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ECONOMIC GROWTH, POLITICAL INSTABILITY AND INDIVIDUALISM. A CROSS-COUNTRY ANALYSIS

Master's thesis

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ABSTRACT

This thesis explores the relationship between economic growth, political instability and individualism. The author adopts a random effect regression model for a balanced panel data from 57 countries around the world. For that goal, the time span of 2002-2019 is used. The results show that there is a negative relationship between economic growth and political instability. While a positive relationship exists between economic growth and individualism. Results reveal that in order to have a developing economic environment, a stable political situation within a country seems necessary. Moreover, individualism will help to thrive the economy. More freedom and less intervention by the government have beneficial effects on the political situation that might be more stable. The findings are robust, and even changing some data, results still hold.

Keywords: economic growth, political instability, individualism, collectivism, economy

INTRODUCTION

The political situation around the world nowadays is tense. Some of the factors that might cause political instability are the limited access to participate in a country's politics, immigration problems, the fiscal pressure and the restrictions while doing business. These problems cause tensions that arise between government infrastructure and citizens and thereby it might have economic fallout. In addition to these factors, also different kind of pandemics might cause political instability and economic fallout. Just recently, the rise of the COVID-19 pandemic that has impacted societies and put under pressure the geo-political infrastructures of many countries. Due to that, national lockdowns with restrictions to personal freedom and the temporary closure of economic activities (restaurants, cinemas, theatres, sports clubs and travels) have been implemented (Covid: How are … 2021).

Mass immigration is a heavy burden for the countries' welfare system and the competition for the low paying jobs might increase. This means that a country's native citizens might not get a job. This could cause that unemployment rises thereby causing problems in the overall economic growth. (Brady 2016) Fiscal pressure and restrictions of doing business might induce entrepreneurs to have less "faith" in the future of the economy where investment decisions seem risky (Alesina *et al.* 1996). Entrepreneurs and skilled workers might think, at some point in time to work in an another country or to invest abroad, where fiscal and economic conditions are more favourable (Murad, Alshyab 2019). To avoid working elsewhere, informal entrepreneurship and unincorporated businesses it is necessary to support businesses with favourable tax law (Block 2016) and provide minimal government intervention into the private sector (Reed, 2001).

Giving people more freedom to do business, to decide what is beneficial for them, as well as to have the opportunity to participate in the political process, gives people more trust towards the authorities (Schimmack *et al.* 2005). Trust makes people more innovative and motivated to invest into a country's economy and this can help for a country to have competitive economy (OECD 2013). Individualism also fosters higher innovation, which leads to a rise in production and productivity and it has a positive effect on country's long-term growth (Gorodnichenko, Roland

2012). This result shows that it is important to explore the statement: Does an unstable political environment and individualism have any impact on economic growth?

The aim of this thesis is to explore the relationship between economic growth, individualism and political instability using a panel data for 57 countries around the world and adopting the random effect (RE) regression model.

This thesis sheds a light on the following question:
How does the political instability and individualism affect the economic growth?

In the thesis, the following two hypotheses are tested:
H1: Economic growth and political instability are negatively related.
H2: Economic growth and individualism are positively related.

There are several studies that have focused on a similar research question taking a look at the relationship between individualism and economic development (Pinillos, Reyes 2011; Gorodnichenko, Roland 2012; Chan and Cheung 2016; Gantenbein *et al.* 2019), the relationship between the political instability and economic growth (Asteriou, Price 2001; Polachek, Sevastianova 2011; Berggren *et al.* 2012; Jaouadi *et al.* 2014). In those studies, Gross Domestic Product (GDP) or average indicators were indicated as outcome and associated to political instability (assassinations, coups, riots, strikes, guerrilla warfare, anti-government demonstrations, purges, revolutions and cabinet changes). This thesis contributes to the previous studies providing a different approach by the use of a variety of different socio-economic indicators to represent political instability that other studies have not commonly or at all included.

The thesis is organized as follows. In the first chapter, the author explains what is/are the cause(s) of the political instability and the measurement. The difference between individualism and collectivism is discussed as well metrics used to determine the validity of each. The author gives an overview of their relationship with the economic growth and summarizing the previous studies in the literature overview.

In the second chapter, the author adopts the RE regression model using a socio-economic balanced panel data for 57 countries around the world for a time span of 2002-2019. The dependent variable is the GDP per person employed retrieved from the World Bank (2021a) database, while one of the explanatory variables, the political instability indicators are retrieved from different sources: World Bank (2021b) and Heritage (2021a) database. In addition, another explanatory variable individualism indices are taken from the Hofstede Insights (2021a) website. The chapter also presents the data and the analytical methodology. For the analysis, statistical software RStudio is used.

In the third chapter, the author presents and discusses the results of the analysis and compares them with the hypothetical statements and previous studies. An empirical data robustness check is also included. Finally, concluding remarks and suggestions for further analysis will be provided.

1. POLITICAL INSTABILITY, INDIVIDUALISM AND THE EFFECT ON THE ECONOMIC GROWTH

In this chapter, the author will give an overview of the concept of political instability as well as of the concept of individualism and how to measure both. Moreover, the author will explore how the political instability and individualism might affect economy. The author will also present an overview about the previous studies and their results.

1.1. How to Measure Political Instability and its Causes

1.1.1. Measuring Political Instability

Political instability can be defined as sudden and frequent changes in the leadership, policies or country conditions (Central Intelligence Agency 2021). Political instability depends on different variables such as (Campos *et al.* 2012, 293) regular and irregular government spending (Campos, Nugent 2002, 159), conflicts between social groups, strikes, riots, demonstrations, coups, crimes, government collapse and frequent cabinet changes (Alesina *et al*. 1996; Annett 2001). These variables are just some of the indicators that might determine the political instability in a country. Therefore, overall political instability depending on different factors: political, social, cultural and economic factors (Murad, Alshyab 2019, 367). Political instability is measured through indicators (Campos, Nugent 2002, 159) or the actual situation of the country and it ranges between 0 (low political instability) and 100 (high political instability). If looking at the freedom indices then higher the percentages, lower the political instability. (World Bank 2021b) With that, there is no one way to measure the political instability and all depends on the variables.

1.1.2. Causes and Consequences of Political Instability

Political instability is caused by many elements and political factors, within a country. Some of those (discussed in a more detail below) are the limited access to participate in country's politics, immigration problems and restrictions that limit doing business. But also, limitations of peoples' freedom to move and a fiscal pressure that do not support businesses. The first element is the participation in the politics. It has been previously resulted that, a country with a democratic republic tends to be more politically stable than non-democratic countries. The reason for this is that the citizens in democratic countries express their opinions and actively participate in the political process. (Blanco, Grier 2009 ref Parsa 2003) In non-democratic countries, average citizens' speech and participation in the government is limited and this repression of liberties might provoke rebellion and more conflicts (Rummel 1995). This issue can be compared with the political instability indicator voice and accountability.

The second element that can cause political instability is the mass immigration. Within the European Union (EU), every member State is required to take a certain number of refugees (European Commission 2021). This number depends on how many asylum seekers are waiting to get approved, the socio-economic conditions of the member State (like GDP, population, unemployment rate), and the number of asylum seekers or refugees that a member State has already taken of its own free will (European Commission 2015). However, not all citizens concur with the fact that their home country has to take certain number of refugees and provide them social services. This has been a hot political issue, causing vivid debates between governments and their citizens. One underlying argument in this debate is that immigrants, in some of the countries, use the public services and with that they take away the possibility from the native citizens to use the same services. So with that, the native citizens cannot have the public service they should get (health, education and infrastructure). (Murad, Alshyab 2019) Mass immigration is a heavy burden for the countries' welfare system and the competition for low paying jobs might increase. This means that a country's native citizens might not get a job. This could cause inequality and unemployment numbers to rise thereby causing problems in the overall economic growth. (Brady 2016) In addition, a higher share of immigrants increases political instability and government military spending, which can be detrimental (Gebremedhin, Mavisakalyan 2013). This issue can also be compared with the political instability indicator voice and accountability.

A third major problem that creates political instability occurred, for example, in the end of 2019 and it is what was defined as COVID-19 pandemic. The virus spread exponentially, creating a pandemic and affecting individuals worldwide. Since then, the virus has spread and mutated causing a flying increase of deaths. (Kooraki *et al.* 2020) In spring 2020, several countries imposed national lockdowns with only the most necessary shops remaining open such as food stores and pharmacies. During the autumn 2020, there had been debates on whether it was better to keep the economy open, to lock the country partially or to impose new national lockdowns (Sharfuddin

2020). Keeping the country partially open might bring more tensions because, it creates unfair situation between different sectors and between big and small businesses (CFIB 2020). Arguably, imposing new national lockdowns worsens the economy (IMFBlog 2020). The discussion of COVID-19 in the empirical analysis will not be treated. It is necessary, however, to bring it out, because these kind of problems might cause deeper political instability. In situations like a pandemic, authorities have to have the trust of individuals living in the country otherwise, the success of national health measures would not work. If the public will not cooperate, it will be harder to get infection numbers down (Lau *et al.* 2020) and to hold the economy open. This issue can be compared with the political instability indicators such as business freedom and trade freedom.

A fourth issue might be the rise in fiscal pressure with the rise of taxes. Political instability might arise because of new tax rise and bring uncertainty about the future path of the economic strategy. It also creates a risk of strikes, business shutdowns and attacks to private entrepreneurs. Rising taxes make entrepreneurs worried on whether they are able to keep the holdings of their output in the future. (Carmignani 2003, 3) Political instability harms economic performance seriously and causes policymakers to conduct economic damage control. This problem might lead to a frequent change in a government power and this brings more tensions and volatility, thereby affects economic performance negatively. (Aisen, Veiga 2013) This issue can be compared with the political instability indicator tax burden.

Taxes and other restrictions make entrepreneurs more willing to open/move their businesses in another country where the law promotes entrepreneurship. One of the great example is Hong Kong, where a lot of individuals have moved their businesses because of more entrepreneurial freedom. The population density is really high but still Hong Kong has one of the highest standards of living in Asia. The country does not place restrictions on international trade and direct economic activity. Economic and political environment is stable, tax regime is appealing (no sales tax or VAT, personal income tax is low, no capital gain tax, no tax on dividends and interest) and legal system is effective. (Why run your … 2021) Individuals should be free to choose whom they want to sell to, what to sell, where to invest and to whom they want to work for (Friedman, Friedman 1980, 34).

