

# **The Value Of Wealth: A Cross-Country Comparison**

## Abstract

The growing economies worldwide have contributed to undermining natural resources' role for countries, relating the concept of "wealth" as monetary holding. The world based solely on monetary reserves may not work for much longer, since inequality between countries increases unsustainably. Several theories have shown that a country's wealth depends on natural resources, allocation, and distribution. To contrast the hypothesis that a country's wealth should depend on natural resources rather than monetary holdings, we use data from the International Monetary Fund to compare the richest and poorest countries as of 2021, where findings indicate a substantial difference between the two countries. Moreover, primary data from a survey conducted to understand people's perception of wealth led to the conclusion that several factors affect people's perception of a wealthy country, such as income, the generation they belong to, and their country of origin.

**KEYWORDS:** Wealth, Natural Resources, Monetary Holdings, Financial Institutions, Political Power, Country Comparison, Joint Venture, Economic Growth.

## Introduction

There is one goal that all countries strive for: economic growth, which has a significant impact on countries' wealth (Vorley & Williams, 2017). Economic growth gives a country power over others and classifies each as “wealthy” or “poor”. This paper aims to analyse whether a country should be defined as “wealthy” because of its natural resources, or rather, because of its monetary holdings. A wealthy country needs to manage its assets correctly and allocate them in the best way (Dunning, 1977). Given the relevance of money, people forget and confuse the value of a resource and its price (Becker, 2015). Hence, the wealth of a country depends on how this aspect is measured.

There is a gap between what the literature explains and our perception of wealth. Indeed, the wealthiest country as of 2020 is Luxembourg (IMF, 2020), endowed in financial resources, while the most impoverished country is the Republic of South Sudan (IMF, 2020), endowed in natural resources. The difference between the two shows a discrepancy in the concepts of wealth, leading to distant perspectives of what being a “wealthy country” means. Nevertheless, those countries which see money as the most fundamental asset obtain it from buying natural resources from developing countries (Mukherjee, 2005). Based on this reflection, in this study we aim at answering the following research question: *Should the wealth of nations be linked to monetary holdings or to the availability of natural resources?*

To answer the research question, an empirical methodology based on both quantitative and qualitative approaches is followed. Data are cross-sectional since they are taken and analysed at a specific period. The qualitative research will compare the richest and poorest countries globally, analysed their Gross Domestic Products (GDP) per capita, and how wealthy they genuinely are when looking into their natural resources. Moreover, the quantitative methodology focuses on a survey conducted to investigate 231 people's points of view on the concept of a “wealthy country.” According to them, this survey analyses whether people

connect the word “wealth” with money or with resources and the importance of these two for a country. The quantitative method used to generate the results was the independence test since the survey uses qualitative variables.

Our findings show that there is a link between how a person measures the current and future wealth of a country. Moreover, people’s perception concerning the wealth of a country depends on many factors such as income, the generation they belong to, and their country of origin.

This study offers insightful suggestions and possible solutions to move toward a more balanced society and an improved way to measure wealth. In particular the use of joint ventures between countries could help them accomplish steady incomes to producers and a fair return on capital for those investing in industries. Nevertheless, governments should put aside their greed and focus on shared growth, creating pacts or structures like a joint venture and highlighting the importance of global growth.

## Theoretical Framework and Hypotheses Development

Countries that are massively big in terms of resources are considered weak when standing next to countries with a massive amount of money. Nowadays, the distribution of wealth is not fair because countries are being pushed down by the larger economies (Ahamed, 2019). The following theoretical framework will explain the different concepts of a country's source of wealth to address this issue.

Many theories were developed to explain how the growth of a country is managed, discussing the factors contributing to this growth. By taking Adam Smith's most influential book, "The Wealth of Nations" (Smith, 1776), we can find an 18<sup>th</sup>-century approach towards the meaning and measurement of wealth. Smith (1776) believed that the maximization of wealth could be achieved by removing restrictions from a Nations' productive capacity. To accomplish this, an *Invisible Hand* allocates the national products most efficiently without any need for government intervention (Majaski, 2019). The *Invisible Hand* is a concept that refers to the free commerce and trade between merchants, given that the market should find its own equilibrium without disturbances from other entities. Most importantly, Smith (1776) analyses how efficiency in productivity increases when individuals worked in a competitive market (Pal, 2015) and argued that people's self-interest is the engine that pushes up the Nation's wealth, obtaining an economic benefit afterward.

When Adam Smith developed his theory, many subjects that we study nowadays, such as international trade or finance, could not have been taken into account. Nevertheless, this theory is still relevant to this paper because it provides us with a general scope of the meaning of wealth. Indeed, even in early ages, wealth was already linked to resources, production, and allocation. For Smith (1776), wealth comes from the assets owned by the country, and he states that the government should not interfere in the exchange between the value put onto the goods and prices to be in their natural rate (Witztum, 2010).

While acknowledging Adam Smith's point of view about the meaning of wealth and growth, we must also consider "Marxist Economics," which provides an entirely different perspective. Karl Marx introduced his theory by publishing a seminal work called "Das Kapital" in 1867 (Liberto, 2019). For Marx, the world was divided into two different groups based on economic power. He describes the capitalist system as self-destructive, arguing that the ruling class gains power from the cheap labour provided by the working class. High economic power is associated with higher ownership of resources, higher production, higher wealth, and more control over the country, leading to abuse of power. The most important idea that can be retrieved from Karl Marx's theory is that the production quantity in a country is the primary source of their economic power (Woods, 2013). Marx supported the government's intervention in the economy for total control of the production means, which could then be equally distributed among all economic actors. This theory goes back to the 19<sup>th</sup> century, and it still links wealth with the resources of a country. However, we ought to consider more modern approaches to help us orient the paper into actuality.

All economies pass through five stages of growth. Walt Whitman Rostow explains each of the stages in his book "The Stages of Economic Growth: A Non-Communist Manifesto," published in 1960.<sup>1</sup> In accordance to Rostow (1960), the first stage for economic growth is a "*traditional society*," explaining that the country's technology and institutions limit a nation's output. Following this idea comes to the "*pre-conditions for take-off*," referring to the beginning of the banking industry and the mechanization of work. The national output in the first stage starts to be systematic, and now people perceive growth as a necessary meaning for their industries. The third stage is "*take-off*," having compound interest built into the economy's institutions; regulations and legislations are added to the banking industry in phase

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<sup>1</sup> W.W. Rostow was the advisor to the president candidate John F. Kennedy, whose job was to ensure the United States' economic growth (Britannica, 2020)

two, and people see growth as a normal condition. The next stage is the “*drive of maturity*” of industries, and a mature industry has passed both the emerging and growth phases (Kenton, 2019). Having this in mind, this stage consists of focusing on how to make businesses grow regardless of the natural resources base of the first stage. The fifth and last stage is the age of “*high-mass consumption*,” where people can buy all the consumer goods they desire from the systematic and mechanized production set in the previous stages.

