



Radboud Universiteit Nijmegen

**THE INFLUENCE OF SOCIO-ECONOMIC DETERMINANTS ON
DEMOCRATIZATION IN ASIAN COUNTRIES**

Le Xuan Truc Giang

s4764021

lexuantrucgiang@student.ru.nl

**Radboud University
Nijmegen School of Management**

Thesis submitted for the degree of
Master's program in Political Science
Specialization: Comparative Politics

Supervisor: Dr. Maurits J. Meijers

13 August 2018
Nijmegen, The Netherlands

List of Tables

Tables

1. Correlation matrix of factors affecting the level of democracy, 24 nations, 1990 – 2015 (p.35)
2. Descriptive statistics on factors that may influence on the level of democracy, across 24 Asian countries, 1990 – 2015 (p.40)
3. Descriptive statistics after listwise deletion on factors that may influence on the level of democracy, across Asian countries, 1990 – 2015 (p.41)
4. The regression results on factors that may influence on the level of democracy, across 24 Asian countries, 1990 – 2015 (p.42)

Appendix tables

1. Collinearity Statistics of the coefficients in multiple regression analysis (p.69)

List of Figures

Figures

1. Modernization Theory (p.9)
2. Human Development Sequence (p.18)
3. Result of Breusch and Pagan Lagrangian multiplier test (p.37)
4. Result of Hausman specification test (p.38)
5. Result of overidentifying restrictions test (p.38)

Appendix Figures

1. P – P Plot Test normality of the level of democracy processed with SPSS (p.68)
2. A scatterplot of the predicted value and residuals processed with SPSS (p.68)
3. Result of heteroskedasticity test (p.70)
4. Result of serial correlation test (p.70)

Table of Contents

Abstract	1
1. Introduction	2
1.1. Democratization in Asia.....	3
1.2. Demarcation	4
1.3. Outline.....	6
2. Theoretical framework and hypotheses development	7
2.1. Economic development.....	7
2.1.1. Economic wealth.....	9
2.1.2. Industrialization.....	11
2.1.3. Urbanization.....	13
2.1.4. Economic equality.....	15
2.2. Social development	17
2.2.1. Education	18
2.2.2. Gender equality	20
2.2.3. Freedom of expression	22
3. Methodology	25
3.1. Data	25
3.2. Dependent variable.....	26
3.3. Independent variables.....	27
3.3.1. Human Development Index (HDI).....	27
3.3.2. Industrialization (IND)	28
3.3.3. Urbanization (URB)	28
3.3.4. Income equality (IE).....	28
3.3.5. Education (EDU).....	29
3.3.6. Gender equality (GE)	29

3.3.7. Freedom of expression (FoE).....	29
3.4. Control variables	30
3.4.1. Oil rent (OIL)	30
3.4.2. Corruption (COR)	31
3.4.3. Population growth (PG).....	31
3.5. Method	32
4. Empirical results and discussion	40
4.1. Descriptive statistics.....	40
4.2. Main results and discussions	43
4.2.1. Human Development Index (HDI).....	45
4.2.2. Industrialization (IND)	46
4.2.3. Urbanization (URB)	47
4.2.4. Income equality (IE).....	48
4.2.5. Education (EDU).....	49
4.2.6. Gender equality (GE)	51
4.2.7. Freedom of expression (FoE).....	52
4.2.8. Mixed variables	54
5. Conclusion	57
References	61
Appendix	70
Appendix A: Testing the assumptions of linear (OLS) regression	70
Appendix B: Collinearity Statistic	71
Appendix C: Testing the assumptions of time-series-cross-section (TSCS) data.....	72

Abstract

The thesis investigates the variation of socio-economic development toward democratization, aiming to achieve more understanding of factors which might have an influence on this political transition in Asian countries. In particular, it concentrates on four determinants of economic development and three determinants of social development, namely, Human Development Index (HDI), industrialization, urbanization, economic equality, education, gender equality and freedom of expression. Using country-level data from twenty-four Asian nations in the period from 1990 to 2015, this paper applied the fixed effects model as an analysis technique to examine the hypotheses. The results reveal that four out of seven socio-economic factors are found to have effects on the progression of democratization in Asia. Moreover, these significant variables also perform a positive correlation with the level of democracy, which is similar to these predicted hypotheses. On the other hand, industrialization, urbanization and gender equality is not supported by the model, indicating that there is no significant influence on the level of Asian democracy.

Keywords

Democratization, socio-economic development, Asia, quantitative analysis, fixed effects model

1. Introduction

Living in a democratic society is a generally shared goal in the modern world. Since the third wave of democratization started in 1974, more than eighty countries, spreading from Southern Europe to Central-Eastern Europe and Latin America, have established a significant transformation toward democratization by organizing free and fair elections as well as by expanding individual political freedom. Fukuyama (1989) stated that the success of Western politics throughout democratization has demonstrated as “the end of history” or the ending point of competitive ideological evolution around the globe. In other words, the twentieth century perceived the universalization of Western liberal democracy which should be known as the last stage of humankind government.

Following the movement of global democratization, Asia has witnessed the emergence of several new democratic regimes such as the Philippines, South Korea, Taiwan, Mongolia, and Thailand. Besides Japan where was previously the only democratic government in East Asia, these democratic institutions have frequently held free and competitive elections to decide represented leaders at all levels of government. However, the process of Asian democratization also illustrated the fact that democracy is universal but fragile and uncertain (Chu et al., 2013). After the transition of democratization, some countries were not able to maintain their democratic systems (Gilley, 2014) while in other states, authoritarian forms of government have occurred. Moreover, according to Shin and Wells (2005), citizens in East Asia have not yet fully acknowledged that democracy is indeed “the only game in town” (Linz & Stepan, 1996, p.15); they still prefer their authoritarian habits and attitudes regarding norms and processes. In this context, only three Asian countries of Japan, Korean and Taiwan are considered to be well-consolidated democracies which involved the transformation of both political institutions and cultural values in their democratization (Linz & Stepan, 1996).

Hence, despite the global spread of democratization, there has still been an uneven development and stability of democratic progress in Asia (Ahlqvist, 2018). There are various explanations for Asian democracy as well as a lot of dispersed discussions regarding what factors have the most influence in this particular process. This appealing puzzle in Asian democratization indicates different potential factors influencing democratic transition and progress comparing to those of other regions in the world. Therefore, in this introductory chapter, I would like to present a short introduction to the current progress of Asian democratization. Then I will briefly discuss

the favorable prospects for democracy in Asia, followed by the specific research question and an outline of this paper.

