

**THE POLITICAL INSTITUTION IN MONGOLIA AND
SUSTAINABILITY OF ECONOMIC GROWTH:
An Interrupted Time Series Analysis**

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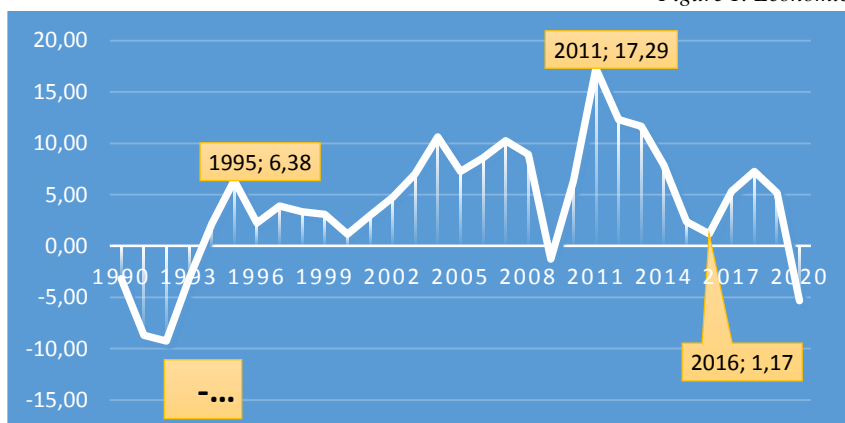
Abstract: During the last three decades, there have been several cases of faster economic growth and sharp economic decline in Mongolia. It shows that it is very worth to study and identify what factors causes the unsustainability of economic growth in post-communist countries. In this study, we relied on two competing accepted hypotheses on economic development that reject each other. We combined them as a convergent knowledge to study our research problem and find holistic answer to our research question. We use secondary source of data to test our hypotheses. We employed interrupted time-series design of quasi-experiment study to analyze the data and interpret the meanings of data analysis. One finding of this study shows that reforms towards inclusive economy causes higher sustainability of economic growth. Another finding shows that a coalition government of dominant parties changes economic institutions towards more extractive one and causes sharp economic decline when there is lower knowledge of managing economic policy effectively.

INTRODUCTION

Since 1990s, the Mongolia's economy has not been sustainable. Mongolians have witnessed both unusual growth and unusual decline. Most of voters complain that this instability happens in association with political reasons. The instability has been more serious and harmful since 2015.

As it is shown in the Figure 1, there was an economic crisis. The economic growth was -9.26 (Bank, 2021). There was nothing besides salt in shops and supermarkets because of lack of subsidy or economic aid from the Soviet Union. Even the Russian Federation that was newly established after the collapse of Soviet Union was under economic crises itself. Therefore, it was not feasible for Mongolia to wait for aid from Russia. Instead of Russia, the donor countries that was led by Japan began to support Mongolia's efforts to adopt new political and economic institutions. At that time, Mongolia had strived to build a democratic regime for two years after the country changed its communist regime. It had been trying to build a market economy instead of command economy. The new democratic constitution had just enabled multi political party system.

Figure 1. Economic growth



Source: World Bank 2021

However, Mongolia's economy began to grow dramatically. The economic growth reached 6.38 in 1995. This economic growth shows that the policy of free market economy had benefitted Mongolia. During those three years, Mongolia created private sector and reduced the role of government in the economy.

There was unusual growth in 2011. The economic growth reached 17.39 (World Bank, 2021). At that year, Mongolia was a promising economy. It associates with the foreign investment for Oyu-Tolgoi mining site. Oyu-Tolgoi is one of the world largest copper and gold ventures that is owned by Rio Tinto and Mongolian government. The investment significantly expanded the national economy of Mongolia. However, that great economic growth didn't last for a long time. There was an unusual decline again in 2016. Mongolian economy declined sharply and

reached 1.17. The country nearly faced a financial crisis in 2016. At the request of Mongolia's government, the International Monetary Fund (IMF) approved a three-year extended fund facility arrangement for Mongolia to stabilize the economy (IMF, 2017). The total financing package amounts to about \$5.5 billion, including support from the IMF, Asian Development Bank, the World Bank, Japan, Korea and China. IMF claims that this crisis happened in connection with "the sharp decline of commodity prices and the slowdown in key export markets, unsustainable public debt, and falling international reserves, and lower growth" (IMF, 2017).