Rostow (1960) links GDP with economic growth, perceiving the economy as a plane that should never land. Indeed, he assumes that GDP growth can go on forever. Throughout these five main stages, we can recognize that resources are the impulse of the metaphorical plane of growth. However, when he developed this idea, he did not take into consideration that resource usage keeps falling with growth’s increase. This theory leads us to suggest that another concept of growth is linked directly to resources. However, an unending growth cannot only depend on resource exploitation (Raworth, 2018).

After looking into the previous classical theories, the paper will bring attention to a modern approach. In the 20<sup>th</sup> century, the economy concept was focused on centralizing technologies, institutions, knowledge, and power in few hands, and it appears that we have not changed our habits (Piketty, 2014). Oxford economist Kate Raworth, during a TED conference, explains how we can transform countries where people are falling short on life’s essentials into regenerative, distributive economies that work within the planet’s ecological limits (TED, 2018). Under her view, a healthy economy should be designed to thrive instead of growing. Nonetheless, the motion of forwarding and upward is the direction that humans recognize as progress. It is not a coincidence that we expect economic progress to take the same shape: an ever-rising line of growth. Rostow (1960, p. 16) asks us:

*“And then, the question beyond, where history offers us only fragments: What to do when the increase in real income itself loses its charm?”*

Sadly, we have now reached the point that our earnings are no longer seen as a privilege because our greed and desire for more have become the priority (Snowdon, 2015). Today’s financial system is designed to pursue the highest rate of monetary return, putting constant pressure on companies to deliver increased sales, market shares, and profits (Bloom, and Kotler, 1975). We lost interest in the meaning of growth, aiming only to increase output. This fact may be the reason why we focus more on how much money we have instead of looking at where it truly comes from.

The 21<sup>st</sup>-century challenge of humanity is clear: meet the needs of all people within the means of our living planet for us and nature to thrive (Cullian, 2020). We are now flying in the plane of mass consumerism with economies that demand and depend upon unending growth. Still, we have not realized that progress cannot be measured with money metric because it does not cover everything that countries have to offer (Agarwal & Nandram, 2021). The amount of resources mined from the planet was up from 39.3 billion tons in 2002, and it has increased 55 percent in less than 20 years (World Counts, 2020). Money as our priority has cost us Earth’s natural resources to be under heavy pressure, given that we are already extracting 75 percent more than it can sustain in the long run (World Counts, 2020). The highest growth is seen in the mining of metals. Production of mined metal commodities is expected to increase by 250 percent by 2030 compared to 2000 (World Counts, 2020). Despite these numbers, people will keep turning their backs on resources and focus on their personal growth because people cannot settle for what they have (Naim, 2018).

The literature review discussed above has examined different centuries and different theories and approaches to the meaning of growth. However, one element is common in all



such theories: resources and amount of output. What has changed is the importance we give to the natural assets that have been de-emphasized compared to the amplified focus on increasing income. According to an opinion survey by Susan Dusit Rajabhat University, the economy is the most crucial issue for most people. In the survey, 78.45% of respondents pointed to economic problems saying their income could barely keep up with the rising prices of goods, forcing them to look for extra jobs (BankogPost, 2020). The survey proves that people draw more attention to their livelihood than to the economic system forgetting about resources, which are the key elements that are the base of growth, as shown with the previous theories. To argue the previous theories, the following hypotheses will be tested:

#### *Link between current and future wealth*

This independence test will compare the relation between the respondent's way of measuring the wealth of a country and their way of estimating a country's future wealth. In the book "The Changing Wealth of Nations 2018" by the World Bank Group, the authors express that future wealth will depend on updating and improving our current models, showing a relationship between present and future wealth. For instance, it is mentioned that "as newer models become available, natural capital accountants will face the choice of keeping past modeling approaches or using new, potentially improved approaches that require updating..." (Lange, Wodon and Carey, 2018. Page 206). Therefore, a link between the current and future wealth of a country is expected to appear in the test.

Hypothesis 1: A person who measures current wealth as the amount of natural resources will estimate future wealth as natural resource valuation.

#### *How wage affects the perception of a nation's wealth*

The test compares whether the amount of money earned by a person changes what they think a nation's wealth depends on. It is known that there is a gap between rich and poor, which

comes from wage inequality. Evidence for this link can be found in the study conducted by the Organization for Economic Co-operation and Development (OECD), “How Does Income Inequality Affect Our Lives?”. This research states that inequality affects economies and societies, presenting growing evidence that excessive inequality may affect a country’s growth. It also brings attention to inequality, dampening educational opportunities and social mobility (Keeley and Brian, 2015). Observing the previously mentioned study, we expect to find a relationship between income and the person’s perception of a wealthy nation.

Hypothesis 2: People with higher salaries may see lifestyle and national debt as a dependent factor of a country’s wealth since they have access to luxurious life and relate a country’s wealth to it.

#### *Effect of generation on the perception of a country’s wealth*

The statement seeks to test the independence between the person’s generation, and the factors they believe are related to a wealthy country. Kupperschmidt (2000) defines a generation as an identifiable group, sharing years of birth, historical and social life experiences, which affect how people in that generation develop and distinguish group one from another. These generational groups build their personality and feelings towards authority, values, and beliefs about organizations, ethics, work habits, goals, and aspirations for life (Smola and Sutton, 2002). It has also been suggested that each generation is likely to develop distinct preferences or traits, showing a difference among the age of what they perceive as a wealthy country. Hence, through this independence test, the person’s generation is expected to influence a country’s wealth perception.

Hypothesis 3: Younger generations consider living standards as a proxy of a country’s wealth.

*Independency between a person's country where they live and considering that country to be wealthy*

The test wants to find the link between the person's country where they live and whether they think they live in a wealthy country or not. However, there is a lurking variable in this statement: the life satisfaction of a person. A country where the person lives will be affected by the life satisfaction, they perceive from the land itself, which at the same time affects whether they consider living in a wealthy country or not. Evidence of a relationship between the country's development and people's perception of their well-being can be found in the Gallup World Poll data. This research was conducted in 2006. The questionnaire covered many aspects of well-being, including an overall measure of life satisfaction and several parts of the health and economic status (Deaton, 2008). One finding from the Gallup World Pool paper was that high-income countries have greater life satisfaction than low-income countries. This research showed that relatively high-income countries reported an average national life satisfaction score in the range of 7.5 to 8.5 (on a scale from 0 to 10). In contrast, low-income countries reported a satisfaction score in the field of 3.1 and 4.5. Therefore, the country where the person lives impacts whether they think the country is wealthy or not, taking into consideration the lurking variable and seeing that the previous survey demonstrated a positive relationship between life satisfaction and GDP per capita.

Hypothesis 4: People living in well-developed places and with higher living standards will consider living in a wealthy country.