1.1. Democratization in Asia

Not only the largest region in the world, Asia is also the continent where both the threats and the probability of democratization are most experienced intensely in modern time. In its culture, Asia contributes to the values of Buddhism, Confucianism, Hinduism, Islam, Shintoism, and Daoism (Shin, 2008). Moreover, it also is known as hometown to the most significant number of Muslim populations in the world. In the economic field, Asian involves countries of great prosperity such as Japan and Singapore as well as nations with extreme poverty such as Bangladesh and Myanmar. Consequently, Asia comprises numerous differences among countries regarding their natural resources, cultural and religious legacies, social and economic development. Hence, it is hard to compare its nations and categorize some general forms of “Asian democratization” (Shin, 2008).

Until the 1980s, Japan is the only country in Asia that was considered as fully democratic in both its institutions and society. This outcome has been achieved thanks to the remarkable efforts of the government after the Second World War. After that, the third wave of democratization stretched the shorelines of Asian region since the elimination of the dictator Ferdinand Marcos with the population revolution in the Philippines in 1986, followed by the end of South Korea’s military rule and the Kuomintang’s one-party rule in Taiwan. As it could be shown, the third wave transition of democracy in Asia has been a steady transformation, which led to around seven new democracies in East Asia.

However, more than three decades after the beginning of democratization expanded from Southern Europe, nearly half of all Asian countries have not yet experienced the democratic regime transformation. Furthermore, two of these third-wave democratic countries have returned to authoritarian regimes, namely Cambodia and Thailand. The Philippines’ process to establish a functioning democratic institution also remains a lot of conflicts and difficulties due to weak civil society. In general, the 2017 report by Freedom House (2017) reveals that there is solely 38 percent of freedom in democratic institutions and 5 percent of freedom in press and communication in Asian region. Besides, it recorded numerous issues regarding many essential rights and civil liberties which prevent the movement of democratization in Asian countries. On the whole, the

democratic transition of authoritarian regimes in Asia has primarily delayed for an extended period.

In the attempt to explain the reasons why Asia has been later than other continents in response to the emergence of democratic movement, Shin (2008) provided the differences of economic and social spheres in Asia compared to those of Europe and Latin America. First, in the economic field, unlike other countries in different continents, many states in Asia accomplished unprecedented economic development and social modernization under authoritarian regimes. Growing wealth under authoritarian regimes indicates that ordinary citizens who support democratic changes had less motivation to reject their authoritarian system and favor democracy than did their peers in East and Central Europe with the communism and Latin American with military rule. Second, in the cultural sphere, Asia is an area inspired by the principal values and traditions of Confucianism, especially in East Asia and even in some non-Confucian Asia countries (Inoguchi & Newman, 1997). Being supported as “Asian values”, Confucianism has historically been a remarkable role in classifying the privileges and responsibilities of individual residents and the authorities and power of their government (Bell, 2006). Moreover, as Huntington (1993) pointed out, these values underline the priority of family and community more than individuals, the discipline and hierarchy more than freedom and equality and the consensus and harmony more than diversity and conflicts. Therefore, these cultural values are likely to reduce the democratic supports by dispiriting Asian citizens from refusing the patterns of authoritarian regimes and welcoming those of democratic institutions (Linder & Bächtiger, 2005).

As a result, the context of economic and social development in which democracy would like to occur in Asia was dissimilar from these of Europe and Latin America. Hence, both the extraordinary economic growth and the solid root of Confucian notions under authoritarian regimes are likely to restrain Asian population from demanding for democratic transformation and for developing electoral democracy to full-fledged democratic systems.

1.2. Demarcation

Although the process of democratization seemed fragile and uncertain due to many stable authoritarian regimes settled in Asia, there are also some motivating signs of democratic transition. While consolidated liberal democracies have achieved most solidly in Japan, South Korea, and

Taiwan, other countries such as the Philippines, Thailand, Bhutan, and Indonesia have experienced a level of democratic inauguration (possibly, these transitions might occur some reversals). Furthermore, in Myanmar, the protracted movement for human rights and democratization which was organized by Aung San Suu Kyi, have been witnessed to succeed in opening the probability of political liberalization in 2010 (Grugel & Bishop, 2014).

These transitions have provided a level of optimism about the anticipation for democracy in Asia which is in line with Diamond (2012)'s specific argument to the next significant wave of democratization in Asia. In his article, he suggested that democratization is likely to be intensive and sustainable in Asia over five to ten years due to several reasons. First, some Asian countries have been observed to have a consolidated democratic foundation, generating a regional pattern around democracy. Second, there are more vocal and sometimes violent citizens throughout Asia, who disapprove of authoritarian regimes and demand better political representation, inducing to break the secure authoritarian systems. Third, many pieces of evidence about the beginning of democracy are already recorded in Myanmar, Thailand, and Indonesia during the global recession. Fourth, the Arab Spring had established a new movement for democracy around the world. This process will have a significant impact on the democratic transitions in Asia more than anywhere else. Finally, Diamond (2012) also pointed out that the shift of democratization is more enduring in Asia than in other parts of the world due to the characteristics of these Asian countries. Thus, besides being influenced by the economic components of Lipset (1959)'s modernization theory, Asian democratic transitions are also underscored by the idea of Huntington (1991) about the importance of the relationship between states and society contributing political changes.

Since the 1990s, several occurrences happened in Asia that indicated not only the fragility and non-linearity of the democratic procedure but also the dependence of democratization on economic and social development. With many developing states stuck in a middle ground between unequivocal dictatorship and full-fledged democracy, the long-lasting question of favorable and unfavorable factors leading to democratization and democratic institutions has intensely drawn back academics' attention (Linder & Bächtiger, 2005). However, academic studies have only focused on case studies while comparative research investigating regularities of the level of democracy are rare (Przeworski et al., 1996), particularly in Asian countries. For example, most comparative works concentrated on economic explanations leading to democracy such as Lipset (1959), Diamond (1992), Przeworski and Limongi (1997) and Boix and Stokes (2003) that covered

some Asian countries in their analyses. On the contrary, very little comparative research observed the role of social and cultural development which exclusively aims attention at subjective citizen values, beliefs and attitudes in Asia (Linder & Bächtiger, 2005). In this aspect, while Bomhoff and Gu (2012) attempted to compare the shift to more emphasis on the self-expression index regarding democratization between East Asia and rich West countries, Linder and Bächtiger (2005) had examined economic, social and political components affecting to democracy in 62 African and Asian countries between 1965 and 1995.

Consequently, we are left with specific issues related to the question of the conditions leading to democratization in the region of Asia since the 1990s. Therefore, the goal of this paper is to achieve more understanding of factors in both economic development and social development which might have an impact on Asian democratic changes. Accordingly, my research question for this thesis is stated as follows: *Which factors influence the level of democracy in Asian countries during the period from 1990 to 2015?* In general, I would expect that the better the factors of economic and social development, which manifests in higher values of particular determinants, helps to attract a higher level of democratization in Asia.

