_replication.

Bachelor thesis proposal (Teze závěrečné bakalářské práce)

Department of Political Science

Motivation (Zdůvodnění výběru práce)

In recent decades we have been witnessing the long-term economic growth of China. This has led many IR theoreticians to put emphasis on Chinese economic performance and various implications have been drawn. Some of them are arguing that Chinese economic growth will eventually cause the decline of American primacy in global order and that China will soon emerge as a new pole. But does the assumption that preponderance in economic sphere leads to overall dominance hold? Therefore, the purpose of this thesis will be to test on historical cases if a necessary condition for regional dominance is the size of an economy. The results of this analysis could provide us with further information how we should treat the economic rise of China in the future.

Contribution (Předpokládaný cíl)

Some may claim, that it was trade and a merchant enterprise which have caused the seventeenth-century Dutch hegemony. Similarly, the nineteenth-century British hegemony was most likely the product of the trading system of Great Britain and its economic lead after the industrial revolution. On the other hand, the Soviet Union emerged after the Second World War as the second pole despite its poor economic performance in comparison to the United States and the economic growth of Japan in the 60s and the 70s in the 20th century have not resulted in its regional dominance. Referring to these previous historical cases, the purpose of this work will be to determine on empirical cases of regional dominance, whether the high economic potential was in the history leading to the regional dominance and to the ability of states to project power or if the causes of regional preponderance should be sought elsewhere. In other words, this work will try to identify if the size of an economy is either a necessary or a sufficient condition for countries to rise.

Methodology (Metodologie práce)

For the purpose of this work, we will use the following research question: Does the historical cases of regional dominance indicate that the size of an economy was a necessary condition for countries to rise. The analysis of historical cases will be done as follows. Firstly, the historical cases will be divided such that we will have always a comparison between two powers: a rising power and a ruling power. This division will take as an example the work of Gragam Alison: "Destined for War: Can America and China Escape Thucydides's Trap". (ALLISON, Graham T., 2017. Destined for war: can America and China escape Thucydides's trap? Boston: Houghton Mifflin Harcourt. ISBN 978-0-544-93527-3.). Secondly, the size of the economy of selected countries will be measured using GDP, iron and steel production, energy consumption or the size of a trade. Third, the model of NCA (necessary condition analysis) will be applied, which should provide us with the results if the size of the economy is either a necessary or a sufficient condition for regional dominance.

Introduction to the topic (Základní charakteristika tématu)

The primary scope of this work is the rise of China, nevertheless to address the rise of China correctly this thesis will encompass following: it will examine what are the determinants of the rise of countries; it will discuss, what role the size of an economy has played in the past and what are the consequences for the future when the data set will be constrained only on historical examples of ruling powers and rising powers.

Outline (Předpokládaná struktura práce)

Firstly, this work will analyse the literature which is focusing on the determinants which may induce the status of regional reponderance. This will be followed by the qualitative analysis of a role that economy might play as one of the key determinants for regional dominance. Secondly, this work will focus on historical cases of ruling and rising powers

and the size of economies of selected countries will be measured. Thirdly, the analysis using the model of Necessary Condition Analysis will be used. Finally, the result of the model will be analysed which will be concluded with a discussion of the implications of the findings and future research directions.

Literature (Základní literatura)

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