## Methodology

Quantitative and qualitative methods will be applied based on secondary data to answer the research question. The argument that natural resources are the true wealth of countries is

based on the grounds that monetary holdings are not an accurate representation of a nation's wealth.

### Qualitative analysis

To compare the richest and poorest countries different sources and data have been used (International Monetary Fund (IMF) provides the World Economic Outlook released in October 2020). This document contains a list of all countries and their GDP, representing the total value at current prices of final goods and services produced within the countries in a determined period.

Richest and poorest countries in the world have been compared to examine how wealthy they genuinely are when looking into their natural resources. To do so, obtaining the GDP per capita of Luxembourg, the wealthiest country as of 2020 (IMF, 2020), and comparing it to the Republic of South Sudan, the poorest country as of 2020 (IMF, 2020) will provide a base for the research question. The comparison between them will be based on their primary resources, the history behind them, the amount owned, and its cost.

### Quantitative analysis

A survey was conducted to investigate people's points of view on the concept of a "wealthy country." More precisely, it analyses whether people connect the word "wealth" with money or with resources and the importance of these two for a country, according to them. Data will be collected using online surveys ("Monkey Survey")<sup>2</sup>. 231 responses were collected, and the survey was sent through more than ten WhatsApp groups, posted on LinkedIn, and shared on Facebook with a response rate of 7%. The idea of this survey is to contrast people's responses given their different styles of living.

The survey was created in English, Spanish, and Italian to reach more respondents. The

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<sup>2</sup> <https://www.surveymonkey.com/>

type of questions will be explanatory. Previous studies were conducted about the wealth of countries and their differences. We ask demographic questions (gender, age, income, country of origins). Indeed, a more detailed understanding of the influence a demographic factor as gender on the perception of a wealthy country is of critical concern to everyone who conducts or relies upon research involving surveys (Smith, 2008). The research seeks to contrast the Post-War Cohort, Boomers 1 and Boomer 2 with the Generation X, Y and Z (WJS, 2020). Studies have segregated that people in different generations have different ways of understanding today's world (Subramanian, 2017). The analysis of personal income helps us to compare if there will be a difference in the country's wealth according to the amount of money, and due to the different characteristics of the populations and countries, it is expected that people not surrounded by luxury are aware that resources are connected to a country's wealth. The questionnaire is fully reported in appendix 1: Survey Questionnaire.

The statistical independence test has been used to obtain the results. To test this independence, we compare two or more distributions within a sample and see if they look alike. First, we put together a table of observed counts linking the categories of two variables and then create an expected count table. Then the difference between observed and expected counts is considered and therefore result with the component table from which the hypothesis testing is achieved. The threshold is given by alpha 0.05:

$$\chi^2 = \frac{\sum (O_i - E_i)^2}{E_i}$$

Where:

- $O_i$  = observed value (actual value)
- $E_i$  = expected value

To conclude whether our hypothesis can be proved or not, we must compare whether  $\chi^2$ -Stat is higher than  $\chi^2$ -crit and p-value is lower than  $\alpha$ .

## Results

The results of the qualitative and quantitative analysis are reported.

### Qualitative Results

The most common indicator for the country's wealth, and its overall economic activity is GDP per capita. The following section is dedicated to comparing the GDP per capita of Luxembourg and South Sudan, their primary resources and services, and which proportion of GDP these resources and services represent.

The European country of Luxembourg had USD 109.6 thousand GDP per capita as of 2020, the highest in the world (IMF, 2020). Its distribution of GDP across economic sectors consisted of 79.16 percent from services, 11.32 from industry, and 0.23 percent from agriculture (Statista, 2019). The financial sector is the country's economic engine, representing around 11 percent of employment and contributing 21 percent of fiscal revenues in 2019 (ABBL, 2020). According to the Center of Intelligence Agency<sup>3</sup>, *"Luxembourg is the world's second-largest investment fund asset domicile, after the U.S., with \$4 trillion of assets in custody in financial institutions."* It provides a diversified ecosystem that facilitates new banks, including seven of the largest Chinese banks.

Luxembourg's natural resources consist of minerals, scenic landscape, and arable land. More specifically, iron ore has been mined even before it became an independent state. By the early 1840s, the country was exporting over seven thousand tons of iron ore, one of the significant steel producers in Europe (Elisha, 2019). Currently, 79.5 percent of products exported from Luxembourg are bought by importers in Germany (23.9% of the global total),

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<sup>3</sup> <https://www.cia.gov/the-world-factbook/countries/luxembourg/>

France (15.5%), Belgium (11.1%) (Workman, 2020).

On the opposite, we have the African country South Sudan with a GDP per capita of USD 322.64, the lowest in the world (IMF, 2020). According to the World Bank, this country was officially recognized as an independent nation in July 2011, and it is one of the most oil-dependent countries in the world. Its oil counts for almost the totality of exports, 90 percent of revenue, and more than one-third of its GDP. Sudan has the third-largest oil reserve in Sub-Saharan Africa, and South Sudan owns 75 percent of these oil reserves (Owuor, S. 2019). The Energy Minister of Sudan estimated these reserves to be more than 5 billion barrels, with 563 million barrels already proven.

Possessing such an essential reserve of oil should boost their economy due to the importance of this asset. However, the problem comes with a lack of infrastructure, given that South Sudan is the world's newest country (Leins, C. 2019). Internal and external threats to peace, security, and stability are what drove this oil-producer country to their economic vulnerability, and decades of civil war destroyed their infrastructure and their productive capacities. Not everything is about having many resources; their organization and distribution are two factors that take place in economic growth. For this, South Sudan's Minister of Mining, Gabriel Thokuj Deng, told African Review he was "*optimistic about the interest of investors already present in the country*" while also mentioning that "*this sector needs FDI to boost its resources and related output.*" The country is also endowed with sixteen mineral deposits, such as gold, iron ore, copper, and diamonds

### Quantitative Results

The survey was launched on the 25th of November 2020, reaching a total of 231 respondents. Participants, ranged in age from 16 to 56 and over, were divided in generation and 61% of them were female. Most of them came from Europe (49.56%), Peru and Venezuela

(28.16%), United States (7.89%), others (4.39%). The net income of participants can be described as follow:

- \$0 to 999, 63.2%
- \$1 000 to 1 499, 11.26%
- \$1 500 to 2 499, 12.12%
- \$2 500 to 4 999, 6.92%
- Between \$5 000 and greater, 6.49%

The results of the hypotheses tests are obtained by comparing the values of chi-stat with chi-crit ( $\chi^2\text{-Stat} > \chi^2\text{-crit}$ ) and the p-value with alpha ( $\text{p-value} < \alpha$ ).

#### *Link between current and future wealth*

Hypothesis 1 is supported. The null hypothesis ( $H_0$ ) and alternative hypothesis ( $H_a$ ) are:

- $H_0$ : Current measures of wealth and estimate future wealth *are independent*.
- $H_a$ : Current measures of wealth and estimate future wealth *are not independent*.