1.3. Outline

The structure of this paper will be as follows: this chapter demonstrated the introduction and the central research question into my study. In the second chapter, I will look at numerous different perspectives of scholars on this topic, giving the general theoretical framework and proposing seven research hypotheses for empirical examination. The third chapter presents the methodology, providing an operationalization of the crucial determinants and a detailed explanation of the research method which will be utilized with countries as the unit of analysis. Besides, I also describe the dataset collected from various reliable resources that will be applied to test my hypotheses in this chapter. The fourth chapter illustrates the results and discussions of my data analyses for each model I had tested. Lastly, in the fifth chapter, I will summarize my findings, elaborate on the limitations of this research and make recommendations for further discussion in the future.

2. Theoretical framework and hypotheses development

This chapter aims to give a concise discussion of the dependent variable based on the concept of democratization and what previous researches have attempted to examine possible factors which could impact the level of democracy. In this chapter, I would like to discuss various theories appearing in the scientific literature which have been used to explain the process of democratization. From these valuable theories, I will elaborate on hypotheses which could demonstrate the primary research question: *Which factors influence the level of democracy in Asian countries during the period from 1990 to 2015?*

2.1. Economic development

Regarding a theoretical link between economic development and the level of democracy, the starting point of the discussion often returned to Lipset's modernization theory (1959). He argued that "democracy is related to the state of economic development. The more well-to-do a nation, the greater the chances that it will sustain democracy" (Lipset, 1959, p.75). To elaborate his statement, several features of economic development – industrialization, urbanization, and wealth – have been estimated for the nations which are divided into higher and lower level of democracy in the regions of Anglo-Saxon, Europe, and Latin America. It is the list including several factors which are firmly interconnected and would be pre-conditions, not necessarily causes, for the development of democracy according to Lipset. Besides, Przeworski et al. (1996) believed that economic growth is a crucial principle in sustaining democratic countries over time. The expansion of economy does prevent regimes from societal conflicts of inequality and other cleavages and help to reduce the possibility of political alienation and polarization. On the other hand, the economic decline would threaten the sustainability of democratization. In this context, whether the government fails to resolve the challenges of equity and development efficiently, it will be likely to weaken the stability of societal support, encouraging the emergence of authoritarian alternatives (Linder & Bächtiger, 2005).

After the basic research of Lipset, there is a broad range of quantitative studies which have studied the correlation between the level of democracy and some different aspects of economic development (Diamond, 1992). As a result, a positive relationship has been recorded in almost all

these works, which approved the conclusion that “level of economic development appears to be the dominant explanatory variable” in shaping democratization (Bollen & Jackman, 1985, p.42). On the other hand, Przeworski and Limongi (1997) raised a critical question about the relation between the economic development of a given country and its probability of being democratic: does economic development foster democracy, or does economic development slightly help maintain democracy once it has already been established? The authors regarded the former explanation as the endogenous form and the latter as the exogenous form of democratization. Based on their empirical research, Przeworski and Limongi (1997) clarified that while the exogenous explanation proves its significance, the endogenous explanation, which is known as modernization theory, is false. To be more precise, economic development might help democracies endure, yet it is not likely to establish democracy in any country. If authoritarian regimes get richer, they will be more likely to make a transition to democracy. However, this development has only occurred until they reach a level of around \$6,000 per capita income. Above this level, dictatorship could become more stable since countries become more prosperous. Therefore, Przeworski and Limongi (1997) rejected the endogenous hypothesis of Lipset’s theory (1959) which considered that economic development would bring about the level of democracy.

In a useful attempt to refute the conclusion of Przeworski and Limongi, Boix and Stokes (2003) have pointed out some shortcomings of the study. They argued that the research needs to put the entire sample back to the period when there is no democratic country at all. By merging the period from 1850 to 1950 with the dataset of Przeworski and Limongi (1997), the authors showed that there is an endogenous effect which not only involves to the 1950 – 1990 period of Przeworski and Limongi’s dataset but also appears stronger in the pre – 1950 period. In the same way, Inglehart and Welzel (2005) also provided a powerful critique of Przeworski and Limongi’s work. They calculated the ratio of regime shifts towards democracy and the shifts towards autocracy in the different degree of per capita GDP. The results illustrated that the ratio grows exponentially as GDP grows, proving that modernization has been increased the likelihood of transformation to regime’s democracy.

In sum, according to Wucherpfennig and Deutsch (2009), various statistical literature firmly suggests that both the exogenous and endogenous versions of democratization are systematically connected with economic development. Therefore, the economic factors such as urbanization, industrialization and wealth are considered as a mediating variable which belongs to

a broader syndrome of conditions towards to democratization. It is called as an in-depth explanation by Kitschelt (2003) when economic development could work through this syndrome of conditions to make an influence on the level of democracy.

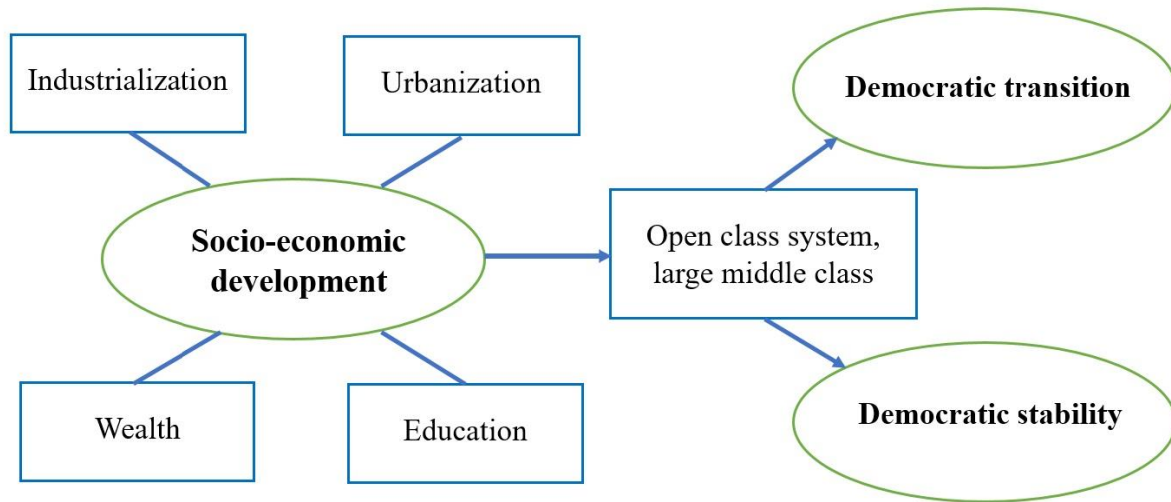


Figure 2.1. Modernization Theory. *Source: Wucherpfennig and Deutsch (2009, p.2)*