Different scenario is in the State of California where tax rising is not beneficial. These regulations arise debates because of the outflow of individuals and businesses into the states or to a country where taxes are lower and there are less restrictions. The main reason can be associated with the fact that housing costs and the fiscal pressure is too high, the state politics are dominated strongly by one party and the problem of homelessness has risen. If individuals are allowed to work remotely, then around 40% of the Silicon Valley workers would move to a State where life is cheaper. (Financial Journey 2020) The tendency is that more young people in the age range 16-24 move into the State of California because of the university system. After finishing their studies, working age people and families decide to move out because of lack of employment and high living costs. This means that State of California is losing a share of wealthy individuals more than it gets. Therefore, to keep people staying in the State of California, some political changes are needed. (Bruno 2013) Another issue that tax rising will bring along is informal economy. With that people might try to seek for other options like how to do business without paying more than earning profit. One of the most common things is tax avoidance which will reduce the economic growth. (Elbahnasawy *et al.* 2016)

When politics are unstable, it decreases private investments that lead to a decrease of economic growth. Political instability arises when there is uncertainty in policy and this causes problems for making fecund economic choices. (Asteriou, Price 2001) With it, there is a high chance that the economic investors are risk averse and they do not want to invest into an economy where policy is unstable. They decide not to move their businesses elsewhere but to invest abroad. They invest in countries where the economy and policies are more stable. In addition, foreign investors do the same and do not invest to countries where political situation is unstable. This leads to the problem that there are fewer private investment made to one country and this harms economic growth. (Alesina *et al.* 1996)

1.2. Individualism versus Collectivism

1.2.1. The Concept of Individualism

Individualism is a political and social view that affirms individuals' freedoms and achievements (Realo *et al.* 2002). Individualistic cultures prefers individuals' accomplishments (discoveries and innovations) and the act that make a person to stand out. For an individual, it is important to stick out to be different. In an individualistic country, individuals value their personal freedom, they are more self-aware and they have a higher need for self-improvement. The latter shows individuals in a more positive light, thereby strengthens their self-esteem and identity. An individualist person is more independent and the world is, for them, more formable. It is important for those individuals to achieve the goals set and it is also very common for an individualist to think more analytically. The individual is more concerned with big picture ideas than minute details. For them, it is important to keep close relationship with a small amount of people and have a lot of acquaintances. (Gorodnichenko, Roland 2012)

Individualism fits better with countries that aim to be more innovative. The individualistic culture is more open to experiments in governance reforms that are democratically derived. This holds true because such experiments are reversible if the experiment fails. (*Ibid*.) Individualist prefers to be socially independent. This is the reason why the individualist usually moves away from home when he/she is ready to take care of themselves and be independent. (Grosmann, Varnum 2015) In the culture where individualism emerges, individuals are expected to look after themselves and their close relatives (not necessarily within their homes) (Zhang *et al.* 2013). If individuals have preserved a sturdy system of social network, then it indicates a higher level of individualism (Allik, Realo 2004).

1.2.2. The Concept of Collectivism

In a collectivistic culture, the overwhelming descriptive word is "we" (Chen, West 2008). This culture is based on group centralized communication and its identity is depending on the social system of which they are embedded (Dou *et al.* 2016). The collectivist individual remains loyal to the groups they had been raised in (Hofstede 2001). Assets are split (Pinillos, Reyes 2011) and breaking loyalty in a collectivistic culture is against social norms (Hofstede 2001). Collectivistic group identity is more important than each individual differing opinion (Pinillos, Reyes 2011). The collectivistic culture tends to show that the individual is the problem and all the problems come from individuals who abandon the group. It is through this worldview that they are able to keep things around them stable. (Gorodnichenko, Roland 2012)

In a collectivistic culture, individuals need to put more effort into work environments than an individualistic person, in order to succeed. For a collectivistic individual, achieving success, results come from more steadfast endeavor than from skills. Collectivistic cultures prefer that somebody within the group would make command decisions for them. They do not like, if someone from outside the group makes leadership decisions. Collectivistic culture fits better with a government structured with coordinated committees that are able to provide concentrated guidance at all levels. When talking about immigrants, collectivistic society is less tolerant because they tend to stand with each other. Immigrants are perceived as a threat for the society. In a collectivistic culture, families stay together as long as possible and prefer to stay together within home. (*Ibid*.)

1.2.3. Measuring Individualism

When talking about measuring individualism, it is important to mention measuring collectivism, because these two go together on the same scale. There are at least three factors that have to be fulfilled to measure individualism and collectivism. It is important to differentiate individualism and collectivism components, because these components tell, which society characterizes the country most. There has to be wide dataset, which means reference groups have to differ and separate cultural groups with the same conceptions have to be compared. (Chen, West 2008)

There are many indicators to measure individualism and collectivism. Most important ones are independence, competitiveness, uniqueness, freedom, respect for parents, friends and family time. The indicators that indicate individualism are the first four while the last three indicate collectivism. This means that if individualism instruments are positive or high and collectivism indicators are low, then country is more individualistic. If individualism instruments are negative or low, then country is more collectivistic and vice-versa. For doing an analysis, it is possible for the researchers to make their own survey to find out which country is more individualistic or collectivistic. Or the researchers can use existing dataset where the indices are already calculated (*Ibid*.) as in the case of the Hofstede index.

1.2.4. Individualism versus Collectivism Through Visions

Individualism and collectivism can be represented as a conflicting ideology, with two visions: constrained and unconstrained. The constrained vision represents the individualism while the unconstrained vision represents the collectivism. People with a constrained vision adhere to beliefs that people are changing all the time and adapt to new situations. Decisions that have to be made, depend on the current situation and self-interest. They think that traditions are important and look at how things have been historically. They make decisions based on historical facts and based on empirical evidence rather than on individuals' experience. For them, the rule of law is important and systematic processes work. Government intervention should be kept to a minimum. In an unconstrained vision, people believe that human beings are fundamentally good but they do not believe that every individual can make the best decisions and think that government should intervene into the private sector. People with unconstrained vision adhere to beliefs that there is an ideal solution for everything and that compromises are not possible. They see that it is possible for an individual to be perfect and that those individuals should be indicated as decision-makers. (Sowell 1987; Sowell 2007)

1.2.5. Pros and Cons of Individualism Related to Economics

During the last 50 years, individualism and individualistic societies have increased worldwide. However, historical cultural differences abide, meaning that two very different countries with distinctly different cultures, can still be both individualistic. (Santos *et al.* 2017) One of the pros of individualism is that environment fosters higher innovation, which leads to a rise in production and productivity. The result of this is a positive effect on country's long-term growth. (Gorodnichenko, Roland 2012, 6) Innovation in an individualist society is often rewarded with social and financial benefits. Advocating personal freedom, fuels innovators to think in a more creative way and be independent. Indeed, it has been shown that countries that have higher individualism are open espousing new technologies. (Ang 2015)

In individualistic cultures, people have had more freedom to pursue ideals that they value the most. More freedom gives them the power to decide their own fate and self-determination has allowed people to have higher well-being. Individualism is making nations wealthier: this fact is directly reflected and correlated with the national development indicators. (Schimmack *et al.* 2005; Pitlik, Rode 2017) In addition, individualism promotes building quality institutions and policies consistency with the rule of law and economic freedom (Pitlik, Rode 2017). Individualism encourage the economic development through which individuals are more motivated to invest, be more innovative and gather capital (Kyriacou 2016; Gorodnichenko, Roland 2017). Individualism encourages volunteerism and charitable giving. This type of philanthropic endowments in the arts, culture, humanities, education, health and human services, political and other organizations enhance national wealth and culture. (Kemmelmeier *et al.* 2006)

Individualism is often also associated with greed. More precisely greed could be described as self-interest. In today's society, greed has a strong negative connotation and meant to stir fear but looking at greed as self-interest is very desirable. There are many examples of great people who have greatly influenced the society and the economy because of their self-interest. Bill Gates, for example, did not found Microsoft because of some bureaucrats gave him direction. He had self-interest to make profit, boost his career and pursue what he loved the most. This self-interest trend can also be seen in Steve Jobs with the company Apple, Elon Musk from Tesla or even Jeff Bezos from Amazon. People's freedom and free enterprise have laid the groundwork for many comfortable and advanced societies today. (Veldhuis 2008)

When looking back at the last financial crisis 12 years ago, many people thought that the cause was an act of an individualism and Wall Street operating without proper regulations. Actually, it was The Federal Reserve policy to keep the interest rates low and incentives loans. Most people could get mortgages no matter their level of income and this created a financial bubble. (*Ibid.*) The bubble where investors changed low return financial assets to higher return non-financial assets. One example is private dwellings. Property owners, through refinancing of mortgages, bought additional property for investment or as an additional residence to live. (O'Connor 2010) All of this was just peoples' act of self-interest and to enliven the economy (Veldhuis 2008). When the interest rate rose, owners of the properties had to repay the debts back at higher interest rate. The problem occurred, when many property owners could not pay the mortgage payments back on the right time and they had to default. (Pritchard 2020)

In the following two paragraphs, examples are given by two collectivistic country of why individualism is considered beneficial on the well-being and on the economy. The individualism is measured with the Hofstede index, which varies between 0 and 100. Countries with the index lower than 50 are treated as collectivistic while countries with the index above 50 are treated as individualistic countries. (Hofstede Insights 2021b) The first example is the collectivistic country Russia, represented with the Hofstede index equal to 39 (Hofstede Insights 2020). Expounding on an example of how collectivistic Russia can embrace individualism can be seen when children are in a camp. These camps are a staple of Russian society. At these camps, children are given more freedom than they get at home. This individualistic camp living makes children more self-sufficient and with that they can have more freedom. This inspiration means kids become more individualistic and allowing the next generation of collectivistic Russia to improve. (Matza 2012) Because freedom gives people more power to decide what is beneficial for them and how to make their country wealthier (Schimmack *et al.* 2005).

Another example is China, which is highly collectivistic country, with the Hofstede index equal to 20 (Hofstede Insights 2020). There is a new societal trend among Chinese people that they are increasing the emphasis towards the individualism factors. This trend is seen in the Chinese peoples' high regard for marital status, self-assessment health, earnings, proffesion status, freedom of choice and to be in command of your own life. Therefore, Chinese peoples' overall well-being and quality of life is better with individualistic factors. (Steele, Lynch 2013) According to that example of China, when countries value more individualistic factors, they have better possibilities to have higher long-term growth. The reason is because people are more concentrated to have personal achievements and they are more innovative. (Gorodnichenko, Roland 2011) This leads to the fact that economic development makes people happier and their well-being is better (Zagorski *et al.* 2010). This means that individualism, well-being and economic growth depend on each other.

Cons about individualism can be described with the example of Japan. Japan is collectivistic country with the Hofstede index equal to 46 (Hofstede Insights 2020), subjective well-being is negatively correlated with individualistic values. In Japan, individualism means begin arrogant and lonely and it is against many Japanese social norms. (Ogihara *et al*. 2014) Therefore, for some of the Asian countries all Western social norms of individualism are negative. Japanese individualists have lower well-being than collectivists. Arguably, Asian countries do not have the same social structure and cultural background as in Europe, and it can be harder to cope with an individualistic system. (Ogihara, Uchida 2014) For this motivation in Japan, economic growth, individualism and well-being are not combined.

The second con might appear when individual is making money by investing. Individualist who invests is more likely to be overoptimistic and self-assured (Dou *et al.* 2016). Individuals exaggerate private information and underestimate public information (Daniel *et al*. 1998). These reactions come from self-attribution and self-assurance tilt (Dou *et al.* 2016). With being overoptimistic they might lose a lot of money.

1.3. Link Between Economic Growth, Political Instability and Individualism

The relationship between economic growth, political instability and individualism depends on multiple indicators and mechanisms (Ezcurra 2020). Political instability arises when competence and assets are unevenly allocated between the groups and this creates confrontation (Østby 2008). In a collectivistic society, it is important that the leadership role guard their group's interests and protect themselves from other groups and government actions (Kyriacou 2016). At the same time, in an individualistic society, people are uninterested in investing their own time to be a part of a group or defend the group philosophies. This is the reason why conflicts are less likely to happen in an individualistic society than in a collectivistic society. (Schaller, Neuberg 2008) In addition, individualism might make sociopolitical situation more stable. The economic development is most affected by the political instability, individualism, democratic principles (Ezcurra 2020) and formal and informal institutions. Such as rule of law and generalized trust. (Gantenbein *et al.* 2019)

The following examples show that political stability is the key to a more individualistic society. Democracy leads to a more stable political environment (Dutt, Mobarak 2016) and is more dominant in an individualistic countries (Gorodnichenko, Roland 2020). Through democracy, citizens can take part in the political processes, thereby reducing the risk of violence (Rummel 1995). Democracy allows people to be free and freedom gives more power to decide what is beneficial for them and how to make their country wealthier (Schimmack *et al.* 2005). People can boost the economy by being more innovative and motivated to invest (Kyriacou 2016; Gorodnichenko, Roland 2017). Another motivator for investment is the rule of law (Gantenbein *et al.* 2019) that demonstrates the underlying trust in the police and court system as well as how well these two departments abide by the law (World Bank 2021b). According to that, stronger rule of law increases trust (Gantenbein *et al.* 2019). Trust is one of the motivators for entrepreneurs to invest (OECD 2013).