The table of observed counts (Table 1) links the categories of two variables and then create an expected count table (Table 2). To elaborate the hypothesis testing (Table 3), we can prove that the current measure of wealth and how to estimate future wealth are not independent since  $\chi^2\text{-stat} > \chi^2\text{-crit}$  ( $34.2959 > 16.9190$ ) and  $\text{p-value} < \alpha$  ( $0.00007926 < 0.05$ ). Therefore, there is a link between how a person measures the current and future wealth of a country.

#### *How wage affects the perception of what a nation's wealth depends on*

Hypothesis 2 is not supported.  $H_0$  and  $H_a$  are:



- Ho: The monthly net income of a person and what they think the Nation's wealth depends on *are independent*.
- Ha: The monthly net income of a person and what they think the Nation's wealth depends on *are not independent*.

The table of observed counts (Table 4) links the categories of two variables and then create an expected count table (Table 5). To elaborate the hypothesis testing, (Table 6) , we fail to prove that a person's wage is not independent of the perception of what a Nation's wealth depends on since  $\chi^2\text{-stat} < \chi^2\text{-crit}$  ( $9.4897 < 16.919$ ) and  $p\text{-value} > \alpha$  ( $0.3933 > 0.05$ ). Consequently, having a wage between \$0 and 999, \$1 500 and 2 499, \$1 000 and 1 499, \$2 500 or greater does not affect what the person considers a nation's wealth to depends on the value of resources over time, lifestyle/purchasing power, national debt, or value of goods and services.

#### *Effect of generation on the perception of a country's wealth*

Hypothesis 3 is not supported. Ho and Ha are:

- Ho: The generation and the perception of the factors of a country's wealth *are independent*.
- Ha: The generation and the perception of the factors of a country's wealth *are not independent*.

The table of observed counts (Table 7) links the categories of two variables and then create an expected count table (Table 8). To elaborate the hypothesis testing, (Table 9), we fail to prove that the generation is not independent of the factors country's wealth since  $\chi^2\text{-stat} < \chi^2\text{-crit}$  ( $4.8457 < 21.0261$ ) and  $p\text{-value} > \alpha$  ( $0.96294 > 0.05$ ). Hence, being from generation X, Y, Z, or Baby Boomer does not affect the person's factors for a country's wealth.

*Independency between a person's country where they live and considering that country to be wealthy*

Hypothesis 4 is supported. Ho and Ha are:

- Ho: The country where the respondent lives and whether they consider their country wealthy is *independent*.
- Ha: The country where the respondent lives and whether they consider their country wealthy is *not independent*.

The table of observed counts (Table 10) links the categories of two variables and then create an expected count table (Table 11). To elaborate the hypothesis testing,(Table 12) , we can prove that the country where the person lives and whether they consider their country wealthy is not independent since  $\chi^2\text{-stat} > \chi^2\text{-crit}$  ( $87.7743 > 12.5912$ ) and  $p\text{-value} < \alpha$  ( $0.0001 < 0.05$ ). Accordingly, we can say that being from Europe, Latin America, or another country depends on whether they consider the country to be wealthy.

## Discussion

This paper aimed to answer the following research question: *should the wealth of nations be linked to monetary holdings or the availability of natural resources?* The argument that natural resources are the true wealth of countries is based on the grounds that monetary holdings are not an accurate representation of a nation's wealth.

The qualitative analysis shows us that, when looking into Luxembourg and South Sudan's assets, people might consider financial affairs more valuable than natural resources because they are related to managing people's money. Luxembourg does not hold even half of the number of natural resources that South Sudan has, and yet we see the European country with the highest GDP per capita in the world. Most of the countries considered rich are not the

ones holding significant resources. Instead, states buying, financing, and industrializing these natural resources are the ones at the top.

Economic power comes from influencing other countries, producing, buying, or selling high quantities of products or services (Cambridge, 2020). These multifaced and amorphous networks are composed by large states, leaving aside those countries that cannot grow because of their dependency on the countries' owners of the networks. In this system, the powerful take advantage of other country's situation to obtain goods for lower prices instead of trying to help enhance their living conditions.

To illustrate this situation, China is the top export destination of South Sudan, representing 95 percent of their total exports (Trading Economies, 2019). The economic difference between these two countries is outrageous, considering that China is the world's second-largest economy, distributing around 30 percent of global growth in the past eight years (World Bank, 2019). South Sudan is a wealthy country due to its large amount of oil and gas, but they are not considered because their living conditions are precarious. Countries with raw materials are rarely the ones that produce the goods; they export them to larger countries to be processed and sold at higher prices.

In addition, when looking at the quantitative research, we have several hypotheses to discuss regarding people's perception of a wealthy country and whether this concept is linked to monetary holdings or natural resources. To answer the research question, four different hypotheses have been tested, and the results are:

1. The current measure of wealth and the future wealth estimation are not independent.

[ INSERT FIGURE 1 ABOUT HERE ]

The country's current investments are the dominant variable among how a person would estimate future wealth. However, based on our sample, the variable for the current

measure of wealth, “Amount of Resources,” is the only one that does not have a country’s current investments as the only dominant; it also has natural resource valuation. Almost all variables have a common dominant, but the reasons are different, which is why we will look into each relation for the dominant factor:

- A person who would measure current wealth as the **amount of natural resources** is likely to estimate the future wealth as **natural resource valuation** and a country’s current investments. When looking into the number of natural resources, we can also relate it to valuing them for the future, which is why it is believed that there is a relation between them. the **country’s current investments** also affect how natural resources are developed. To stay competitive, a country needs to invest in its infrastructure, Research and Development, and production facilities.
- The foreign exchange market is a highly volatile market, affected by several exogenous factors. When a country is well-developed or improves, its currency becomes more reliable because it shows that the country has a healthy economy. Estimating the future wealth of a country as the **country’s current investments** is reflected in measuring wealth with the **currency value against** others. The more investments a country makes, the healthier their economy will be.
- Measuring wealth as **GDP** concerns the value of all final goods and services within a country in a period, and the **country’s current investments** affect the production of these goods and services in the country. With low investments in the country’s production, there cannot be an increase in GDP, decreasing the country’s wealth.
- We associate **the population’s well-being with safety, access to good education, possibly high-end house markets and luxury good, and** purchasing power. These conditions are only possible if the **country invests** in these infrastructures, any fiscal

stimulus they give to the population, and public constructions from which the population can benefit.