2.1.1. Economic wealth

One of the factors that Lipset’s modernization theory (1959) mentioned above is economic wealth. In his research, several aspects of wealth had been predicted to have an influence on the democratization such as per capita income, number of persons per motor vehicle and per physician, number of radios, telephones, and newspapers per thousand persons. Among these indices, per capita income, or gross national product (GNP), is the most dominated factors which have often been tested not only by Lipset but also other later scholars to measure the level of democracy. It is believed that the higher-income regimes tend to be more democratic than the lower ones. He argues that this positive relationship occurs because the higher national income is a determinant of the modernization which could foster the demand of citizens for political participation in society. Moreover, the national income level will influence its responsiveness to democratic political tolerance norms. In this context, error in the governing party can be tolerated when there is enough wealth in the nation so that citizens could accept effortlessly whether some redistributions might happen. The level of general income also helps the nation improve the “universalistic” norms

among civil servants and politicians, providing “selection based on competence; performance without favoritism” (Lipset, 1959, p. 84).

According to Diamond (1992), the positive correlation between national income and the level of democracy has been studied by a vast number of academics over the years, leading to the support of Lipset’s hypotheses. To be more comprehensive, Coleman (1960) applied the cross-tabulation method, dividing 75 modernized countries into three groups: competitive, semi-competitive and authoritarian regimes. Then, he attempted to examine these nations with different indicators such as national income, industrialization, urbanization, and education. The results confirmed almost entirely to what had been expected from modernization theory: nations with the most economic growth were competitive regimes while authoritarian regimes were recorded as the lowest of development. Following these researches, Huntington (1991) emphasized that higher per capita income was one of the primary elements behind the rise of the third-wave democratization. Also, Przeworski et al. (2000) argued that higher national income would prevent countries from autocratic reversals.

On the other hand, Acemoglu et al. (2008) applied a panel-data analysis with country-level fixed effects to examine the relationship between income and the level of democracy. The advantage of this method is computing for all fixed country features which might influence on both income per capita and political institutions. As a result, Acemoglu et al. indicated that there is no association between changes in income and changes in democracy. This outcome shed significant doubt on the claim that there is a substantial causal effect of income on the level of democracy. Besides, Moore (1966) believed that there is no simple procedure of modernization in the current world when higher per capita GNP could lead to greater democracy. In his research, prosperity and the level of democracy go together only under some circumstances. Other specific conditions could lead countries to communist revolution or fascism rather than democracy.

Noticeably, Dahl (1971) – the father of polyarchy – used a classification of five stages of development to figure out that the highest level of development also leads to polyarchies. It led Dahl to provide an essential extension of Lipset’s theory in the sort of two propositions. First, there was an upper threshold, varied around \$700 – 800 GNP per capita when being above this income level produces the chances of polyarchy. Second, there was a lower threshold, varied around \$100 – 200 GNP per capita when being below this income level also generates the chances of polyarchy.

Furthermore, although per capita GNP seems to be one of the independent factors that have most accurately and continuously projected the degree of democracy, it has several disadvantages and limitations. Regarding Diamond (1992), the GNP indicator is not possible to estimate the income of communist regimes without the profit of market values as well as many developing regimes where there are so many economic activities takes place in the informal means. This factor also exaggerates the development levels of some principal oil-exporting countries. Besides, the mean GNP of a state said nothing about the distribution because national income might provide the unequal distribution than the period of life expectancy or individual schooling. Therefore, GNP indicators are less consistent in measuring the average level of human development in a nation than two following nonmonetary factors.

Due to these drawbacks of per capita national income, Diamond (1992) suggested applying the Human Development Index (HDI) which has been built up by the United Nations Development Program (UNDP, 1991). It combines an average of three measures: the life expectancy, adult literacy, and (the log of) per capita national income. It is likely that HDI provides a broader estimation of human well-being and development which is more closely related to the level of democracy. To be exhaustive, the association between the HDI and the level of democracy also performs more frequently than for per capita GNP in the authoritarian regimes which is suitable with the characteristics of Asian politics in general. Moreover, comparing to the crosstabs for per capita GNP, the HDI illustrates a higher correlation with the collective indices of political democracy. Therefore, the country's mean level of HDI better forecasts its likelihood of democratization and the degree of political freedom than its per capita GNP. In other words, the HDI of the country's population is expressively beyond what could be examined solely by the level of national income.

Hypothesis 1: *Countries with the higher level of HDI show higher influences on the level of democracy in Asia than countries with the lower level of HDI.*

2.1.2. Industrialization

Industrialization is one of the significant factors of economic development that Lipset (1959) has mentioned in his classical modernization theory. In his analysis, industrialization is measured by the percentage of employed males in agriculture and the per capita commercially produced energy

which is consumed in the state, measured regarding tons of coal consuming by each person per year. The result, in the end, carried out an equally consistent relationship between industrialization and the level of democracy in both mentioned aspects.

From early studies, Karl Marx had argued that industrialization brings out the emergence of the bourgeoisie, which could lead to democracy (Inglehart & Welzel, 2010). Deutsch (1964) also pointed out that industrialization, together with growing mass literacy, fosters the transformation of illiterate peasants into participants who are likely to contribute to the political field. During economic development and industrialization, the productive relationships change significantly (Robinson, 2006). For example, the higher number of workers and firms that have migrated from rural areas to modern industrial cities, the more critical of physical capital, later human capital, and technology, leading to the transformation of the whole economic structures. When the capital intensity increases the development of national economy, industrialization may change the structure of labor force organization, allowing a trade union to establish and generally promote collective action. It then would bring out an empirical relationship between industrialization and the level of democracy. Following the same pattern, Rueschemeyer et al. (1992) identified that the landlord class is the dominant obstacle to democratization while the organized working class is considered as the most contributive factor. As a consequence, to the degree that it reinforces the labor class and erodes the landlord class, industrialization supports democracy.

While being put forward by Lipset (1959), the association between industrialization and democracy is elaborated further by Inglehart and Welzel (2010). They discussed that due to the process of industrialization, an economic change occurs and leads to the transformation of cultural values. In this context, individuals begin to focus more on self-expression rather than on community values in post-industrial societies. In other words, industrialization produces a vital process of societal change, creating bureaucratization, the hierarchy, secularization, centralization and the shift from traditional to secular-rational values in countries. The procedure of modernization then undermines the autonomy, choice, creativity, and self-expression values of individuals, which might deteriorate the legitimacy of authoritarian regimes and support the emergence of democracy. Hence, the industrialization process has started the political development towards democracy.