To support the above thoughts, in recent decades governments all around the world are promoting the entrepreneurial eagerness. It is a necessary act, because entrepreneurs' creativity and innovation are the catalyst for the economic growth. Being more individualistic means having more entrepreneurial eagerness. This is why it is important for a country to be more individualistic and for government to support these endeavors. That way economy can grow. (Gantenbein *et al.* 2019)

1.4. Literature Overview

1.4.1. Relationship Between Economic Growth and Political Instability

The relationship between economic growth and political instability has been studied in Asteriou and Price's work (2001) where they found a strong and negative correlation between instability and economic growth when looking at the following instability indicators: strikes, elections, regime and terror. These indicators were measured against the GDP growth as economic performance indicator using Generalized Autoregressive Conditional Heteroskedasticity in mean model. The authors explain that if political instability rises, it causes more uncertainty. Another article that supports Asteriou and Price's work is the study by Jong-A-Pin (2009). He used system Generalized Method of Moments model and several different indicators of political instability and macroeconomic variables as indicators of economic performance. His findings underlined a negative relationship only between political regime and economic growth. He brought out that this relationship create uncertainty about the future and found interdependent relationship showing that economic growth can affect political instability (political regime).

Polachek and Sevastianova (2011), on the other side, used Fixed Effect and Ordinary Least Squares for estimating the models. They used wars as a political instability indicator, together with many macroeconomic variables to indicate performance. They show that civil wars affect economic performance negatively with a drop in annual growth between 0.01-0.13 percentage points. Conversely, high-intensity wars reduce annual growth between 0.18-2.77 percentage points. The higher the intensity of a war, the larger the drop in economic growth. The study brought out that the effect from wars is felt stronger in the short-term than in long-term.

In support of the Polachek and Sevastianova, the study from Berggren *et al.* (2012) using principal component analysis and GDP per capita as a dependent variable, looked at how the economic growth is affected when a country has institutional instability. They found that in high-income countries, institutional instability and growth is positively related in the short-term but no effect in the long-term. Instability increases forecasts economic uncertainty in these countries that were used in the study. Campos *et al*. (2012) using Autoregressive Conditional Heteroskedasticity model and economic growth as a dependent variable found that there is a direct negative relationship between informal political instability (strikes, assassinations and guerilla warfare) and economic growth. While there is an indirect negative relationship between formal political instability (cabinet changes) and economic growth.

To support the above studies, Aisen and Veiga (2013) used system Generalized Method of Moments model and cabinet changes as a main indicator of political instability and a wide range of macroeconomic variables to indicate the economic performance of a country. They found that every additional cabinet change per year affect economic performance negatively with a drop in annual GDP growth 2.39 percentage points. They also found that the political instability decreases the productivity growth and labor capital accumulation.

Jaouadi *et al.* (2014) using Fixed Effect model and GDP as a dependent variable, found that revolutions are affecting the economic growth negatively, with a higher risk that investors will decide to invest somewhere else besides the country where political instability is high. A more recent study by Murad and Alshyab (2019) came to a conclusion, using Fully Modified Ordinary Least Squares model and economic growth as a dependent variable, that political instability has a negative effect on economic activity and making individuals uncertain about the future. Investors and skilled workers do not know what might happen with the economic situation and policies thereby it makes them invest or to move abroad where political and economic situation is more stable.

The results by Blum and Gründler (2020) are consistent with the previous studies. For finding the relationship they used difference-in-difference model, GDP per capita (logarithm form) as a dependent variable and the *coups d'états* as an indicator of political instability. The results showed that *coups d'états* deteriorates economic growth. Political instability negatively affects the economic growth lowering it by 2 to 3 percentage points. In addition, the rise of unemployment has a negative impact on citizens health and overall well-being of life. The difference with the previous articles is that the authors brought to light that this negative relationship has a stronger impact on women than men.

Conversely, Nomor and Iorember (2017) used Autoregressive Distributed Lag model with economic growth as a dependent variable and looked for the relationship between economic growth and political stability instead of instability. They found that in the short-term as well as in the long-term, there is a strong and positive relationship between political stability and economic growth. As a rule, a stable country has better economic performance. With that, there is improvement in employment and a standard of living.

1.4.2. Relationship Between Production Output and Political Instability

There are few studies that look for the relationship between political instability and production output. For example, Bernal-Verdugo *et al.* (2013) is one of those. They used probit model and real GDP as a dependent variable to find the relationship. They found that political instability affects production output growth negatively, with a stronger effect in the short-term. The recovery of the output growth level depends on overall government efficiency. On the other side, Sweidan (2017) used time-series cross-sectional Prais-Winsten regression model and real output as a dependent variable, and found that the relationship between political instability and the real production output results are blended. This means that relationship can be both negative and positive, but in the end the result was that political instability has a negative impact on real production output. Negative production output might lead to more complicated and ambiguous situations in the future.

1.4.3. Relationship Between Inflation and Political Instability

Few studies look for the relationship between political instability and inflation, such as in Aisen and Veiga (2006) work. For finding the relationship they used system Generalized Method of Moments model and inflation in a logarithm form as a dependent variable. They found that higher the political instability, the higher the inflation. High inflation diminish society's well-being and economic growth. This might be because frequent cabinet changes cause revaluation of inflation and unemployment policies. Rise in the economic freedom and increase in democracy could help to lower the inflation and the political situation might stabilize. In another Aisen and Veiga (2008) study, they compared cabinet changes (as the political instability factor) and seigniorage. For that they used panel regression analysis with fixed effects and seigniorage as a dependent variable. They found that higher political instability led to higher seigniorage with a stronger impact in developing, less democratic and high inflation countries. Telatar *et al.* (2010) used system Generalized Method of Moments model and found that low political instability cause lower inflation and their results confirm a previous study by Aisen and Veiga (2008) where the relationship has an effect for developed and instead of high-inflation countries, for low-inflation countries.

1.4.4. Relationship Between Economic Environment and Individualism

The relationship between individualism and economic development is being analyzed in Pinillos and Reyes (2011) study. They used Ordinary Least Squares model and total entrepreneurial activity (measured by GDP per capita), to find that a positive relationship between individualism and entrepreneurial activity is shown mainly, when the development of a country is high. When the development of the country measures low or average, then the relationship is negative. Another study that is looking for the similar relationship is by Gorodnichenko and Roland (2012). For that they used Euclidian distance between the frequency of blood types and log GDP per worker as a dependent variable. This study examines that the link between individualistic culture, long-term growth and innovation is positive. Compared to the collectivist culture, in an individualistic country higher levels of productivity and production will be achieved through a higher innovation rate. In the long-term, that link triggers economic growth.

The study by Hansen (2012) where he used Ordinary Least Squares model and annual earnings in a logarithm form as a dependent variable has come to a same conclusion as previous studies. Results showed that individualism and economic growth are positively related. He also brought out that individualistic countries are economically more successful and incomes are better because more self-employed workers. There is a similar result in the Chan and Cheung (2016) study, where they examined how mergers and acquisitions (M&A) are related with individualism. For that they did multiple regression analysis where once the dependent variable was individualism and in the other models intensity of M&A activities. The results showed that M&A are important business activities and these two can affect economic development. They found that M&A activities have a positive relationship with individualism. As well, they found that in individualistic culture, corporate managers tend to take part in M&A activities more than in collectivistic culture.

In Kyriacou (2016) study, new perspective of the relationship between individualism and economic growth was established. For finding the relationship he used Ordinary Least Squares and Two-Stage Least Squares regression model and log GDP per capita as a dependent variable. His study determined that individualism affects economic development when the governance supports the peoples' socio-economic liberties. The relationship between individualism and economic development is positive, thereby individualism is making countries wealthier. If the government takes on too much responsibility to govern and to expand into every area of life, then the positive impact of individualism will disappear.

In the Gantenbein *et al.* (2019) study they established the results using pooled regression and log venture capital as a dependent variable. The results showed that the relationship between individualism and entrepreneurship is strong and positive. The entrepreneurship indicator metric represents venture capital investments. If entrepreneurs' activity is the focus, then innovation, entrepreneurs' creativity and investments are key elements for economic development and then it is important to keep country more individualistic. In addition, venture capitalism is successful because of the high level individualism.

2. EMPIRICAL ANALYSIS

In this chapter, the author will give an overview of the dataset and the data sources, the variables used and provide some descriptive statistics. Additionally, an overview about the methodology that will be presented for the empirical analysis, tests conducted, expected results and description of the analysis. The econometric analysis is implemented using the statistical software RStudio.

2.1. Data

In this thesis, the author will explore the relationship between economic growth, political instability and individualism. A balanced panel data for 57 countries around the world (see appendix 1) is used to get the variety of individualistic/collectivistic and politically stable/unstable countries within the time span of 2002-2019. The time span was chosen according to the availability of the data and to ensure that all of indices (political instability, individualism and GDP) were present for each country. The dependent variable is represented by GDP per person employed and is retrieved from the World Bank (2021a) database. Political instability indicators that are one of the explanatory variables are retrieved from World Bank and Heritage database (World Bank 2021b; Heritage 2021a). Another explanatory variables are individualism indices, that are retrieved from the Hofstede Insights website (Hofstede Insights 2021a).

To measure political instability, the author will use seven different variables broken down by percentages. The variables are: business freedom (%), trade freedom (%), voice and accountability (%), government effectiveness (%), regulatory quality (%), tax burden (%) and financial freedom (%). These indices are chosen because freedom indices are showing how free citizens can be and how freely they can operate in daily businesses. In more detail, business freedom shows that how easy it is doing business (open businesses, obtaining licenses and closing businesses) (Heritage 2021b). Trade freedom shows how easily trade can happen (absence of the barriers and non-barriers) (Heritage 2021c). Voice and accountability percentage show the participation of the citizens when selecting government. Additionally, this shows how free media is, how freely citizens can express themselves and freedom of association. The government effectiveness percentage shows how much government intervenes to the private sector and the policy formulation and implementation commitment to policies. The regulatory quality percentage shows how well government is formulating and implementing regulations that help to develop private sector. (World Bank 2021b) Tax burden percentage show how high is the fiscal freedom/pressure in a country. This means that how many taxes and how high are the percentages that people have to pay. (Heritage 2021d) Financial freedom shows how big is the government intervention to the financial system (regulations to banks) and it measures independence from government control (Heritage 2021e).