2. We fail to prove that a person's wage is not independent of the perception of what a nation's wealth depends on.

[ INSERT FIGURE 2 ABOUT HERE ]

The person considers that wealth depends on the lifestyle and purchasing power of a country (orange area), which is dominant. The reason behind the relation between the different wages and what wealth depends on:

- Earning a wage between **\$0 and 999** could mean that the person is studying and/or young or poor. Moreover, people with low wages measure people's success with the **amount of money and lifestyle**, which can also be reflected at a country level. If the population lives better, then the country is wealthy.
- Wages from **\$1 000 to 1 499** belong to the working class, with a possible high school degree. Therefore, they do not have an accurate knowledge of what entrepreneurship or what having a business means. They have a vague opinion, which is why this creates a meaning of wealth where they associate wealth with the possession of high-end luxury materials. Therefore, it is expected that they relate the country's wealth with **purchasing power and lifestyle**.
- People with a wage from **\$1 500 to 2 499** represent those who went to university, unlikely to have a master, or independent professionals starting their practices. This group relates **lifestyle and purchasing power** to a country's wealth because, being above the middle-income, they have extra money to spend. Therefore, the more extra money you have, the wealthier you are because it means your wage allows you to have a luxury lifestyle, relating it to a country level.

- It is expected that people with higher salaries (**\$2 500 and greater**) might see lifestyle and national debt as dependent factors of a country's wealth. These people have access to luxurious life and relate a country's wealth to it. However, the survey also expected that people with these wages have a higher education level, which gave them a clearer sense of wealth being related to the value of resources. Nevertheless, this group has **lifestyle and purchasing power** as the highest percentage of responses. This could be explained because they live surrounded by a luxurious life, and we automatically link wealth to it thanks to the marketing of products that link accomplishments to extravagance.
3. We fail to prove that the generation is not independent from the factors country's wealth.

[ INSERT FIGURE 3 ABOUT HERE ]

Similar factors determine a country's wealth throughout all generations. The dominant variable, labour productivity, is also similar throughout the different ages. However, it is higher in some ages than in others, such as the difference between generation Z and Baby Boomers. For this reason, we will look into each generation and the reason behind its dominant variable:

- In the x-axis, **Generation Z** shows similar percentages for each response. It is expected of this generation to consider living standards as a proxy of a country's wealth. However, based on our sample, generation Z considers products and services, natural resources, monetary reserve, or labour and population as all factors of a country's wealth. This could be because Gen Z is currently at school or university, not having a concrete meaning of wealth and base it on their background.
- **Generation Y.1 and Y.2** have **labour and population** as dominant. It gives us a general understanding that, based on our sample, these generations see the factor

characteristic of a wealthy country: its number of jobs in the country. People between 24 and 39 years old belong to the workforce and perhaps see labour and population as the engine of a country. This is why Generation Y (1 and 2) perceive that, with jobs pushing productivity, the country thrives and increases its wealth.

- For Generation X, two variables can be considered dominant: **labour/population** and **natural resources** and allocation. This generation is more inclined to consider natural resources and labour as the country's true wealth. For this reason, they have a first-hand experience of how resources and jobs are worth, which might be the reason why Gen X sees wealth as labour and natural resource allocation.
  - Looking into **Baby Boomers**, labour and population represent the highest percentage of responses. The period they lived in was very labour-focused and the amount of working population mattered to increase the economy's productivity. Knowing that this generation lived in the post-World War II era, it is coherent that Baby Boomers perceive labour and population as the factor of a country's wealth. The hypothesis expected that Gen X and Baby Boomers would show a higher percentage of natural resources and labour and population responses, which does appear to be confirmed.
4. The country where the person lives and whether they consider their country wealthy is not independent.

[ INSERT FIGURE 4 ABOUT HERE ]

In the last hypothesis, it is found that the respondent's country does have a repercussion on whether they consider the country to be wealthy, demonstrating there is a link between them. Most people consider their country to be wealthy. Still, we have three exceptions (Italy, Peru, and Venezuela), where most respondents perceive that their country is not wealthy. It was expected that people living in places well-developed and with higher living standards would

consider living in a wealthy country. We will now look into each country to analyse the responses and whether they are in line with the expectations:

- People from our sample who live in **Italy** do not consider this country to be wealthy. Due to its current economic instability and having difficult political, the country has been deteriorating. Italy cannot be compared to Venezuela or Peru, which are genuinely developing countries, yet the respondents do not consider it wealthy.
- It was expected that people living in **Peru** would respond that they do not consider it to be wealthy. We saw in the previous hypotheses that people relate wealth with the population's lifestyle, and living in Peru, a developing country, you see a lot of poverty in the streets, which is why a person living in this country will not see it as a wealthy country.
- **Venezuela** is known for its history of governmental corruption and one of the most insecure countries globally, regardless of the amount of resources and its potential to grow them. For this reason, it is expected that people living in Venezuela do not see it as a wealthy country.
- All respondents living in **France** consider this country to be wealthy. Indeed, this country is well-developed and has high living standards. This result corresponds to our expectations, showing that people living in France see it as wealthy.
- **Monaco** is one of the most luxurious places to live in the world, and based on our sample, the respondents living in Monaco consider it wealthy. Monaco offers a high-end lifestyle, full of extravagant cars and yachts, all presented as a success. Nevertheless, the Principality does not have any natural resources or a real source of where its money comes from.
- **The United States** is recognized worldwide for having a massive economic structure and country management. It is a well-developed country, which is why respondents



consider the U.S. to be wealthy. The economic stability that the U.S. possesses and the low unemployment rate gives the country a healthy vision of its structures.

## Conclusion

*“GDP is a failed metric. The pursuit of growth is destroying the planet.”*

Mark Banks, professor of cultural economy at Glasgow University (2021)

The paper focuses on the perception of a wealthy country, considering that people relate it as monetary holding rather than the amount of natural resources the country possesses. We first explored the research question with a qualitative method, comparing the richest and poorest countries globally, obtaining that the difference between them is highly disproportioned considering that Luxembourg’s resources cannot be compared to the amount owned by South Sudan. We have also conducted a survey to learn people’s perception of a wealthy country, expecting respondents to relate this meaning to the country’s monetary holdings. Indeed, based on the sample analysis, we can confirm that people were more inclined to believe their country is wealthy due to the living standards and purchasing power of the population. On the other hand, there are limitations to the survey since the respondents were not randomly chosen and are bias. This paper can be followed by conducting a numerical survey to carry out a multiple regression.

What the analysis can contribute to this practice is to bring light upon what countries can do or change to address the great inequality between the “rich” and “poor” countries (Ahmed & McQuaid, 2005). One system that could be applied at a country level is the Joint-Venture system. A Joint Venture is used mainly by businesses, where the parties agree to pool their resources to accomplish a new business activity. Ideally, in a joint venture between two companies, they combine their resources, expertise, and money, generally with a 50-50 ownership split.