Industrialization generates a secularization of authority, moving the authority source from religion to more secular principles. Nevertheless, some societies were still identified by pronounced governmental relations and socioeconomic conditions which were constructed by the discipline, uniform, and standardization of industrial production. It is the reason why several scholars have believed that modern orientations are not necessarily leading to democratic direction. For example, Inkeles (1978) provided some aspects of individual modernity such as open-mindedness, secularism, positivism, meritocratism, rationalism, activism, or nationalism, which are assumed to correlate to the democratic orientations. Surprisingly, there are some variables of these orientations could also comply with the requirements of dictatorship.

Moreover, Moore (1966) has formulated a critique of the relationship between socioeconomic development – industrialization in particular – and the level of democracy. He argued that the industrialization process does not necessarily transform into the intermediate variables which might contribute to democracy. It depends on the timing of industrialized process and the structure of society at the time of transformation that decides the routes of the modern world: the emergence of liberal democracy, the fascism, or the communism. However, on the basis of various researches, the relationship between industrialization and the level of democracy could be demonstrated.

Hypothesis 2: *Countries with the higher level of industrialization show higher influences on the level of democracy in Asia than countries with the lower level of industrialization.*

2.1.3. Urbanization

A further determinant necessary for the democratization elaborated by Lipset (1959) is urbanization, which we will also consider as it might have a political correlation on the existence of democracy. He claimed this relationship by examining three different aspects of urbanization: the percentage of the population in areas of 20,000 and over, the percentage in communities of 100,000 and over, and the percentage living in standard metropolitan zones.

In the work of Weber (1978) on the democratic emergence in the West, the rise of industrial cities is believed to make a transition to the participatory political systems. Precisely, he argued that the migration of workers and production to urban areas caused the decline of landed elites,

replacing by the landless middle classes. Over time, the vast number of classes owning no land gained their reputation within markets and demanded to have more political participation in the government. Therefore, the foundation of modern political change could be traced to economic changes and urbanization (Anthony, 2014). Similarly, Lerner (1958) also emphasized that urbanization generate an exclusive effect to the social associations of modernizing society which foster the rise of civil society to maintain a “Participant Society” (p.50).

According to Anthony (2014), the urbanization required the more economic interdependence and reduced the differences of the population, which evolve a tolerance for political diversity over time. Moreover, the extensive economic interdependencies have established long-term partnerships and political participation, which both could prevent some extreme political viewpoints. The urban population then provides lesser isolation, more direct competitions, greater diversity and promotes better-formalized conflict solutions. Therefore, “the more urban a nation is, the valuable political compromise becomes for all parties involved” (Anthony, 2014, p.749). In addition, Glaeser and Steinberg (2017) argued that when more people live in urban areas than in the countryside, it is easier for citizens to meet and communicate when they demand the honest responses from the government. Besides, if government leaders consider repressing protestors, it would be more problematic to do in cities. It always becomes costlier and riskier to oppress many protestors in the urban areas than a few in the countryside. Hence, urbanization could contribute to the level of democracy.

Furthermore, Dima et al. (2011) illustrated the linkage between urbanization and the level of democracy with two arguments. First, an urban area is considered to create the existence of thick markets which include both consumer markets and labor markets. When accessing these markets, there are forward and backward associations to the large local markets (Baldwin et al., 2003). As a result, urbanization could affect democracy through its influence on economic development. Second, they argued that the urbanization process stimulates the transition towards emancipative values because of the changes in education and occupation. Therefore, this procedure could contribute to individual autonomy, leading to the development of democracy (Inglehart & Welzel, 2005). Their qualitative analysis which comprises a dataset of 56 developed countries in the period between 1982 and 2007, also supported that the urban population level is positive and significant, related to the Polity IV measure of democratic society.

Hypothesis 3: *Countries with the higher level of urbanization show higher influences on the level of democracy in Asia than countries with lower the lower level of industrialization.*

2.1.4. Economic equality

Regarding the promising correlation between economic equality and the level of democracy, scholars of the political field have speculated that the appropriate functioning of democracy depends on an equal distribution of economic resources. From early studies, Aristotle had figured out that great economic inequality might facilitate the wealthy to seek a sharing of power, which is corresponding to their share of resources. Its progress would lead to destabilize the democratic government or prevent the growth of democratization as well (Solt, 2008). Moreover, in the modernization theory, Lipset (1959) already implied that economic growth contributes to the level of democracy. For clarification, it is necessary to mention that many academics usually misunderstand the theory of Lipset by assuming that economic growth would have a direct positive influence on democratization. However, it is the interaction between education, urbanization, industrialization and economic growth that will lead to democracy (Deutsch & Wucherpfennig, 2009). This theory is relevant for our analysis as the starting point, regarding the research of correlation between economic equality and the level of democracy. From its foundation, Lipset's modernization theory is renovated by Dahl (1972). Dahl examined this relationship further at the underlying mechanisms, which indicated that economic inequality would prevent reforms in the society. In this context, people with a more impoverished economic background could not achieve a better social position while it is more beneficial for the rich to maintain their hierarchy. Therefore, economic inequality would contribute to a lack of community sense and cohesion, which is essential to democracy (Dahl, 1972).

Elaborating the modernization theory on the macro level, Boix and Stokes (2003) suggested another indirect support for the conditions of democratization. They argued that it is not per capita income that is necessary but rather the equal distribution of economic income. Therefore, income equality is considered as an extended mechanism of endogenous democratization which could translate socio-economic development into democracy. The underlying hypothesis is that the elite of a given country fear redistribution less if there is economic equality among the society. In other words, if income distribution is more equal, leading a democratic tax structure is less

expensive, the rich are more willing to countenance the democratization in their countries. It is not their preferred outcome; however, under some constrained conditions when the masses might demand a better redistribution of the elites' capitals, it is the optimum available solution for the elite to maintain the government. By evaluating a dataset spanning the period from 1850 to 1980, the findings indicated that economic equality would be central to the level of democracy instead of per capita income. As Boix and Stokes (2003) made evident, economic equality improves the probabilities of both the transition of democratization in non-democratic governments and its stability in democratic regimes. Moreover, they argued that democratic outcome is also more likely to happen whether the assets of countries are mobile. If assets are mobile, the elite then could preserve their prosperity from taxation by transferring it to other foreign countries (Boix & Stokes, 2003).