Some scholars argue that unsustainability of economic growth frequently occur in association with the deviant development of representative democracy. For instance, Uganbayar (2012) claims that clientelist promises of mainstream political parties in Mongolia negatively influences the effectiveness and efficiency of economic and welfare policies. Some evidences indicate that the failures of public policy are associated with the increase of populism in Mongolia's democracy (David Stanway and Terrence Edwards, 2012; Verena Fritz, Brian Levy, and Rachel Ort, 2014).

While I was reviewing the literature of sustainability of Mongolia's economic growth, I realized that there have been few researches on describing the effects of political and economic institutions on economy. These days, it has been becoming more worth to identify what political and economic institutions have developed in Mongolia and systematically study how it influences the sustainability of economic growth. We suspect that there aren't still comprehensive knowledge and solution to this problem. Therefore, we decided to conduct research under this given topic. To conduct this research, we raised one specific research question. Our research question is "How do the existing political and economic institutions affect the sustainability of Mongolia's economic growth?"

A. Research objectives

We have proposed the following research objectives to explore more systematic and holistic answers to the given research question we raised in the above paragraph. We have four research objectives.

1. To review the existing literature that studies the relationship between the political institutions and economy and explore what is known and what is unknown there.
2. To explore what political and economic institutions exist in Mongolia and describe their characteristics.
3. To design and develop hypotheses on the relationship between representative politics and economy based on the findings of literature
4. To collect, analyze, and interpret data that are appropriate and useful for our objectives to test the above hypotheses.

B. Hypothesis

We have proposed the following two major hypotheses to achieve our hypotheses:

1. Economic reforms towards more inclusive economic reform are more likely to create fast recovery of economic growth.
2. More extractive economic institutions under the influence and political response of ruling political parties are more likely to cause sharp decline of economic growth in Mongolia

LITERATURE REVIEW ON POLITICAL INSTITUTIONS AND ECONOMIC GROWTH

During the literature review on the relationship between political institution and economic growth, I observed two trends of studies on this issue. The first theoretical tradition is the “ignorance hypothesis”. According to this tradition of study, some governments or countries fail to design, plan, and manage both public policy and economic policy in association with incompetent rulers or ruling parties (Robbins, 1935; Medema, 2009; Shizgal, 2012; Lopez de Leon, Fernanda Leite, and Renata Rizzi, 2014). They claim that economy fails when individuals and firms have less economic freedom because of incompetent rulers or government.

Robbins(1935) argues that "economics is a science which studies human behavior as a relationship between ends and scarce means which have alternative uses". Some scholars argue that this accepted hypothesis matches the existing situation of Mongolia partially (Reeves, 2011). He claims that both Mongolia’s state weakness and unconscious power create a “mutually reinforcing threat to Mongolia's environmental security”.

The second theoretical tradition that studies the association political institution and economy emerged recently in 2012. The tradition began with hypothesis on the effect of “inclusive and extractive economic institutions” on economic development (Acemoglu, Daron; Robinson, James A., 2012). They argue that the political and economic institutions societies chose influence the success and failures of economy (Jakšić, Miomir; Jakšić, Milica, 2018). They reject other theories arguing that economic success differences across countries are affected by the differences of culture, climate, geography or knowledge quality on good public policy. Acemoglu and Robinson (2012) argue that nations who have chosen extractive economic institutions serving for narrow elites fails in economic growth.

The scholars of the second theoretical tradition define that inclusive economic institutions protect and promote property rights, democratic order, and state leadership for markets. Their research also show that inclusive economic institutions support investment and innovation through various public policies of incentives and provide majority of citizens with education opportunities to learn new business and

make them more competent in labor market (Acemoglu, D., Liabson, D., List, J., 2015).

In many ways, the second theoretical tradition is useful to theoretically explain the existing scenario of Mongolia's economy and politics. There are many evidences in Mongolia indicating that Mongolia's economy is not inclusive enough. Some research finding show that patron-client relationship is very strong in Mongolian representative democracy (Lauren Bonilla & Tuya Shagdar, 2018). Another research result shows that political clientelism has already become unique characteristic of Mongolia's representative democracy, political coalition, and political response to public policy issues (Uuganbayar, 2012). Political elites extract their power and resources through clientelism. They win political supports of voters by using clientelist promises. They use public resources for keeping their clientelist promises, not from their pockets. They do it for seizing their political power. They have implemented many cash handout programs. The cash welfare programs have had harmful effects on the national economy.