All of these indicators are listed in percentage terms from 0 to 100. Percentage 0 shows the lowest value and percentage 100 shows the highest value. (World Bank 2021b) The countries whose percentage is below 50 are considered politically unstable countries while countries whose percentage is above 50 are considered more politically stable. Higher the indices percentage, lower the political instability and vice-versa. In previous studies, mainly GDP (Asteriou, Price 2001; Jong-A-Bin 2009; Telatar *et al.* 2010; Polachek, Sevastianova 2011; Berggren *et al.* 2012; Aisen, Veiga 2013; Bernal-Verdugo *et al.* 2013; Jaouadi *et al.* 2014; Blum, Gründler 2020) or average indicators for political instability (assassinations, coups, riots, strikes, guerrilla warfare, anti-government demonstrations, purges, revolutions and cabinet changes) (Alesina *et al*. 1996; Blanco, Grier 2009; Ezcurra 2020) have been used as a dependent variable. To provide another approach to the research, the author have chosen different indicators than previously have been used in other studies to measure political instability. In addition to that, the author wanted to use more socio-economic variables, which show both political and economic situation in a country.

As dependent variable, in the previous studies the logarithmic form of the GDP per worker, also known as productivity, derived as ratio between real GDP and employment has been used (Gorodnichenko, Roland 2011). In this thesis, to study the relationship between economic growth, political instability and individualism, the GDP per person employed is also utilized as a dependent variable. GDP per person employed is presented in logarithm form (*ln*) and is retrieved from the World Bank (2021a) database.

For measuring individualism, the author has taken from the Hofstede Insights website the same countries as in the political instability and GDP per person employed dataset. Hofstede started collecting the data about individualism-collectivism society from 1967 to 1973 and with that time period, the Hofstede team got answers from around 70 countries. Since 2001, more countries participated in the survey. As culture has changed very slowly, the scores that are available can be considered as up to date data. Hofstede team collected the data by doing a world value survey in which the team asked about the overall satisfaction of life, work morale, attitudes, personal value of time, health, age, gender and education level. (Hofstede 2001) The scale rank is from 0 to 100, and 50 is the middle-level point. If the score is under 50, the culture is treated as collectivistic and if the score is above 50 the culture is treated as individualistic. (Hofstede Insights 2021b) In previous studies where individualism is one of the indicators, Hofstede indices are mainly used. (Allik, Realo 2004; Chui *et al*. 2010; Gorodnichenko, Roland 2012; Ang 2015; Chan, Cheung 2016; Dou *et al*. 2016; Kyriacou 2016). More detailed descriptive statistics are presented in Table 1.

Table 1. Descriptive Statistics

Indices	Min	Max	Mean	Standard errors	Source
Log GDP per person employed	8.66	12.49	10.94	0.73	WBa
Individualism	6	91	47	24.21	HI
Business freedom %	40.00	100	73.81	13.99	HER
Trade freedom %	0.00	95.00	79.57	10.70	HER
Voice and accountability %	3.37	100.00	68.00	26.79	WBb
Government effectiveness %	10.53	100.00	71.91	21.87	WBb
Financial freedom %	10	90.00	62.43	19.03	HER
Regulatory quality %	2.87	100.00	71.26	24.82	WBb
Tax burden %	29.08	93.80	69.95	13.26	HER

Source: (WBa) World Bank (2021a); (WBb) World Bank (2021b); (HI) Hofstede Insights (2021a); (HER) Heritage (2021a); author’s calculation

There are some countries whose GDP per person employed is low, that are politically very unstable and are collectivistic. While, there are some countries whose GDP per person employed and political stability is really high and are individualistic. The standard errors are low, meaning that countries indicators dispersion is not wide.

To get the better overview about the situation in the countries, the author has graphed GDP per person employed (figure 1), political instability (figure 2) and individualism (figure 3) indices on the world map. The data is the average of the time span of 2002 to 2019.

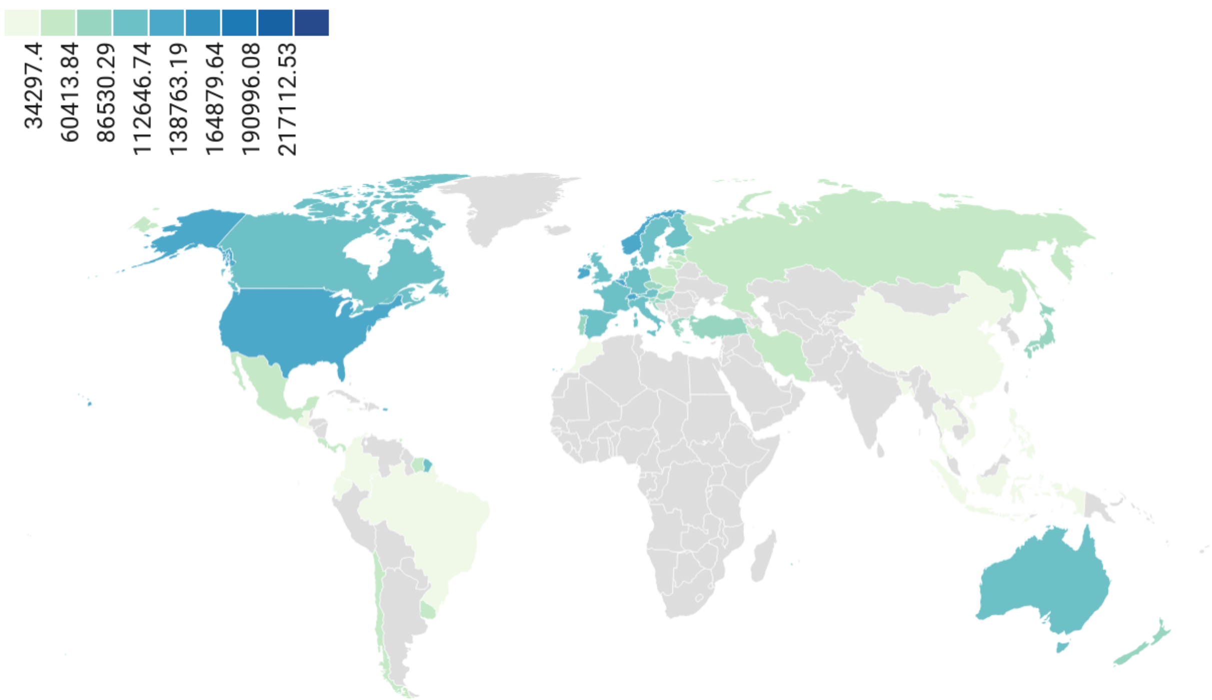

Figure 1. GDP per person employed (constant 2017 PPP) by country
Source: World Bank (2021a); compiled by the author

Figure 1 shows countries based on their GDP per person employed: darker the colour, higher the GDP per person employed country has. Based on that, the top three countries that has highest GDP per person employed compared to the other countries are: Luxembourg with the GDP per person employed value of 243 288.979, Ireland with the GDP per person employed value of 134 250.884 and Norway with the GDP per person employed value of 121 956.259. The three countries that have lowest value of GDP per person employed are: Bangladesh with the GDP per person employed value of 8 180.949, Vietnam with the GDP per person employed value of 9 347.831 and Philippines with the GDP per person employed value of 16 007.019. (World Bank 2021a) It can be distinguished from the map that the countries that have higher GDP per person employed are in Northern and Central Europe, North-America, Australia, New Zealand. The countries that have lower GDP per person employed are in South-America and Asia. The grey coloured countries mean a lack of data.

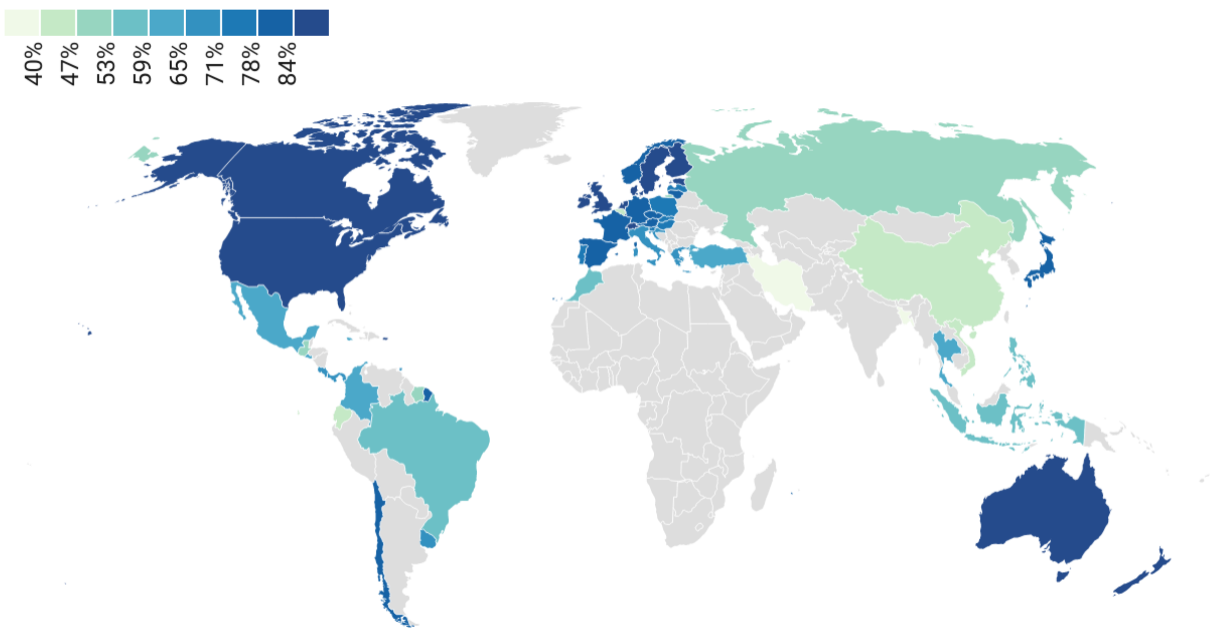

Figure 2. Political instability by country
Source: World Bank (2021b); Heritage (2021a); compiled by the author

In the figure 2, it can be seen that the darker the countries, more politically stable they are. Based on that, the three most politically stable countries are: Hong Kong with the average value of 89.97, New Zealand with the average value of 89.59 and Canada with the average value of 88.88. The three most politically unstable countries are: Iran with the average value of 34.23, Bangladesh with the average value of 37.69, Ecuador with the average value of 44.25. (Heritage 2021a; World Bank 2021b) If to look for a pattern it can be said that more politically stable countries are located in Northern and Central Europe, North-America, Australia and New Zealand. South-America and Asian countries are more politically unstable. The grey coloured countries mean a lack of data.