Another similar approach is offered by Acemoglu and Robinson (2005) when they observed the interrelationship between the economic equality, the assets' nature, and the level of democracy (Wucherpfennig & Deutsch, 2009). In contrast to Boix and Stokes (2003), they also considered the threat of revolution from the masses when they tend to realignment the balance of power between social groups in some social or economic crises. In this context, at first, the elite is likely to hinder democracy due to their concern of redistribution in a society. Thus, they could suppress the masses and prevent the latter from raising any rebellion with their power in a government. However, these attempts are usually costly and might lead to the worst scenario when the mass succeeds in establishing democracy by themselves throughout their revolutions. The elite then would lose most of their wealth in the aftermaths of these uprisings. Therefore, compared to the threat of the masses' rebellions, democratization is less likely to cause much harm to the elite and their assets. In the end, the elite would favor economic equality and increase the progress of democracy since this could diminish the threat of a revolution (Acemoglu, Johnson, Robinson & Yared, 2005).

Based on these positive arguments mentioned above, I suggest that the higher level of economic equality in society could be an essential stage in the causal mechanism contributing to democratization in Asian countries. Therefore, I will derive this potential correlation with the following hypothesis.

Hypothesis 4: *Countries with the higher level of economic equality show higher influences on the level of democracy in Asia than countries with the lower level of economic equality.*

2.2. Social development

While numerous comparative studies have investigated the influences of economic development on democratization, there is less research into the social development for a variety of reasons (Linder & Bächtiger, 2005). First, it is explained that the concept of political culture is too narrow and not efficient enough to interpret the intercorrelation between culture and the transitional positions of traditional and developing societies. Second, some academics had applied several social development factors to the in-depth qualitative analysis. However, they found it does not assist the progress of systematic and comparative works smoothly (Muller, 2002).

On the other hand, the appearance of the third wave of democratization which swept across many developing countries since the beginning of the 1980s had challenged the concept of economic prerequisites for democracy. There were various movements and transformations toward formal democracy having occurred in some nations with low levels of economic development. For instance, a large number of countries undergoing an evolution to democracy during the period of the third wave belong to the bottom third of the Human Development Index (Przeworski & Limongi, 1997). Moreover, some authoritarian regimes were reported to survive even after accomplishing a substantially high level of economic development. In this context, it did not seem to be a natural movement from authoritarianism to democracy when these societies had already reached some developmental threshold as explained in the modernization theory (Menocal, 2007).

In response to the supposed limitations of modernization theory, various promising studies have emerged since the 1980s attempting to understand democratic transformation from the perspective of social development. According to Menocal (2007), literature illustrated the influences of decisions, thoughts and the interaction among individuals in society as well as documented the importance of these structural factors in determining actor choices to a variety of degrees. Following the same pattern, Inglehart and Welzel (2010) have provided several main reasons to revise the modernization theory in this context. First, industrialization, in fact, leads to numerous significant changes, affecting to bureaucratization, centralization of authority, secularization and a transition from traditional to secular-rational values in societies. However, the

post-industrial stage of modernization also has impacts on increasing the emphasis on individual autonomy and self-expression values. These new social values are expected to demolish the legitimacy of authoritarian regimes and bring the flourish of democracy. Second, socio-cultural influences are path dependent. The authors argued that although economic development is likely to bring budding changes in countries, several social indicators such as religious and historical heritage also leave a long-term imprint. Third, modernization does not inevitably influence democracy while it could lead to fascism and communism as well. With the appearance of the post-industrial phase, there is a growth in levels of economic security, bringing emphasis on self-expression values and encouraging free choice in society. In this case, socio-cultural changes in post-industrial society have increased opportunities to establish democracy.

In sum, as Inglehart and Welzel (2005) had stated, while industrialization gives rise to bureaucratization and secularization, the second step of post-industrialization is about growing sense of individual autonomy and massively increasing emphasis on self-expression values. These social and cultural changes are likely to affect both the presence and quality of democracy. The authors illustrated this central argument by the human development sequence which is diagrammed in Figure 2.2 as followed. It indicates that the growth of favorable existential security could lead people to the new stage of better prominence on human freedom and selection, contributing demands to establish and reinforce democratic liberties and institutions.

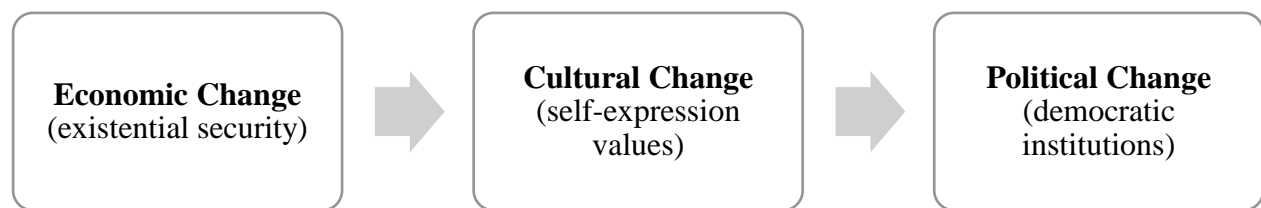


Figure 2.2. Human Development Sequence. *Source: Inglehart and Welzel (2005, p.134)*

2.2.1. Education

Besides economic wealth, industrialization and urbanization, education has been discussed as a principal social determinant for democratization in the modernization theory. According to Lipset (1959), the correlation between education and democracy should be examined extensively since

numerous relevant evidence determined that the better education the countries' population, the better probabilities a democratic government would institute. This means that a higher level of education becomes closer to be a necessary condition of democratization in the current period. By observing four indices of education, that are literacy, the number of primary student enrolment, the number of post-primary student enrolment and the number of higher education student enrolment, the findings of Lipset (1959) supported the proposition that education and the level of democracy are equally consistently correlated at the individual level. Therefore, educated people are likely to think more critically, behave more tolerantly toward others and could not readily accept some extremist doctrines. Moreover, this correlation also is claimed on the macro level with countries as a unit of analysis in many empirical other studies that support Lipset's classical theory (Lerner, 1958, Barro, 1999 & Przeworski et al., 2000).

The causal mechanism between education and democracy is also discussed by Almond and Verba (1989) who considered education as a core factor of a "civic political culture" while Smith (1948) believed that the higher the education levels, the more likely people are trusted in democratic values such as representation and pluralism and promote various democratic practices. Similarly, Glaeser, Ponzetto, and Shleifer (2007) indicated that education could affect all forms of social interactions such as political participation. They formulated a model of regime stability which is concentrated to the incentives of political participation. In this case, while dictatorship offers powerful incentives but only a narrower base of support, democracy provides a broad possible base of support but weak incentives for its supporters. The authors argued that despite education stimulating the benefits of participation in both democratic and dictatorial regimes, the development of participation is much more significant in the more inclusive democratic countries. Then, it might lead to the success of democratic revolutions which is against dictatorships and decrease the opportunities of anti-democratic coups (Glaeser et al., 2007). Furthermore, Aleman and Kim's (2015) analysis have provided the same result, concluding that education would contribute to a higher level of tolerance, social equality and political participation in society.