While I am reviewing the existing literature, we found that inclusive and extractive economic institutions are useful concepts for describing or explaining the existing scenario of Mongolian economic sustainability. However, we argue that we should apply both theoretical traditions to systematically study why there is lower sustainability in the economic growth of Mongolia. Our study doesn't focus on supporting one of these two sides of these two hypotheses. Therefore here, we rely on both hypotheses that are based on "ignorance hypothesis" and "economic institutions." In addition to this claim, there have been few systematic and political-economic efforts to study how both inclusive and extractive economic institutions have influenced the unusual rapid growth and unusual sharp decline in Mongolian economy.

RESEARCH METHODOLOGY: AN INTERRUPTED TIME-SERIES ANALYSIS

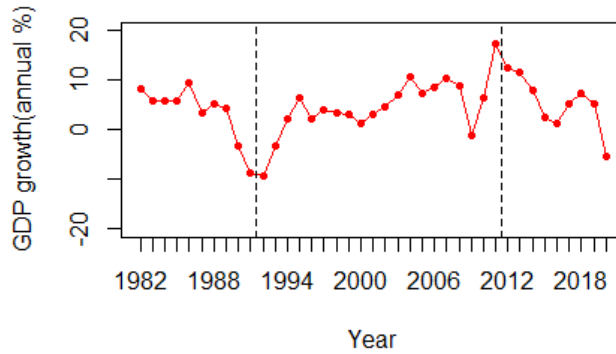
Our study aims to study how inclusive and extractive economic institutions that existed in various periods of time during the last three decades have affected the sustainability of Mongolia's economic growth. Since we study the effect of different economic institutions on the economic growth of Mongolia within a specific time period, the pretest and posttest design are the most appropriate design for this given research. Experimental study is used for performing pre-test and post-test design. However, we can't employ experimental study in this study, since we use purposive sampling in this study. For experimental study, we have to use random sampling. Therefore, we apply Interrupted Time Series Design (ITS) of quasi-experiment study in this research.

We collect our data at equally-spaced time points from the last three decades of Mongolia's economic growth. The observation of our study covers statistical data from 1982 to 2021. Based on the review of previous studies and reports of international organizations, we identified two time periods when more inclusive and more extractive economic institutions have existed. We use word "more", because there haven't been full inclusive and extractive economic institution. According to the existing evidence in the reports and findings of previous studies, 1992-2011 was a transition period when new laws that were adopted after 1992 new democratic constitution enabled all Mongolian citizens to exercise their economic freedom. Since the economic freedom and privatization began to be secured, we select this period as the period when economic institution was becoming more inclusive.

The second important period occurred in the last decade when Mongolia's economy significantly expanded due to the foreign investment into Oyu-Tolgoi gold and copper venture. Mongolia economic growth reached 17.29. This was a great achievement. However, the economy sharply declined and Mongolia nearly experienced an economic crisis. To stabilize the economy, Mongolian government requested a rescue program from IMF. The IMF and other donors approved the extended fund facility. Due to the program and control of IMF, the Mongolian economy stabilized and recovered under the advice, management, and supervision of IMF. The benefit of Oyu-Tolgoi has been lower than the expectation of Mongolians. It has been likely to increase the debt of Mongolia rather than increasing the profit from this project. Many people argue that it happens because of illegal 2015 "Dubai agreement". The Saikhanbileg established the agreement by skipping the approval of parliament. This means that the government of that time established agreement by considering interest of coalition government and ruling political parties rather than meeting the interest of other domestic stakeholders. Therefore, we select this time period as the period of more extractive economic institution when the influence and political response of ruling coalition government on national economy existed in association with the lack of control by a strong opposite party in the parliament.

We have precisely described the selected two different periods of changes of political and economic institutions in the Figure 2 . The first one is the period from 1992 to 2011 when Mongolian economic institution changed from communist command economy with limited economic freedom to more inclusive economy with economic freedom. The second period is the period from 2012 to 2016 when ruling coalition cabinet and ruling party influential politicians enjoy more autonomous decision-making without the control of strong opposite party in the parliament.