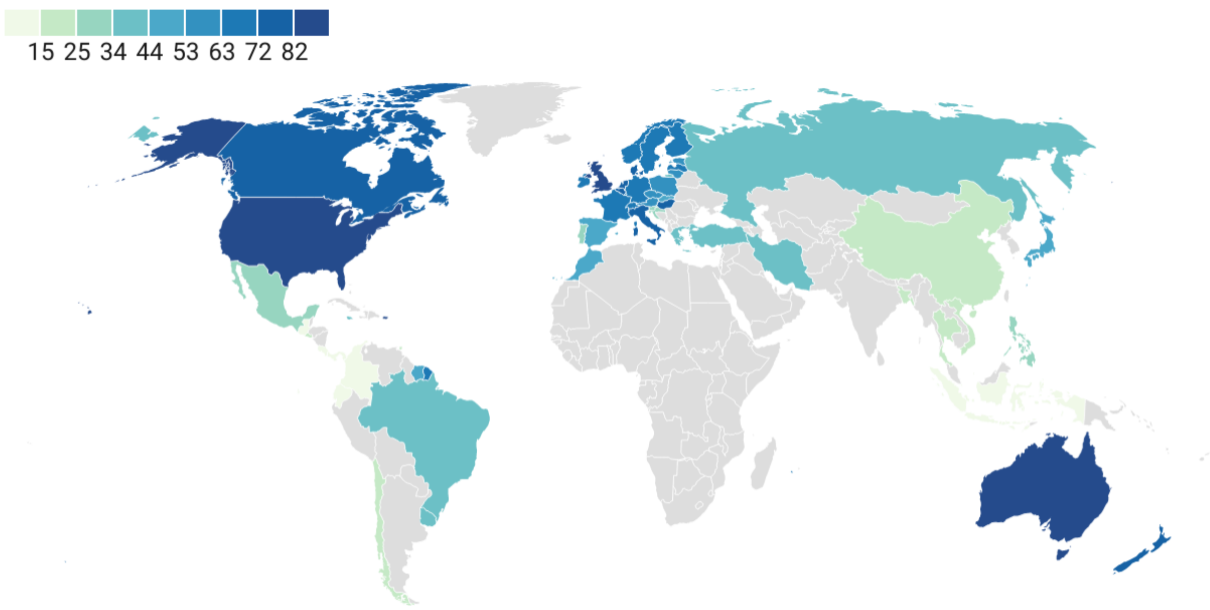

Figure 3. Individualism by country
Source: Hofstede Insights (2021a); compiled by the author

Figure 3 shows countries based on their level of individualism: darker the colour, more individualistic they are. Based on that, the top three individualistic countries compared to the other countries are: the United States of America with the Hofstede index equal to 91, Australia with the Hofstede index equal to 90 and the United Kingdom with the Hofstede index equal to 89. The three most collectivistic countries compared to the other countries are: Guatemala with the Hofstede index equal to 6, Ecuador with the Hofstede index equal to 8 and Panama with the Hofstede index equal to 11. (Hofstede Insights 2021a) From the map, it can be distinguished clearly that individualistic countries are located in Northern and Central Europe, North-America, Australia and New-Zealand. More collectivistic countries are in South-America and Asia. The grey coloured countries mean a lack of data.

This result shows that the same countries that have higher GDP per person employed, are politically more stable and are more individualistic. This also shows that countries with lower GDP per person employed are also politically more unstable and collectivistic. This might imply that in order to have good economic growth it is necessary to have stable political environment and countries should be individualistic. This comparison is not, however, strong enough to show the relationship between the two variables. Therefore, further econometric analysis is needed to do, to investigate the relationship between economic growth and political instability and also economic growth and individualism. Moreover, the analysis is needed to do to explain in detail which political instability indices affect economic growth.

2.2. Methodology

The econometric analysis is conducted using the fixed effect or random effect regression model to estimate the relationship between economic growth, political instability and individualism. To decide which regression model (fixed effect or random effect) better performs the analysis, the author of the thesis conduct the Hausman test. Before the estimation of the model, it is also necessary to assess whether the variables are normally distributed. For that, the normality test will be conducted. In the normality test, the histogram will be graphed. If the variables are skewed, the *ln* will be taken. In this case it would help to transform the variables to be normally distributed. (Feng *et al.* 2014)

The second test that will be conducted before the baseline model estimation will be unit root test. It is necessary to do it, to find out does unit root exist or not. If yes, then the first difference of the variables is needed to be taken. (Fuller 1996)

For estimating the model, the author will use stepwise regression and, in particular, the backward selection. With that selection method, the author will add all the variables to the model and one by one will remove the variables that are not significant, starting from the variable with the highest insignificant p-value. The process will end when any and all the significant variables are found. (Tutz 2011) In the previous studies (Jong-A-Pin 2009; Aisen, Veiga 2013; Elbahnasawy *et al.* 2016), the tactic of changing the number of observations has been used to see how the variables will react to the dependent variable. To deal with the endogeneity problem, the author will add one lagged dependent variable to the baseline model.

When the baseline model estimation is done and the results are found, then the author will interpret the baseline model. The statistics that will be looked are:

- the regressors significance;
- serial correlation;
- heteroskedasticity;
- adjusted R^2.

The regression analysis with panel data will be estimated as following:

$$Y_{it} = \alpha + Y_{it-1} + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 X_{7it} + \beta_8 X_{8it} + \mu_i + \epsilon_{it} \quad (1)$$

$$i = 1, \dots, N \; t = 1, \dots, T$$

where

Y_{it}= log GDP per person employed (constant 2017 PPP);

α = constant coefficient;

Y_{it-1}= lagged log GDP per person employed (constant 2017 PPP);

$\beta_1 - \beta_8$ = coefficients of the explanatory variables;

X_1 = business freedom;

X_2 = financial freedom;

X_3 = tax burden;

X_4 = regulatory quality;

X_5 = trade freedom;

X_6 = voice and accountability;

X_7 = individualism indices;

X_8 = government effectiveness;

μ_i = country specific effect;

ϵ_{it}= error term;

i = represents country;

t = represents time (annual).

The expected hypothetical results are that overall, there is a negative relationship between economic growth and political instability and a positive relationship between economic growth and individualism. To check the specific political instability variables that affect the economic growth, the model will be estimated with different political instability variables. Also, individualism indices will be included. This might give the result that some of the political instability variables are positively related to economic growth and some of the variables are negatively related to economic growth. More detailed results will be covered in the third chapter.

3. EMPIRICAL RESULTS AND SUGGESTIONS FOR FURTHER ANALYSIS

In this chapter, the author will give an overview about the empirical analysis results using the data, the model and the methodology that were introduced in the second chapter. These results will be compared with the theoretical section and with the previous studies. The robustness check will be estimated to find out if the relationship holds even when changing data (number of countries and different variables added). The author will answer the empirical question and will come to a final conclusion. In addition, the author will give suggestions for further empirical analysis.

3.1. Empirical Results

After checking the normal distribution of the variables used in the estimation, the author notes that the variables are not skewed, except the variables trade freedom and GDP per person employed. Despite taking the logarithmic form of the variable trade freedom, the skewness was still present. The logarithmic form of the dependent variable GDP per person employed removed the skewness and improved the results. All the other explanatory variables, including trade freedom, were not in logarithmic form. Trade freedom skewness will remain in the model. However, the empirical model can be estimated and it does not harm the final results (Should I … 2021). The unit root test showed that null hypothesis can be rejected and there is no unit root in the data. The Hausman test showed a p-value of 0.09, meaning that the fixed effect model is rejected and the random effect model will be used.

To estimate the model, the backward selection method is used. The author add all the variables together and then one by one take out the variables that are not significant, starting from the variable that has the highest insignificant p-value. This method is followed to find which variables are significant. If none of the variables would not have been removed from the model, it could have been reducing the model's accuracy. The baseline model results are in Table 2. The presence of heteroskedasticity and autocorrelation, makes necessary to use robust standard errors.

Table 2. Baseline results

Indices	(2.1)	(2.2)	(2.3)	(2.4)	(2.5)	(2.6)
Intercept	4.558***	4.623***	4.811***	4.732***	4.832***	4.454***
	(0.761)	(0.773)	(0.822)	(0.829)	(0.856)	(0.773)
Log GDP-1	0.471***	0.462***	0.442***	0.449***	0.456***	0.466***
	(0.079)	(0.080)	(0.083)	(0.082)	(0.084)	(0.082)
Government effectiveness	0.005	0.005	0.006*	0.006*	0.007***	0.007***
	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)
Trade freedom	0.008*	0.008*	0.008*	0.008**	0.008**	0.008*
	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)
Business freedom	0.003	0.003	0.003	0.003		
	(0.003)	(0.003)	(0.003)	(0.003)		
Individualism	0.004***	0.004***	0.004***	0.004***	0.005***	0.006***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Financial freedom	0.001	0.001	0.001			
	(0.002)	(0.002)	(0.002)			
Regulatory quality	0.001	0.001				
	(0.004)	(0.004)				
Voice and accountability	-0.001					
	(0.003)					
Tax burden	-0.004	-0.004	-0.004	-0.004	-0.004	
	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	
Number of observations	969	969	969	969	969	969
Number of countries	57	57	57	57	57	57
Adjusted R^2	0.876	0.875	0.871	0.873	0.871	0.870

Source: World Bank (2021a); World Bank (2021b); Hofstede Insights (2021a); Heritage (2021a); author's calculation

Notes: - Significance levels are: ***p<0.01; **p<0.05; *p<0.1;
- Dependent variable is log GDP per person employed (constant 2017 PPP).

In Table 2, it can be seen that the variables that were significant and showing a positive relationship with economic growth were: government effectiveness, individualism and trade freedom. This result was expected and it emerged in the theoretical section as well as previous studies. Government effectiveness (political stability) increase, increases economic growth. The government effectiveness index shows that higher the index, the less government intervenes into the private sector and therefore the political environment is more stable. In the theoretical section, it was shown that government intervention into the private sector should be kept to a minimum (Reed 2001). Also, Kyriacou (2016) came to a conclusion, in his study, that if government supports peoples' socio-economic liberties, then the economy can develop. If the government takes too much responsibility to govern and it expands into every area of life, then the positive impact will disappear.

Self-interest is one of the keys to success, as it was written in the theoretical section. Some of the big company founders had the self-interest to make profit and boost their career. Having freedom and the free enterprise system has laid some groundwork for many comfortable and advanced societies today to prosper. (Veldhuis 2008) In addition to that, Aisen and Veiga (2006) came to a conclusion that economic freedom is the avenue to stabilize the political environment and to develop the economy. The culmination of this is that the government should promote entrepreneurship and not say how businesses have to operate. They should give people more freedom to choose. That way the individualism can increase and economy can grow. (Gantenbein *et al.* 2019)

The results in theoretical section and previous studies have shown that individualism is making nations wealthier (Schimmack *et al.* 2005; Hansen 2012; Kyriacou 2016; Pitlik, Rode 2017) and allowing the economy to grow. The force behind it is the idea that individualism is associated with higher innovation (Gorodnichenko, Roland 2012, 6) and through that more investments are made (Kyriacou 2016; Gantenbein *et al.* 2019). Also, overall rise in the production and productivity will take place (Gorodnichenko, Roland 2012, 6). Additionally, being more individualistic means having more entrepreneurial eagerness. Entrepreneurial eagerness is a catalyst for economic growth. (Gantenbein *et al.* 2019) Finally, all these ideas lead to the fact that in an individualistic country there is a greater chance for better economic growth in a long-term (Gorodnichenko, Roland 2011).

Trade freedom (political stability) index shows that higher the trade freedom, lower the political instability. This means when trade freedom increases, economic growth increases and political instability decreases. In the M. Friedman and R. Friedman (1980, 34) book, has been brought out that individuals should be free to choose whom they want to sell to, what to sell and where to invest. This kind of freedom allows the economy to grow.

The variables that were not significant, and therefore were removed from the model, were: business freedom, financial freedom, regulatory quality, voice and accountability and tax burden. This shows that there is no correlation between economic growth and these variables. This result is not in line with the theoretical section and previous studies where the positive relationship between economic growth and business freedom was shown by the example of Hong Kong's economic environment. For example, many businesses have moved to Hong Kong because more entrepreneurial freedom. This shows that people will do business there, where there is more freedom to conduct business. The population density in Hong Kong is really high but still this country has one of the highest standards of living in Asia. Hong Kong does not place restrictions on international trade and direct economic activity. The economic and political environment is stable, the tax regime is appealing (no sales tax or VAT, personal income tax is low, no capital gain tax, no tax on dividends and interest) and the legal system is effective. (Why run your … 2021) Also, Gantenbein *et al.* (2019) resulted that economy can grow if government is less involved how businesses are operated.