On the other hand, Acemoglu et al. (2005) refuted this social development hypothesis of Lipset (1959), arguing that there is no significant correlation between education and the level of democracy. They investigated this causal mechanism by examining changes in the Freedom House rating and changes in average years of schooling during the period between 1970 and 1995. The findings show no effect in the increase of education that could lead to the more democratic

countries. Moreover, when including within-country analysis and controlling for other confounding variables such as income, GDP, age and population size, there is also no significant cross-sectional relationship between education and the level of democracy. In an influential attempt to rebut Acemoglu et al. (2005), Castelló-Climent (2007) had reconceptualized the definition of education when he believed that the average years of schooling are inefficient to measure the effect of education on democracy since countries might only provide education for the elite. Then the elite could employ the knowledge during their educational process to suppress the population in command of the government. Therefore, using the indicator of average years of schooling could have caused the significant differences in the outcome of the educational effect on democracy. After that, Castelló-Climent (2008) suggested applying the distribution of education attained by the population instead of the measurement of average levels of schooling in a country for the education variable. As a result, he did find a significant positive relationship between education and the level of democracy. Hence, the distribution of education in this study proved to be more influential than the average years of schooling to calculate the effect of education on democracy.

While there is an academic debate on whether there is a correlation between education and democracy, the causal mechanism of positive relationship seems to be more convincing on their theoretical frameworks as being discussed above. Therefore, I would like to take these positive theories into account, arguing that education does have a sufficient influence on the level of democracy in Asian countries.

Hypothesis 5: *Countries with the higher level of education show higher influences on the level of democracy in Asia than countries with the lower level of education.*

2.2.2. Gender equality

According to Balaev (2014), although gender equality used to receive little empirical observation in the analysis of democracy, it now becomes a crucial democratic determinant due to its fundamental character of human rights. Therefore, including gender equality as an explanatory variable to democratization helps us to explore a new perspective to determine the role of gender in the pattern of political systems and processes.

When observing the relationship between democracy and gender equality in the existing literature, the studies mainly concentrated on the conditions that foster or hinder the participation and representation of women in federal parliament. Balaev (2014) categorized three most available measures of female political participation in both economy and politics, such as the percentage of women in non-agricultural labor, the proportion of women contributing in the labor force and the percentage of women elected in national legislatures. If a more substantial number of women that could take part in three aspects mentioned above, it would perform an equal distribution of political power and resources in society, immediately improving the level of democracy. Hence, this direct process indicates a probability of long-term effects of gender equality and human rights on democratization.

Beer (2009) emphasized that the inclusive correlation between gender equality and regime type in previous empirical research provides the inconsistency and irrelevance in estimating the conceptualization and measurement of gender equality. As a result, there is various conflicting evidence about the influence of gender equality on the level of democracy. For example, Fish (2002) supports the hypothesis that gender equality causes democracy. He claimed that regimes, where women were not allowed to participate in a public sphere, are more likely to be authoritarian. In the same pattern, Donno and Russett (2004) employed a more fully specified regression model to figure out that democracy is significantly correlated with the number of women elected to parliament. However, other variables of women's status in this research proved no effect to the level of democracy. They argued that it might take many years for the transition to democracy to influence effectively, implying the importance of long-term democracy.

To be more precise, gender equality and its causal mechanism contributing to democracy are discussed by Inglehart and Norris (2003). They explained this mechanism as the “rising tide of gender equality” which includes two transitional steps. First, industrialization brings women to work in the labor market, which declines the fertility ratio and fosters the level of public education. Second, the economic development also creates unexpected cultural changes which reconstruct the gender roles between men and women, leading to the appearance of democratic institutions in a country. Therefore, in the post-industrial society, women are more likely to achieve professional working positions and gain their political influences in government. Using the World Values Survey (WVS) data, Inglehart and Norris (2003) had pointed out that the young, less religious, better-educated people, especially women tend to promote gender equality in all potential fields

such as female rights. They also found that on the individual level, public attitudes towards gender equality are strong determinants to the democratic ambitions all around the world (Kostenko, Kuzmichev & Ponarin, 2016).

Moreover, when examining this relationship by simplified bivariate analysis, the researchers of Brookings (Piccone, 2017) figured out a positive correlation for gender equality among the middle and higher levels of democratic institutions. On the other hand, there is no significance between gender equality and that of autocratic countries. It means that regimes with the higher level of liberal democracy could perform more reliably gender parity than weak democracies while autocratic countries display wider gaps of gender equality. Therefore, he concluded that gender equality could contribute to the level of democracy.

Overall, despite a few opposing arguments in previous literature, there is consistently significant evidence suggesting the emergence of democratic institutions due to higher levels of gender equality regarding women's economic and political participation. Hence, I would like to derive the hypothesis which underlines the positive relationship between gender equality and the level of democracy to examine in this research.

Hypothesis 6: *Countries with the higher level of gender equality shows higher influences on the level of democracy in Asia than countries with the lower level of gender equality.*

2.2.3. Freedom of expression

Martin (2002) explained freedom of expression as the freedom to receive and transfer thoughts, opinions, and information without any interference or coercion. This freedom belongs to all persons and could be exploited through various activities, for example speaking, writing, publishing, broadcasting and physical act. Hence, it is considered as the fundamental freedom and the crucial precondition to exercise other types of freedom.

As the foundation to increase other rights, freedom of expression is illustrated as one of self-expression values which are directly conducive to the level of democracy in a revised version of modernization theory (Inglehart & Welzel, 2010). In general, it is argued that there is a marked connection between self-expression values and the success of democratic government. By investigating the data set from the World Values Survey and European Values Study (WVS/EVS),

the authors found that the societal-level self-expression values are significantly correlated to an index of effective democracy at 0.70 for all available societies. Therefore, Inglehart and Welzel (2010) extended the theory of modernization, implying that self-expression values which represent for mass attitudes in post-industrial phase, establish a mediating variable in the causal mechanism from economic development to democracy. In other words, economic democracy is likely to affect long-term social and cultural changes and increase the values of public self-expression. Then, this procedure could lead to the transitions to democracy in a society. They concluded that self-expression values contribute to changes in the level of democracy. However, these values develop slowly in continuous processes while democracy regularly emerges rapidly after a long institutional stagnation.