Figure 2. Two different periods



Source: Data from World Bank, 2021

FINDINGS AND DISCUSSION

Using the two different time periods that are shown in the Figure 2, I examined the first and second hypotheses of this study. To test these hypotheses, I utilized interrupted time series analysis of multiple interventions. We developed and relied on the following mathematical model to test our hypothesis

$$Change_{jkt} = \beta_0 + \beta_1 \cdot time_t + \beta_2 \cdot level_j + \beta_3 + Level_j \cdot time_t + \beta_4 \cdot level_k + \beta_5 \cdot level_k \cdot time_t + \varepsilon_{jkt}$$

The finding of our first hypothesis test indicates that economic institutional reforms towards more inclusive economic reform caused a fast recovery of economic growth in Mongolia and good sustainability from 1992 to 2011. As it is shown in the

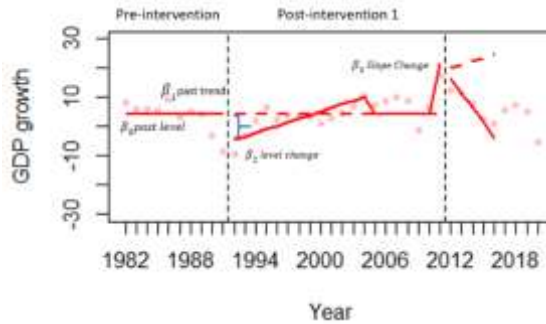
Figure 3, there was sharp decline of economic growth in 1992 after the collapse of communism. The economic growth sharply declined to -9.26 in 1992. Then, due to the economic institutional reforms for enabling people to buy and sell what they want, Mongolian economy recovered more faster and the economic growth reached 10.36 in 2004.

As it is shown in the Figure 3, the horizontal red dashed line shows how the economic growth of communist Mongolia in the middle of 1980s would continue except for the sharp decline in 1989-1991 if you didn't make any economic institutional towards democracy and market economy. The horizontal dashed line didn't have any change of slope.

The first vertical black dashed line indicated the time point of collapse of communism and transition towards market economy. At that point, there was harmful decline of economic growth and sharply declined to -9.26 . There was a level change of red regression straight line(β_2) and the line was interrupted at the point of 1992. Then the red regression straight line went up from -9.26 to 10.36 and the slope of regression line increased and went up from the left to the right(β_3). This result

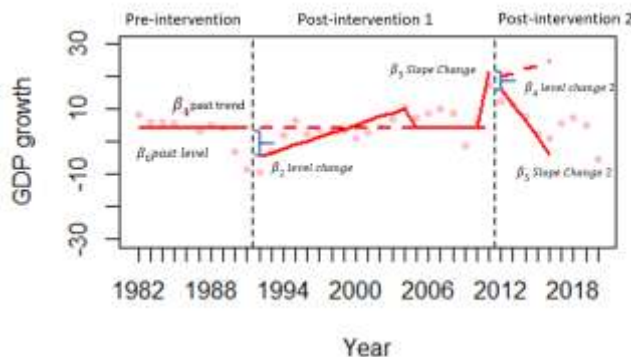
shows that the first alternative hypothesis is accepted according to this analysis of interrupted series of multiple interventions. In other words, this means that economic reforms towards more inclusive economic reform are more likely to create fast recovery of declined economy or cause much faster economic growth.

Figure 3. Interrupted time series (ITS) – Post-intervention 1



As it is shown in the Figure 4, the second vertical black dashed line indicates the time period when there is a weak control of opposite party in the parliament while there is a coalition government of two powerful parties. There is also unusual level and trend change at that point (β_4 and β_5). The economic growth declined sharply from 17.29 to 1.17 in 2011-2016. At that time, Mongolia nearly faced the challenge of economic crisis. This result shows that the lack of stronger opposite party in the parliament lowers the quality of inclusive economic institution, changes it towards more extractive economic institution and causes the failures of economic policy. This indicates that the second hypothesis of our study is also accepted. This means that increasing change towards more extractive economic institutions under the coalition government of dominant ruling political parties without stronger opposite party in the parliament causes the sustainability of economic growth and may cause sharp decline in the economic growth. We also suspect that lower knowledge and experience of ruling decision makers on managing market economy might have influenced this lower sustainability of economic growth.

Figure 4. ITS for Post-intervention 2



CONCLUSION

This study aimed to identify key factors that causes the lower sustainability of Mongolia's economic growth. We used two traditions of literature on economic development and failures: "ignorance of hypothesis" and "inclusive and extractive institutions". There are three important findings from our study. Firstly, our research findings show that reforms towards more inclusive economy causes much faster recovery of economy and increases the sustainability of economic growth. Secondly, we found that increasing change towards more extractive economic institutions under the leadership of coalition government of two dominant parties may cause the quality of economic policy and cause sharp economic decline. Thirdly, lower knowledge of keeping the sustainability of economic growth among ruling decision makers may cause the unsustainability of economic growth.

The most importantly, the general finding of this study shows that the Mongolian government or ruling party should focus more on building inclusive economic institution as a solution to rescue national economy from sharp economic decline.

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