The paper suggests implementing a 50-50 joint venture between countries is possible, and an example can be found with the Organization of the Petroleum Exporting Countries. They coordinate and unify the petroleum policies of their Member Countries, ensuring the stabilization of oil markets to secure an efficient, economic and regular supply of petroleum to consumers (OPEC, 2021). Implementing similar structures between countries can help them accomplish steady incomes to producers and a fair return on capital for those investing in industries (Panda & Dash, 2014). It is possible to create intergovernmental agreements that can benefit countries equally, keeping in mind that development and economic growth contribute to other countries developing themselves. It is left to governments to put aside their greed and focus on shared growth, creating pacts or structures similar to a joint venture and highlighting the importance of global growth.

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## Tables and Figures

### Appendix 1: Survey Questionnaire

1. Gender
  - a. Female
  - b. Male
2. Age
  - a. 16 - 23 (Gen Z)
  - b. 24 - 28 (Gen Y.1)
  - c. 29 - 39 (Gen Y.2)
  - d. 40 - 55 (Gen X)
  - e. 56 or over (Baby Boomers)
3. Income: What is your approximate total net monthly income?
  - a. \$0 to 999
  - b. \$1 000 to 1 499
  - c. \$1 500 to 2 499
  - d. \$2 500 to 3 499
  - e. \$3 500 to 4 999
  - f. \$5 000 or greater
4. Country
5. Which are the factors of a country's wealth?
  - a. Products and services (ex: clothes, education)
  - b. Natural resources and allocation (ex: crude oil's distribution)
  - c. Labour and population (jobs, population of the country)
  - d. Monetary reserve (ex: banking, finance, stock exchange)
6. How would you estimate the future wealth of a country?

- a. Value of future consumption (people's future expenses worth)
  - b. Current investments (country's current expenditures)
  - c. Natural resource valuation (ex: Coal's worth)
  - d. History of country's investment (past expenditures of the country)
7. On what does a nation's wealth depend on:
- a. People's consumption of resources (resident's utilization of resources)
  - b. Lifestyle of residents and purchasing power
  - c. Value of resources over time (ex: Iron ore's worth in the long-term)
  - d. Outstanding national debt (what the country owns to others)
8. Would you measure wealth as:
- a. Amount of natural resources (ex: how much gold the country has)
  - b. Population's well-being (ex: how happy their citizens perceive themselves to be)
  - c. Currency value against others (foreign exchange)
  - d. Gross Domestic Products (how much final goods and services are worth)
9. Which element is less related to a wealthy country?
- a. Country's living standards
  - b. Value of natural resources (ex: Mineral's worth)
  - c. Production of goods and services (amount of goods and services produced)
  - d. Labour productivity (worker's level of production)
10. Do you consider your country to be wealthy?
- a. Yes
  - b. No



**Table 1: Observed Frequencies of the link between current and future wealth**

| <i>Categories</i>                    | <b>Natural resources valuation</b> | <b>History of a country's investments</b> | <b>Country's current investments</b> | <b>Future consumption</b> | <b>Row Sum</b> | <b>% Row</b> |
|--------------------------------------|------------------------------------|-------------------------------------------|--------------------------------------|---------------------------|----------------|--------------|
| <b>Amount of natural resources</b>   | 11                                 | 1                                         | 10                                   | 0                         | <b>22</b>      | 0.095        |
| <b>Currency value against others</b> | 5                                  | 7                                         | 14                                   | 5                         | <b>31</b>      | 0.127        |
| <b>Gross Domestic Products</b>       | 19                                 | 9                                         | 50                                   | 26                        | <b>104</b>     | 0.455        |
| <b>Population's well-being</b>       | 9                                  | 3                                         | 51                                   | 11                        | <b>74</b>      | 0.323        |
| <b>Column Sum</b>                    | 44                                 | 20                                        | 125                                  | 42                        | 231            |              |

**Table 2: Expected Frequencies of the link between current and future wealth**

| <i>Categories</i>                    | <b>Natural resources valuation</b> | <b>History of a country's investments</b> | <b>Country's current investments</b> | <b>Future consumption</b> |
|--------------------------------------|------------------------------------|-------------------------------------------|--------------------------------------|---------------------------|
| <b>Amount of natural resources</b>   | 4.200                              | 1.909                                     | 11.932                               | 4.009                     |
| <b>Currency value against others</b> | 5.600                              | 2.545                                     | 15.909                               | 5.345                     |
| <b>Gross Domestic Products</b>       | 20.000                             | 9.091                                     | 56.818                               | 19.091                    |
| <b>Population's well-being</b>       | 14.200                             | 6.455                                     | 40.341                               | 13.555                    |

**Table 3: Component Table the link between current and future wealth**

| <i>Categories</i>                    | <b>Natural resources valuation</b> | <b>History of a country's investments</b> | <b>Country's current investments</b> | <b>Future consumption</b> | <b>Row Sum</b> |
|--------------------------------------|------------------------------------|-------------------------------------------|--------------------------------------|---------------------------|----------------|
| <b>Amount of natural resources</b>   | 11.010                             | 0.433                                     | 0.313                                | 4.009                     | <b>15.764</b>  |
| <b>Currency value against others</b> | 0.064                              | 7.795                                     | 0.229                                | 0.022                     | <b>8.111</b>   |
| <b>Gross Domestic Products</b>       | 0.050                              | 0.001                                     | 0.818                                | 2.500                     | <b>3.370</b>   |
| <b>Population's well-being</b>       | 1.904                              | 1.849                                     | 2.816                                | 0.481                     | <b>7.051</b>   |

|               |             |    |   |                |          |
|---------------|-------------|----|---|----------------|----------|
| $\chi^2$ stat | 34.2959452  | R= | 4 | $\alpha$       | 0.05     |
| p-value       | 7.92571E-05 | C= | 4 | (R-1)(C-1)     | 9        |
| WE CAN REJECT |             |    |   | $\chi^2$ -crit | 16.91898 |

**Table 4: Observed Frequency of how wage affects the perception of a nation's wealth**

| Categories                 | Value of resources over time | Lifestyle and purchasing power | Outstanding national debt | Value of goods and services | Row Sum   | % Row    |
|----------------------------|------------------------------|--------------------------------|---------------------------|-----------------------------|-----------|----------|
| <i>\$0 to 999</i>          | 31                           | 72                             | 24                        | 19                          | 146       | 0.632035 |
| <b>\$1 000 to 1 499</b>    | 6                            | 11                             | 1                         | 8                           | <b>26</b> | 0.112554 |
| <b>\$1 500 to 2 499</b>    | 4                            | 12                             | 5                         | 7                           | <b>28</b> | 0.121212 |
| <b>\$2 500 and greater</b> | 8                            | 13                             | 4                         | 6                           | <b>31</b> | 0.134199 |
| <b>Column Sum</b>          | 49                           | 108                            | 34                        | 40                          | 231       | 1        |