Financial freedom insignificance is not in line with the theoretical section and previous studies because it was stated that financial freedom shows how much government intervenes with the financial system (regulations to banks) and it measures independence from government control. Financial institutions, such as banks are free to provide services to individuals and companies without government control. They can give out loans, extend credit and accept deposits from whoever they want and for how much they want. Financial freedom with weak government controls boosts the economy. (Heritage 2021e)

Regulatory quality insignificance is not in line with the theoretical section and previous studies, because it was stated that regulatory quality reflects how well government is formulating and implementing regulations which enhance private sector development (World Bank 2021b). Regulations that support the private sector should increase entrepreneurial eagerness (Gantenbein *et al.* 2019) and through that it helps along with the economic growth.

Voice and accountability insignificance is also not in line with the theoretical section and previous studies because it was stated that voice and accountability index shows how free people are, and how freely citizens can express themselves (World Bank 2021b). Voice and accountability gives citizens more freedom to participate in the political process, they are free to choose what is beneficial for them and they have a voice in the decision making process about their country's development (Schimmack *et al.* 2005). Peoples' freedom and free enterprise have laid the groundwork for many comfortable and advanced societies today. Thereby, these freedoms have helped to develop the economy. For example, founding Apple and Amazon. (Veldhuis 2008) These companies have boosted the economy by paying a lot of taxes, investing to the development of technology and creating jobs for lots of people (Angelou Economics 2018; Amazon 2020).

Finally, tax burden insignificance is not in line with the theoretical section and previous studies, because it was stated that tax burden shows the fiscal pressure in a country. If the index is high, this means that there is fiscal freedom and if the index is low, then there is fiscal pressure. (Heritage 2021d) Tax law should support entrepreneurship in order to avoid informal entrepreneurship and unincorporated businesses (Block 2016). Rising taxes make entrepreneurs worried on whether they are able to keep the holdings of their output in the future (Carmignani 2003, 3). The relationship should have shown that if there is no fiscal pressure economy can grow.

The political stability is established with the baseline model results from the two significant variables (government effectiveness and trade freedom) because if the government effectiveness and trade freedom indices are high, then the political situation in a country is stable. When indices are low, then the political situation in a country is unstable. Therefore, if the indices increase, the economy grows as well. If to look the adjusted R^2 then it can be seen that the baseline model specification is good and 87% of the values fit the regression analysis baseline model.

The robustness check was done to find out if the above relationships hold even when adding some different variables and taking some of the countries out. More detailed overview is given in the next subchapter.

3.2. Robustness check

The author did one robustness check in order to check whether the relationships found in the empirical analysis hold, even when changing some data. The author re-estimated the baseline model. More political instability indicators were added. The political instability variables that were added were: monetary freedom and investment freedom. Monetary freedom index shows the price stability (Heritage 2021f). This might mean that when political situation in a country is unstable prices are also unstable. It might increase the prices or decrease the prices. Moreover, it might cause inflation. The index is measured from 0 to 100 where 0 means prices are unstable and 100 means that prices are stable (Heritage 2021f). Investment freedom shows how much freedom citizens and businesses have, to decide where to invest and how much to invest. The index is measured from 0 to 100 where 0 means there are restrictions on investment and 100 means there are no restrictions on private investments. (Heritage 2021g)

In addition, the author used the backward selection method and the reduced number of countries that were used in the baseline model. The final number of countries were 50. The removed countries were: Australia, Bangladesh, Indonesia, Iran, Canada, Singapore and Luxembourg. These countries were removed randomly. The aim was to take out both individualistic and collectivistic countries and to see if the relationship still holds even when data is changed. The time span was the same as with the baseline model (2002-2019) and the dataset was balanced panel data. The results are in Table 3.

Table 3. Robustness check results

Indices	(3.1)	(3.2)	(3.3)	(3.4)	(3.5)	(3.6)	(3.7)
Intercept	3.464***	3.487***	3.463***	3.354***	3.567***	3.565***	3.348***
	(0.582)	(0.587)	(0.591)	(0.613)	(0.687)	(0.680)	(0.722)
Log GDP-1	0.584***	0.589***	0.595***	0.598***	0.575***	0.586***	0.594***
	(0.063)	(0.062)	(0.060)	(0.061)	(0.065)	(0.064)	(0.066)
GE	0.003	0.003	0.002	0.002	0.003*	0.004**	0.004***
	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
TF	0.010***	0.009***	0.008***	0.009***	0.009***	0.009***	0.009***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
IND	0.003***	0.003***	0.003***	0.003**	0.003***	0.003***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
FF	0.001	0.001	0.001	0.001	0.001	0.002	
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	
VAA	0.002	0.002	0.001	0.001			
	(0.002)	(0.002)	(0.002)	(0.002)			
RQ	-0.001	-0.001					
	(0.003)	(0.003)					
TB	-0.003*	-0.003**	-0.004**	-0.003*	-0.004**	-0.004**	-0.003*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
IF	-0.001						
	(0.002)						
MF	-0.001	-0.001	-0.001				
	(0.002)	(0.003)	(0.003)				
BF	0.002	0.002	0.002	0.002	0.002		
	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)		
No of obs	850	850	850	850	850	850	850
No of countries	50	50	50	50	50	50	50
Adj R^2	0.910	0.911	0.911	0.912	0.908	0.908	0.909

Source: World Bank (2021a); World Bank (2021b); Hofstede Insights (2021a); Heritage (2021a); author's calculation

Notes:
- Significance levels are: ***p<0.01; **p<0.05; *p<0.1;
- Dependent variable is log GDP per person employed;
- GE (government effectiveness), TF (trade freedom), IND (individualism), FF (financial freedom), VAA (voice and accountability), RQ (regulatory quality), TB (tax burden), IF (investment freedom), MF (monetary freedom), BF (business freedom).

In the robustness check, it turned out that all the indices that were significant in the baseline model were also significant in the robustness check. Government effectiveness and individualism indices coefficients were little bit higher in the baseline model and trade freedom coefficient was little higher with robustness check model. However, the significances remained.

The coefficient tax burden (fiscal freedom) was not significant in the baseline model but when reducing number of countries and adding new variables it turned out to be significant. The relationship between economic growth and tax burden is negative, which was not in line with the theoretical section and previous studies. This result show that when fiscal pressure (tax burden index) increases, it does not harm the economic growth. However, tax burden is significant on the 10% level, which means the relationship between economic growth and tax burden (political stability) is rather weak.

The added two variables (investment freedom and monetary freedom) and reducing number of countries, increased the model specification, but did not affect the relationships between the variables. The added variables investment freedom and monetary freedom were not significant and therefore, were removed from the model as well as the other insignificant variables. Overall, reducing number of countries and adding more variables into the robustness check model did not change the relationship between economic growth and political instability and economic growth and individualism. Therefore, it can be said that the baseline model remained robust.

3.3. Discussion and Suggestions for Further Analysis

The results show that there is a negative relationship between economic growth and political instability and positive relationship between economic growth and individualism. This means that when the political environment is unstable it has a negative impact on the economic environment and the economy is stifled (Asteriou, Price 2001; Polachek, Sevastianova 2011). Countries who are more individualistic make nations wealthier and the economic environment is better (Schimmack *et al.* 2005; Kyriacou 2016). This finding is the answer to the authors' research question that was stated in the introduction. This finding also supports the hypotheses because there is a negative relationship between economic growth and political instability and positive relationship between economic growth and individualism. The finding is robust, the relationships still hold, even when changing some data. These results are important because they bring awareness that political instability inhibits individualistic ideas and it might damage the economy. This reinforces the concept that in order to have economic development it is necessary to be individualistic and the political environment must be stable.

This thesis stipulates that political stability is good for the economy. Additionally, individualism is a positive characteristic to society and to the economy. Because of that, individualism should be revered and respected. It is important to note that not all the countries were utilized in the dataset. Based on that, the author recommends that in the future research, more countries should be included and the time span should be expanded to get more data points. In addition to that, some other models, such as Two-Stage Least Squares, Ordinary Least Squares or Generalized Method of Moments should be used. More economic, cultural or social variables should be included to the model, to get the full spectrum of the indicators that might affect economy and help economy to thrive.

CONCLUSION

In this thesis, the author explored the relationship between economic growth, political instability and the relationship between economic growth and individualism. For that, the random effect regression model and a balanced panel data for 57 countries was used. The time span was 2002-2019. The dependent variable was log GDP per person employed (constant 2017 PPP) and the explanatory variables were individualism and political instability indices. Indices that indicated the political instability were: business freedom, trade freedom, regulatory quality, government effectiveness, voice and accountability, tax burden and financial freedom. For the robustness check, more explanatory variables that indicate political instability were added. The added variables were investment freedom and monetary freedom. The data about economic growth was retrieved from World Bank (2021a) database. Individualism indices were retrieved from the Hofstede Insights (2021a). The data about political instability was retrieved from the World Bank (2021b) and Heritage (2021a) database. For the robustness check the variables were retrieved from the Heritage (2021a) database.

In the theoretical section, it was presented that the relationship between economic growth and political instability is negative. It has been shown that more politically unstable the situation is, more uncertainty it arises about the future. With that, investors might look to invest in the economy where political situation is stable. In addition, some of the businesses might move or open their businesses somewhere else other than in their home country because of better economic possibilities. Moreover, political instability decreases productivity growth. In addition, higher taxes might incite an informal economy where people conduct business off book. People might try to explore other options to do business without paying all the necessary taxes. Tax avoidance will reduce the overall economic growth.

In the theoretical section, it was presented that the relationship between economic growth and individualism is positive. Individualistic country lead to higher levels of productivity and citizens are more innovative. Innovation is one of the catalysts for the economic growth. That is why it is important that the political environment is stable and government should promote doing business.

This increases the entrepreneurial eagerness resulting that people are more motivated to boost and develop the economy. In addition, the results in theoretical section and previous studies have shown that individualism is making nations wealthier and allowing the economy to grow.

To establish that the empirical analysis supports the theoretical chapter and previous studies, econometric analysis was conducted. The results showed that there is a negative relationship between economic growth and political instability. Variables trade freedom and government effectiveness that indicated political instability were significant. These two indices show that higher the percentage, higher the stable political situation in a country is. This resulted in the empirical analysis when these two indices were positively related to economic growth. This shows that when there is a stable political environment (when indices increase) there is better economic growth. In addition, empirical results showed that there is a positive relationship between economic growth and individualism. This means that more individualistic countries are having more growth and development in their economies. These results support the theoretical section and previous studies.

The robustness check was also conducted and the results supported the baseline model results. Government effectiveness and individualism coefficients were better with the baseline model and trade freedom coefficient was better in the robustness check model. However, the changes were neglectable and significances remained. Tax burden gained significance and the results showed that the relationship between economic growth and political instability (tax burden) is negative. However, tax burden was significant on the 10% level, which means that relationship is rather weak. Therefore, this result shows that even when changing the data (adding new political instability variables and reducing number of countries that were used in the baseline model) it did not affect the baseline model. This means the results are robust.

This topic is of the highest importance, because in order to have a developing or stable economic environment, a country should be more individualistic. It is vital that this country also has a stable political situation. This thesis illuminates the fact that individualism is a positive characteristic in a society and is good for the economy, as well as stable political environment. In conclusion, the author answered to the two hypotheses and the research question through steadfast research and robust data analysis modelling. This thesis supports the concluding statement that economic growth and political instability has a negative relationship and economic growth and individualism are positively related.