**Table 5: Expected Frequency of how wage affects the perception of a nation's wealth**

| Categories                 | Value of resources over time | Lifestyle and purchasing power | Outstanding national debt | Value of goods and services |
|----------------------------|------------------------------|--------------------------------|---------------------------|-----------------------------|
| <i>\$0 to 999</i>          | 30.970                       | 68.260                         | 21.489                    | 25.281                      |
| <b>\$1 000 to 1 499</b>    | 5.515                        | 12.156                         | 3.827                     | 4.502                       |
| <b>\$1 500 to 2 499</b>    | 5.939                        | 13.091                         | 4.121                     | 4.848                       |
| <b>\$2 500 and greater</b> | 6.576                        | 14.494                         | 4.563                     | 5.368                       |

**Table 6: Component Table of how wage affects the perception of a nation's wealth**

| Categories                 | Value of resources over time | Lifestyle and purchasing power | Outstanding national debt | Value of goods and services |
|----------------------------|------------------------------|--------------------------------|---------------------------|-----------------------------|
| <i>\$0 to 999</i>          | 0.000                        | 0.205                          | 0.293                     | 1.561                       |
| <b>\$1 000 to 1 499</b>    | 0.043                        | 0.110                          | 2.088                     | 2.718                       |
| <b>\$1 500 to 2 499</b>    | 0.633                        | 0.091                          | 0.187                     | 0.955                       |
| <b>\$2 500 and greater</b> | 0.308                        | 0.154                          | 0.069                     | 0.074                       |

|                          |               |           |          |                                 |                 |
|--------------------------|---------------|-----------|----------|---------------------------------|-----------------|
| $\chi^2$ stat            | <b>9.4897</b> | <b>R=</b> | <b>4</b> | <b><math>\alpha</math></b>      | <b>0.05</b>     |
| <b>p-value</b>           | <b>0.3933</b> | <b>C=</b> | <b>4</b> | <b>(R-1)(C-1)</b>               | <b>9</b>        |
| <b>WE FAIL TO REJECT</b> |               |           |          | <b><math>\chi^2</math>-crit</b> | <b>16.91898</b> |

**Table 7: Observed Frequencies on the effect of generation on the perception of a country's wealth**

| Categories                       | Products and services | Monetary reserve | Natural resources and allocation | Labor and population | Row Sum | Row %  |
|----------------------------------|-----------------------|------------------|----------------------------------|----------------------|---------|--------|
| <b>16 - 23 (Gen Z)</b>           | 35                    | 34               | 37                               | 45                   | 151     | 0.6537 |
| <b>24 - 28 (Gen Y.1)</b>         | 4                     | 4                | 2                                | 6                    | 16      | 0.0693 |
| <b>29 - 39 (Gen Y.2)</b>         | 6                     | 4                | 7                                | 11                   | 28      | 0.1212 |
| <b>40 - 55 (Gen X)</b>           | 5                     | 3                | 6                                | 7                    | 21      | 0.0909 |
| <b>56 or over (Baby Boomers)</b> | 3                     | 2                | 3                                | 7                    | 15      | 0.0649 |
| <b>Column total</b>              | 53                    | 47               | 55                               | 76                   | 231     | 1      |

**Table 8: Expected Frequencies on the effect of generation on the perception of a country's wealth**

| <i>Categories</i>                | Products and services | Monetary reserve | Natural resources and allocation | Labor and population |
|----------------------------------|-----------------------|------------------|----------------------------------|----------------------|
| <b>16 - 23 (Gen Z)</b>           | 34.645                | 30.723           | 35.952                           | 49.680               |
| <b>24 - 28 (Gen Y.1)</b>         | 3.671                 | 3.255            | 3.810                            | 5.264                |
| <b>29 - 39 (Gen Y.2)</b>         | 6.424                 | 5.697            | 6.667                            | 9.212                |
| <b>40 - 55 (Gen X)</b>           | 4.818                 | 4.273            | 5.000                            | 6.909                |
| <b>56 or over (Baby Boomers)</b> | 3.442                 | 3.052            | 3.571                            | 4.935                |
| <b>Column total</b>              | <b>53</b>             | <b>47</b>        | <b>55</b>                        | <b>76</b>            |

**Table 9: Component Table on the effect of generation on the perception of a country's wealth**

| <i>Categories</i>                | Products and services | Monetary reserve | Natural resources and allocation | Labor and population | <b>Row Sum</b> |
|----------------------------------|-----------------------|------------------|----------------------------------|----------------------|----------------|
| <b>16 - 23 (Gen Z)</b>           | 0.004                 | 0.350            | 0.031                            | 0.441                | 0.825          |
| <b>24 - 28 (Gen Y.1)</b>         | 0.029                 | 0.170            | 0.860                            | 0.103                | 1.162          |
| <b>29 - 39 (Gen Y.2)</b>         | 0.028                 | 0.505            | 0.017                            | 0.347                | 0.897          |
| <b>40 - 55 (Gen X)</b>           | 0.007                 | 0.379            | 0.200                            | 0.001                | 0.587          |
| <b>56 or over (Baby Boomers)</b> | 0.057                 | 0.363            | 0.091                            | 0.864                | 1.375          |

|                          |                    |           |          |                                 |                |
|--------------------------|--------------------|-----------|----------|---------------------------------|----------------|
| $\chi^2$ stat            | <b>4.8457</b>      | <b>R=</b> | <b>5</b> | <b><math>\alpha</math></b>      | <b>0.05</b>    |
| <b>p-value</b>           | <b>0.962934398</b> | <b>C=</b> | <b>4</b> | <b>(R-1)(C-1)</b>               | <b>12</b>      |
| <b>WE FAIL TO REJECT</b> |                    |           |          | <b><math>\chi^2</math>-crit</b> | <b>21.0261</b> |

**Table 10: Observed Frequencies on a person's country of living and considering the country wealthy**

| <i>Categories</i>    | <b>Yes</b> | <b>No</b>  | <b>Row Sum</b> | <b>Row %</b> |
|----------------------|------------|------------|----------------|--------------|
| <b>Italy</b>         | 19         | 50         | 69             | 0.3026       |
| <b>Peru</b>          | 12         | 47         | 59             | 0.2588       |
| <b>Venezuela</b>     | 10         | 18         | 28             | 0.1228       |
| <b>France</b>        | 24         | 0          | 24             | 0.1053       |
| <b>Monaco</b>        | 19         | 1          | 20             | 0.0877       |
| <b>United States</b> | 16         | 2          | 18             | 0.0789       |
| <b>Others</b>        | 6          | 4          | 10             | 0.0439       |
| <b>Column Tot</b>    | <b>106</b> | <b>122</b> | <b>228</b>     | <b>1</b>     |

**Table 11: Expected Frequencies on a person's country of living and considering the country wealthy**

| Categories    | Yes    | No     |
|---------------|--------|--------|
| Italy         | 32.079 | 36.921 |
| Peru          | 27.430 | 31.570 |
| Venezuela     | 13.018 | 14.982 |
| France        | 11.158 | 12.842 |
| Monaco        | 9.298  | 10.702 |
| United States | 8.368  | 9.632  |
| Others        | 4.649  | 5.351  |

**Table 12: Component Table on a person's country of living and considering the country wealthy**

| Categories    | Yes    | No     | Row Sum |
|---------------|--------|--------|---------|
| Italy         | 5.332  | 4.633  | 9.966   |
| Peru          | 8.680  | 7.541  | 16.221  |
| Venezuela     | 0.699  | 0.608  | 1.307   |
| France        | 14.781 | 12.842 | 27.623  |
| Monaco        | 10.123 | 8.795  | 18.918  |
| United States | 6.960  | 6.047  | 13.006  |
| Others        | 0.393  | 0.341  | 0.734   |

|               |             |    |   |                |
|---------------|-------------|----|---|----------------|
| $\chi^2$ stat | 87.7743     | R= | 2 | $\alpha$       |
| p-value       | 8.77977E-17 | C= | 7 | (R-1)(C-1)     |
| WE CAN REJECT |             |    |   | $\chi^2$ -crit |

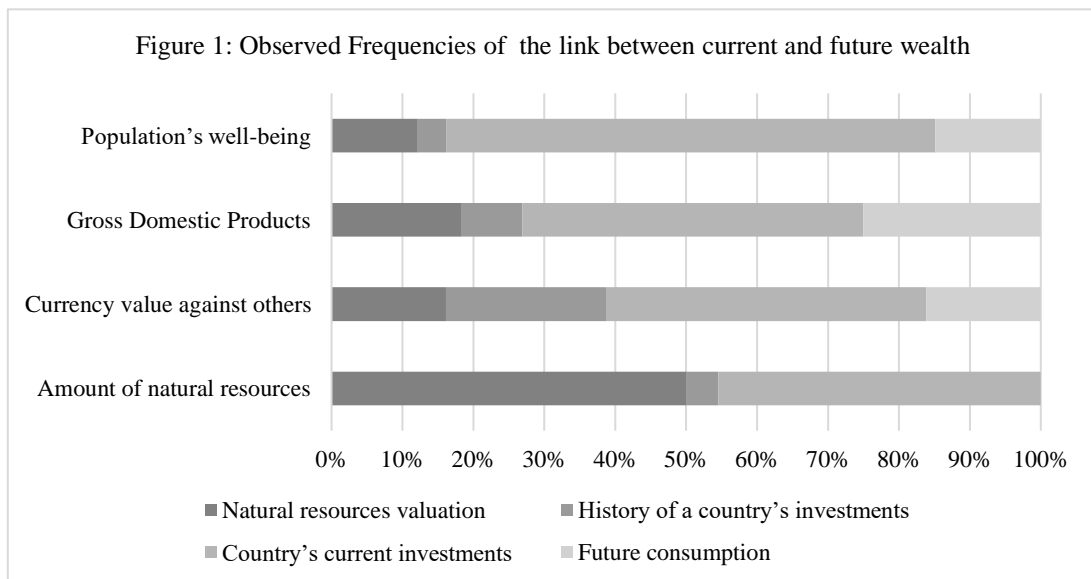


Figure 2: Observed Frequencies of How wage affects the perception of a nation's wealth

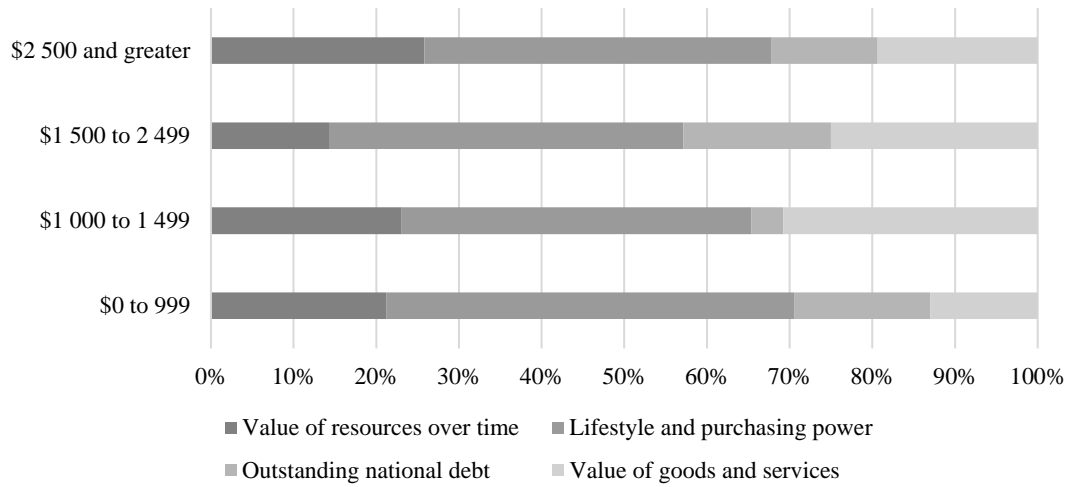


Figure 3: Observed Counts on the Effect of generation on the perception of a country's wealth (%)

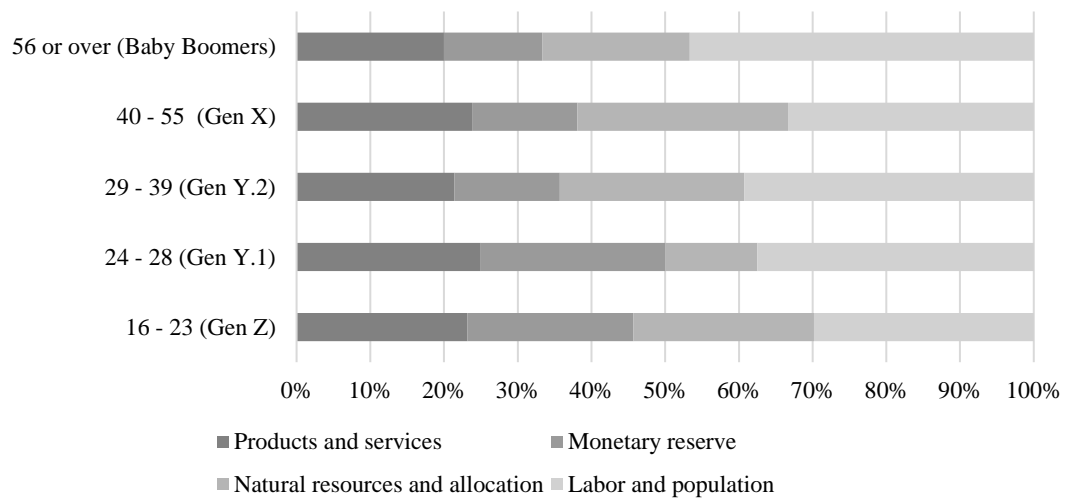


Figure 4: Observed Counts on a person's country of living and considering the country wealthy (%)