KOKKUVÕTE

MAJANDUSKASV, POLIITILINE EBASTABIILSUS JA INDIVIDUALISM. RIIKIDEVAHELINE ANALÜÜS

Ragne Rajas

Poliitiline olukord maailmas on pingeline. Pinged tekitavad poliitilist ebastabiilsust ning aastaid on seda juba tekitanud vähene võimalus osaleda poliitilises protsessis, immigratsiooni küsimused, fiskaalne surve (maksude tõusud) ja erinevad piirangud. Nende faktorite mõjul tekkinud pinged tavakodanike ja valitsuse vahel mõjuvad majandusele halvasti. Piirangud ettevõtlusele tekitavad inimestes ebakindlust, mille tulemusel võidakse kolida oma ettevõttega riiki, kus tingimused ettevõtluseks on soodsamad. Selleks, et ettevõtted jääks alles ja koduriigi majandus saaks seeläbi areneda, on oluline, et ettevõtlust toetataks ja antaks rohkem vabadust ja sõnaõigust poliitilises protsessis osalemiseks. Lisaks sellele on pandeemia COVID-19 tõttu valitsused pidanud piirama inimeste liikumist ja ettevõtlust ning see on kaasa toonud majandusarengu ebastabiilsuse.

Vabadus ja sõnaõigus samas kasvatavad riigis individualismi. Nimelt on leitud, et individualism on dominantsem demokraatlikus riigis, ehk riigis, kus eksisteerivad vabadus ja sõnaõigus. Samas on individualistlikus riigis inimesed innovaatilisemad ning see peaks aitama kaasa majanduse arengule. Sellest tulenevalt tekitab selline seos paratamatult küsimuse, et kas poliitiline ebastabiilsus ja individualism mõjutavad majanduskasvu.

Magistritöö eesmärk on leida seos majanduskasvu, poliitilise ebastabiilsuse ja individualismi vahel. Selleks kasutab autor ajaperioodil 2002-2019 kogutud tasakaalustatud paneelandmeid 57 riigi kohta üle maailma. Empiiriline analüüs tehakse kasutades juhuslike efektide mudelit.

Magistritöö eesmärgi saavutamiseks on püstitatud uurimisküsimus:

1. Milline seos eksisteerib majanduskasvu, poliitilise ebastabiilsuse ja individualismi vahel?

Magistritöö hüpoteesid on:

H1: Majanduskasvu ja poliitilise ebastabiilsuse vahel eksisteerib negatiivne seos.
H2: Majanduskasvu ja individualismi vahel eksisteerib positiivne seos.

Varasemad uuringud on leidnud negatiivsed seosed majandusliku olukorra ja poliitilise ebastabiilsuse vahel või positiivse seose majandusliku olukorra ja individualismi vahel. Käesoleva magistritöö uudsus seisneb selles, et autor kasutab teisi poliitilist ebastabiilsust indekseerivaid sotsiaalmajanduslikke näitajaid, mida varasemates uuringutes nimetatud seoste uurimiseks on kasutatud kas vähe või üldse mitte.

Magistritöö teema on oluline riigi majanduse arengule kaasa aitamise seisukohast. Nimelt, annab töö tulemus teadmise, et selleks, et riigi majanduse arengule kaasa aidata, peab poliitiline olukord olema stabiilne, eksisteerima peab vabadus ja sõnaõigus ning seega ka suurem individualism. Selline seos näitab, et poliitiline stabiilsus on väga oluline ning individualismi ei pea käsitlema riigi seisukohalt negatiivsena vaid seda peaks majandusliku heaolu tagamise eesmärgil pigem populariseerima.

Analüüsi tegemiseks kasutab autor sõltuva muutujana sisemajanduse koguprodukti töötaja kohta ning selgitavate muutujatena: individualismi, ärivabaduse, kaubandusvabaduse, regulatsioonide kvaliteedi, maksukoormuse, finantsvabaduse, valitsuse sekkumise ning „kodanike vabadus otsustada oma riigi heaolu üle“ indeksi. Sensitiivsusanalüüsi jaoks kasutab autor lisaks eelnevalt mainitud selgitatavatele näitajatele: investeerimisvabaduse indeksi ning rahavabaduse indeksi.

Teooria osas on välja toodud, et poliitiliselt ebastabiilne olukord tekitab tuleviku osas ebakindlust. Ebakindlus võib panna investoreid muutma oma investeerimisstrateegiaid ning nad võivad investeerida mujale riiki, kus poliitiline olukord on stabiilsem. Lisaks võivad ettevõtete omanikud avada või viia oma äritegevuse mujale riiki, kus majanduslik olukord on nende jaoks soodsam. Poliitiline ebastabiilsus kahandab toodangu kasvu. Lisaks sellele võivad kõrgemad maksud suurendada varimajandust ning ettevõtete omanikud otsivad võimalusi maksudest eemale hoiduda. See probleem põhjustab aga majanduslikku kahju.

Individualistlik riik viib kõrgema toodangu kasvuni ning kodanikud on rohkem innovaatilisemad. Innovatsioon on üks põhialustest majanduskasvuks. Seetõttu on oluline, et poliitiline olukord oleks stabiilne ja et riik ei sekkuks äritegevusse, vaid toetaks äride toimimist. Selline tegevus suurendab ettevõtliku meelt ning see omakorda tekitab suuremat motivatsiooni majanduse elavdamiseks.

Selleks, et leida kas empiiriline analüüs toetab teooriat, tehti regressioonanalüüs. Analüüsi tulemused vastavad teooriale, varasematele uuringutele ning püstitatud hüpoteesidele. Oluline on ka kontrollida, kas seosed kehtivad, kui mudelis teha muudatusi. Selleks tehti sensitiivsusanalüüs. Analüüs näitab, et põhimudel on robustne ehk isegi kui andmestikus teha muudatusi, jääb seos kehtima. Sellega on vastatud uurimisküsimusele ning hüpoteesid said kinnitust, et majanduskasvu ja individualismi vahel eksisteerib positiivne seos ning majanduskasvu ja poliitilise ebastabiilsuse vahel eksisteerib negatiivne seos.

LIST OF REFERENCES

Aisen, A., Veiga, F. J. (2006). Does Political Instability Lead to Higher Inflation? A Panel Data Analysis. *Journal of Money Credit and Banking*, 38(5), 1379-1389.

Aisen, A., Veiga, F. J. (2008). The political economy of seigniorage. *Journal of Development Economics*, 87(1), 29-50.

Aisen, A., Veiga, F. J. (2013). How does political instability affect economic growth? *European Journal of Political Economy*, 29(1), 151-167.

Alesina, A., Özler, S., Roubini, N., Swagel, P. (1996). Political instability and economic growth. *Journal of Economic Growth*, 1(2), 189-211.

Allik, J., Realo, A. (2004). Individualism-Collectivism and Social Capital. *Journal of Cross-Cultural Psychology*, 35(1), 29-49.

Amazon. (2020). *Amazon's economic impact in the U.S.* Available at: https://www.aboutamazon.com/news/job-creation-and-investment/amazons-economic-impact-in-the-u-s, 29. April 2021.

Ang, J. B. (2015). Agricultural Legacy, Individualistic Culture, and Technology Adoption. *EGC Report No: 2015/06*.

Angelou Economics. (2018). *Economic Impact of Apple.* Available at: https://angeloueconomics.com/keep-up-with-ae/economic-impact-of-apple-angeloueconomics/, 29. April 2021.

Annett, A. (2001). Social Fractionalization, Political Instability, and the Size of Government. *IMF Staff Papers*, 48(3), 1-32.

Asteriou, D., Price, S. (2001). Political Instability and Economic Growth: UK Time Series Evidence. *Scottish Journal of Political Economy*, 48(4), 1-17.

Berggren, N., Bergh, A., Bjørnskov, C. (2012). The growth effects of institutional instability. *Journal of Institutional Economics*, 8(2), 187-224.

Bernal-Verdugo, L. E., Furceri, D., Guillaume, M. D. (2013). The Dynamic Effect of Social and Political Instability on Output: The Role of Reforms. *IMF Working Papers*, 13(91).

Blanco, L., Grier, R. (2009). Long Live Democracy: The Determinants of Political Instability in Latin America. *The Journal of Development Studies*, 45(1), 76-95.

Block, J. (2016). Corporate income taxes and entrepreneurship. *IZA World of Labor*, 257.

Blum, J., Gründler, K. (2020). Political Stability and Economic Prosperity: Are Coups Bad for Growth? *CESifo Working Paper Series 8317*.

Brady, D. W. (2016). Globalization and Political Instability. *The American Interest*, 11(6).

Bruno, C. (2013). *California's Migration Problem: "Good Luck Movin' Up Cause I'm Movin' Out"*. Available at: https://www.hoover.org/research/californias-migration-problem-good-luck-movin-cause-im-movin-out?fbclid=IwAR2j2xZx-sa2eyrcexadeaDwNAenKt4CcTXCbBfuiOX3UnDf8Bng523OGDM, 03. January 2021.

Campos, N. F., Karanasos, M. G., Tan, B. (2012). Two to tangle: Financial development, political instability and economic growth in Argentina. *Journal of Banking & Finance*, 36(1), 290-304.

Campos, N. F., Nugent, J. B. (2002). Who is afraid of political instability? *Journal of Development Economics*, 67(1), 157-172.

Carmignani, F. (2003). Political Instability, Uncertainty and Economics. *Journal of Economic Surveys*, 17(1), 1-54.

Central Intelligence Agency. (2021). *Political instability and regional tensions.* Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001283117.pdf, 07. January 2021.

CFIB. (2020). *Small firms call on Ontario Government to save the holiday season for small retailers.* Available at: https://www.cfib-fcei.ca/en/media/news-releases/cfib-questions-how-shuttering-small-businesses-and-sending-crowds-walmart-and, 07. January 2021.

Chan, A. W. H., Cheung, H. Y. (2016). Extraversion, individualism and M&A activities. *International Business Review*, 25(1), 356-369.

Chen, F. F., West, S. G. (2008). Measuring individualism and collectivism: The importance of considering differential components, reference groups, and measurement invariance. *Journal of Research in Personality*, 42(2), 259-294.

Chui, A. C. W., Titman, S., Wei, K. C. J. (2010). Individualism and Momentum around the World. *The Journal of Finance*, 65(1), 361-392.

Covid: How are European countries tackling the pandemic? (2021). Available at: https://cordmagazine.com/world-news/covid-how-are-european-countries-tackling-the-pandemic/, 26. January 2021.

Daniel, K., Hirshleifer, D., Subrahmanyam, A. (1998). Investor Psychology and Security Market Under- and Overreactions. *The Journal of Finance*, 53(6), 1839-1885.

Dou, P., Truong, C., Veeraraghavan, M. (2016). Individualism, Uncertainty Avoidance, and Earnings Momentum in International Markets. *Contemporary Accounting Research*, 33(2), 851-881.

Dutt, P., Mobarak, A. M. (2016). Democracy and policy stability. *International Review of Economics & Finance*, 42, 499-517.

Elbahnasawy, N. G., Ellis, M. A., Adom, A. D. (2016). Political Instability and the Informal Economy. *World Development,* 85.

Ezcurra, R. (2020). Individualism and political instability. *European Journal of Political Economy*.

European Commission. (2015). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: a European Agenda on Migration*. Available at: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/background-information/docs/communication_on_the_european_agenda_on_migration_en.pdf, 07. January 2021.

European Commission. (2021). Common European Asylum System. Available at: https://ec.europa.eu/home-affairs/what-we-do/policies/asylum_en, 09. March 2021.

Feng, C., Wang, H., Lu, N., Chen, T., He, H., Lu, Y., Tu, X. M. (2014). Log-transformation and its implications for data analysis. *Shanghai Arch Psychiatry*, 26(2), 105-109.

Financial Journey. (2020). *Are people leaving California?* Available at: https://www.financialjourney.com/blog/are-people-leaving-california, 01. January 2021.

Friedman, M., Friedman, R. (1980). *Free to choose. A Personal Statement.* Florida: Harcourt Books INC.

Fuller, W. A. (1996). *Introduction to Statistical Time Series* (2nd ed.). Canada: John Wiley & Sons Inc.

Gantenbein, P., Kind, A., Volonté, C. (2019). Individualism and Venture Capital: A Cross-Country Study. *Management International Review*, 59, 741-777.

Gebremedhin, T. A., Mavisakalyan, A. (2013). Immigration and Political Instability. *Kyklos*, 66(3), 317-341.

IMFBlog. Gopinath, G. (2020, Apr 14). The Great Lockdown: Worst Economic Downturn Since the Great Depression. [Blog post]. Available at: https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/, 08. January 2021.

Gorodnichenko, Y., Roland, G. (2011). Individualism, innovation, and long-run growth. *Proceedings of the National Academy of Sciences,* 108(4), 21316-21319.

Gorodnichenko, Y., Roland, G. (2012). Understanding the Individualism-Collectivism Cleavage and Its Effects: Lessons from Cultural Psychology. *Institutions and Comparative Economic Development*, 213-236.

Gorodnichenko, Y., Roland, G. (2017). Culture, Institutions, and the Wealth of Nations. *The Review of Economics and Statistics*, 99(3), 402-416.

Gorodnichenko, Y., Roland, G. (2020). Culture, institutions and democratization*. *Public Choice*.

Grosmann, I., Varnum, M. E. W. (2015). Social structure, Infectious Diseases, Disasters, Secularism, and Cultural Change in America. *Psychological Science*, 26(1), 311-324.

Hansen, C. W. (2012). Economic growth and individualism: The role of informal institutions. *Economics Letters,* 118(2), 378-380.

Heritage. (2021a). Explore the data. The Heritage Foundation (database) [Online]. Available at: https://www.heritage.org/index/explore, 11. January 2021.

Heritage. (2021b). *Business Freedom*. Available at: https://www.heritage.org/index/business-freedom, 11. January 2021.

Heritage. (2021c). *Trade Freedom*. Available at: https://www.heritage.org/index/trade-freedom, 11. January 2021.

Heritage. (2021d). *Fiscal Freedom*. Available at: https://www.heritage.org/index/fiscal-freedom, 11. January 2021.

Heritage. (2021e). *Financial Freedom.* Available at: https://www.heritage.org/index/financial-freedom, 11. January 2021.

Heritage. (2021f). *Monetary Freedom*. Available at: https://www.heritage.org/index/monetary-freedom, 3. May 2021.

Heritage. (2021g). *Investment freedom*. Available at: https://www.heritage.org/index/investment-freedom, 3. May 2021.

Hofstede, G. (2001). *Culture Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations.* California: Sage Publications Inc.

Hofstede Insights. (2020). Compare countries. Hofstede Insights (database) [Online]. Available at: https://www.hofstede-insights.com/country-comparison/china,japan,russia/, 30. December 2020.

Hofstede Insights. (2021a). Compare countries. Hofstede Insights (database) [Online]. Available at: https://www.hofstede-insights.com/country-comparison/, 03. January 2021.

Hofstede Insights. (2021b). *FAQ*. Available at: https://hi.hofstede-insights.com/faq, 06. January 2021.

Jaouadi, S., Arfaoui, L., Ziedi, A. (2014). Political Instability and Growth: Case of the Developing Countries. *International Journal of Social Science Research*, 2(1), 19-28.

Jong-A-Pin, R. (2009). On the measurement of political instability and its impact on economic growth. *European Journal of Political Economy*, 25(1), 15-29.

Kemmelmeier, M., Jambor, E. E., Letner, J. (2006). Individualism and Good Works: Cultural Variation in Giving and Volunteering Across the United States. *Journal of Cross-Cultural Psychology*, 37(3), 327-344.

Kooraki, S., Hosseiny, M., Myers, L., Gholamrezanezhad, A. (2020). Coronavirus (COVID-19) Outbreak: What the Department of Radiology Should Know. *Journal of the American College of Radiology*, 17(4), 447-451.

Kyriacou, A. P. (2016). Individualism–collectivism, governance and economic development. *European Journal of Political Economy*, 42(1), 91-104.

Lau, L. S., Samari, G., Moresky, R. T., Casey, S. E., Kachur, S. P., Roberts, L. F., Zard, M. (2020). COVID-19 in humanitarian settings and lessons learned from past epidemics. *Nature Medicine*, 26(1), 640-648.

Matza, T. (2012). "Good individualism"? Psychology, ethics, and neoliberalism in postsocialist Russia. *Journal of the American Ethnological Society*, 39(4), 804-818.

Murad, M. S. A., Alshyab, N. (2019). Political instability and its impact on economic growth: the case of Jordan. *International Journal of Development Issues*, 18(3), 366-380.

Nomor, D. T., Iorember, P. T. (2017). Political Stability and Economic Growth in Nigeria. *Journal of Economics and Finance*, 8(2), 45-53.

O'Connor, A. (2010). Government policy, banks' strategies and the financial crisis: Contagion through interconnectedness. *Vie & Sciences De L'Enterprise*, 3(4), 59-75.

OECD. (2013). *Trust in government, policy effectiveness and the governance agenda.* Available at: https://www.oecd-ilibrary.org/docserver/gov_glance-2013-6-en.pdf?expires=1620734559&id=id&accname=oid013565&checksum=5504B8393F2691BF6FDA1F478F18D4AD, 11. May 2021.

Ogihara, Y., Uchida, Y. (2014). Does individualism bring happiness? Negative effects of individualism on interpersonal relationships and happiness. *Frontiers in Psychology*, 5, 1-8.

Ogihara, Y., Uchida, Y., Kusumi, T. (2014). How do Japanese perceive individualism? Examination of the meaning of individualism in Japan. *Psychologia*, 57, 213-223.

Pinillos, M.-J., Reyes, L. (2011). Relationship between individualist–collectivist culture and entrepreneurial activity: evidence from Global Entrepreneurship Monitor data. *Small Business Economics*, 23(1), 23-37.

Pitlik, H., Rode, M. (2017). Individualistic values, institutional trust, and interventionist attitudes. *Journal of Institutional Economics*, 13(3), 575-598.

Polachek, S. W., Sevastianova, D. (2011). Does conflict disrupt growth? Evidence of the relationship between political instability and national economic performance. *The Journal of International Trade & Economic Development*, 21(3), 361-388.

Pritchard, J. (2020). *What Caused the Mortgage Crisis?* Available at: https://www.thebalance.com/mortgage-crisis-overview-315684, 08. January 2021.

Realo, A., Koido, K., Ceulemans, E., Allik, J. (2002). Three Components of Individualism. *European Journal of Personality*, 16(3), 163-184.

Reed, L. W. (2001) *Laissez Faire and Economic Growth*. Available at: https://www.mackinac.org/3479, 5. May 2021.

Rummel, R. J. (1995). Democracy, Power, Genocide, and Mass Murder, *Journal of Conflict Resolution*, 39(1), 3-26.

Santos, H. C., Varnum, M. E. W., Grossmann, I. (2017). Global Increases in Individualism. *Psychological Science*, 28(9), 1228-1239.

Schaller, M., Neuberg, S. L. (2008). *Foundations of evolutionary psychology: Intergroup prejudices and intergroup conflicts*. New York: Lawrence Erlbaum Associates.

Schimmack, U., Oishi, S., Diener, E. (2005). Individualism: A Valid and Important Dimension of Cultural Differences Between Nations. *Personality and Social Psychology Review*, 9(1), 17-31.

Sharfuddin, S. (2020). The world after Covid-19. *The Commonwealth Journal of International Affairs*, 190(3), 247-257.

Should I always transform my variables to make them normal? (2021). Available at: https://data.library.virginia.edu/normality-assumption/, 6. February, 2021.

Sowell, T. (1987). *A Conflict of Visions: Ideological Origins of Political Struggles.* Cambridge: Basic Books.

Sowell, T. (2007). *A Conflict of Visions: Ideological Origins of Political Struggles* (2nd ed.). Cambridge: Basic Books.

Steele, L. G., Lynch, S. M. (2013). The Pursuit of Happiness in China: Individualism, Collectivism, and Subjective Well- Being During China's Economic and Social Transformation. *Social Indicators Research*, 114(2), 441-451.

Sweidan, O. D. (2017). The influence of political regime vs political instability on real output: Evidence from the MENA region. *Journal of Economic Studies*, 44(1), 154-167.

Zagorski, K., Kelley, J., Evans, M. D. R. (2010). Economic Development and Happiness: Evidence from 32 Nations. *Polish Sociological Review*, 169, 3-19.

Zhang, X., Liang, X., Sun, H. (2013). Individualism–Collectivism, Private Benefits of Control, and Earnings Management: A Cross-Culture Comparison. *Journal of Business Ethnic*, 114(4), 655-664.

Telatar, E., Telatar, F., Cavusoglu, T., Tosun, U. (2010). Political instability, political freedom and inflation. *Applied Economics*, 42(30), 3839-3847.

Tutz, G. (2011). *Regression for Categorical Data: Regularization and Variable Selection for Parametric Models*. Cambridge: Cambridge University Press.

Veldhuis, N. (2008). Self-interest benefits everyone: The market meltdown wasn't caused by greed. In: M. Mullins (Eds.), Canada: Fraser Forum, 11.

Why run your business in, or from, Hong Kong? (2021). Available at*:* https://www.guidemehongkong.com/why-hong-kong, 04. March 2021.

World Bank. (2021a). World Development Indicators. World Bank DataBank (database) [Online]. Available at: https://databank.worldbank.org/reports.aspx?source=2&series=SL.GDP.PCAP.EM.KD&country=#, 27. April 2021.

World Bank. (2021b). Worldwide Governance Indicators. World Bank DataBank (database) [Online]. Available at: https://databank.worldbank.org/source/worldwide-governance-indicators/Type/TABLE/preview/on, 06. January 2021.

Østby, G. (2008). Polarization, Horizontal Inequalities and Violent Civil Conflict. *Journal of Peace Research*, 45(2), 143-162.

APPENDICES

Appendix 1. List of Countries Used in the Empirical Analysis

Countries			
Australia	Austria	Bangladesh	Belgium
Brazil	Canada	Chile	China
Colombia	Costa Rica	Croatia	Czech Republic
Denmark	Ecuador	El Salvador	Estonia
Finland	France	Germany	Greece
Guatemala	Hong Kong	Hungary	Indonesia
Iran	Ireland	Italy	Jamaica
Japan	Latvia	Lithuania	Luxembourg
Malta	Mexico	Morocco	Netherlands
New Zealand	Norway	Panama	Philippines
Poland	Portugal	Russia	Singapore
Slovakia	Slovenia	Spain	Suriname
Sweden	Switzerland	Thailand	Trinidad and Tobago
Turkey	United Kingdom	United States	Uruguay
Vietnam			

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