In the same vein, Arslan (2015) provided three specific reasons to expect the freedom of expression as a precondition of democracy. First, the rights to freedom of expression will cultivate diversity and plurality, which are conditions for a democratic society. Since there is a diverse civilization concerning ethnicity, nationality, religion, and ideology, it demands the cohabitation of various conflicting lifestyles, ideas, and thoughts. Therefore, freedom of expression is an efficient instrument to promote and preserve such plural and diverse society and politics. Second, democracy involves a free public domain of exchange where everybody could be able to convey their feelings and opinions. In turn, only through free expression of public views on precise policies, we can take part in decision-making process which comprises the procedure of enacting laws in parliament. Lastly, freedom of expression is known not only as a mean for flourishing democracy but also as an end in itself. It means that freedom of expression is associated with the moral responsibility of individuals. In fact, individuals must be recognized as morally responsible agents who have the free expression to accept and communicate their points of social and political view toward others and their government.

On the other hand, Bollen (1990) had mentioned freedom of expression as a component of political liberties which belongs to political democracy. He demonstrated that political liberties concern the freedom that individuals obtain in the political system such as “the freedom of media, the freedom of individuals or political groups to oppose government policies or officials, and the absence of political censorship” (Bollen, 1990, p.10). Together with political rights, political liberties are anticipated to influence in response to the specific transformation of political democracy. For example, whether there is a decline in political liberties, it would be expected to

decrease the level of democracy in a nation. Therefore, the author suggested a definite linkage between the political liberties and democracy, implying the influence of freedom of expression on the democratic procedure.

In a nutshell, the transition from materialist toward postmaterialist values establish a shift from underlining economic security as the most priorities to increasing emphasis on freedom of expression in society and politics. In the long run, economic development will bring cultural changes which encourage a principal motivation for the flourish of democratization. Hence, the positive relationship between freedom of expression and the level of democracy is illustrated in this study with the following hypothesis.

Hypothesis 7: *Countries with the higher level of freedom of expression shows higher influences on the level of democracy in Asia than countries with the lower level of freedom of expression.*

3. Methodology

This chapter aims to explain the operationalization of the primary variables I would like to use for the analysis which will be explained later in Chapter 4. First, the dependent variable will be discussed, followed by seven independent variables and three control variables. Second, I will demonstrate the process to figure out the most suitable model for evaluating time-series-cross-section (TSCS) data in this study. Also, some crucial assumptions such as multicollinearity, heteroskedasticity and serial correlation are examined, ensuring to make valid inferences and estimation for the empirical analysis.

3.1. Data

The data is used and collected from numerous reliable sources. At first, as the dependent variable, the level of democracy in Asian countries during 1990 to 2015 is acquired from the Freedom House index. The goal of this institution is to assess the state of rights and freedoms enjoyed by individuals in over 195 countries and 14 territories. It originated from the Balance Sheet of Freedom report and developed with Gastil (1990)'s methodology which determined two ratings – political rights and civil liberties – as the primary assessment for the level of democracy. For the analysis, every country is scored from 1 to 7 on each of those two measures, with a rating of 1 indicating the highest level of freedom and 7 as the smallest degree of freedom (Gastil, 1991, p. 53-54). Then, these ratings of political rights and civil liberties are categorized to a specific range of total scores which determines whether this country has an overall condition of Free (1.0 to 2.5), Partly Free (3.0 to 5.0) or Not Free (5.5 to 7.0).

Second, regarding independent variables, while Human Development Index (HDI) is retrieved from the Human Development Reports of the United Nations Development Programme (2016), industrialization, urbanization, and education factors are taken from the World Bank which is known as a free and open source of comprehensive data about various development indicators in countries around the world. Besides, the data from the Global State of Democracy Indices of International Institute for Democracy and Electoral Assistance (International IDEA) is used to examine two other variables: gender equality and the freedom of expression. The International IDEA also investigates the trend of democracy around the globe by conducting independent

surveys about different democratic attributes in over 155 countries (Tufis, 2017). This report consists of five main democracy attributes, namely “representative government”, “fundamental rights”, “checks on government”, “impartial administration” and “participatory engagement” which evaluates the popular control and political equality in each year of countries. The last independent variable – income equality – is measured by Solt (2016)’s The Standardized World Income Inequality Database (SWIID). As explained in his article, the SWIID incorporates several reliable sources of data such as OECD Income Distribution Database and the Luxembourg Income Study, providing comparable Gini indices of both inequality in the income from post-tax and post-transfer as well as the income from pre-tax and pre-transfer in 192 countries since 1960. Concerning three control variables, both oil rent and population variables are acquired from the World Bank while the corruption indicator is collected from the Global State of Democracy Indices of International IDEA database.

Lastly, twenty-four Asian countries are going to be examined in this analysis, namely China, Japan, Republic of Korea, Mongolia, Afghanistan, Bangladesh, India, Islamic Republic of Iran, Kazakhstan, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan, Uzbekistan, Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. These countries are utilized because its data is almost available for all main variables in the period from 1990 to 2015.

3.2. Dependent variable

To analyze effectively the relationship between the level of democracy and seven potential factors which are discussed in the previous section, I first need to establish how to define the concept of democracy. In general, there are several different contemporary models of democracy, such as electoral democracy, liberal democracy, and radical democracy.

The “thinnest” concept of democracy is an electoral democracy which was inspired by the research of Joseph Schumpeter (1947). In his article, he considered democracy as a system of government that operated as a mechanism for the election of leaders. Therefore, democracy is defined as having a free and fair election which would allow competitions between political actors striving for power. Because this conceptualization is too narrow and minimal, Schumpeterian understanding of democracy is only limited where people get the opportunity to accept or refuse

the leaders who are to rule them (Schumpeter, 1947, p.270). A deeper approach is known as liberal democracy pioneered by Dahl (1989). He suggested the institutions of polyarchy as conditions for democracy, including a cohesion of political rights to elect government and civil liberties. In this context, the structure of polyarchy ensures that different groups in society could assess to the consensual or pluralist government. From the 1980s, there is the transition paradigm when Diamond (1999) extended Schumpeterian democracy and demonstrated ten “thick” conditions of the modern democratic polity. He argued that various crucial elements should be ideally exhibited to embed democracy such as free and fair elections, representation of the population, pluralism, civil rights and the constitutional link between the civil society and the government. The “thickest” concept of democracy is radical democracy as it includes all factors of liberal democracy and monitors the state through associations (Keane, 2009). This type of institutions emphasized the deliberative and associational democracy when citizens become politicized through political participation, enhancing opportunities at work and community as well as increasing association life and contacts within the state.

In this study, I would like to use the concept of liberal democracy as the definition to develop the empirical research model because it is more compatible with the hypotheses of our independent variables explaining the level of democracy. When liberal democracy is chosen as the conceptualization for this analysis rather than an electoral one, Freedom House index becomes an efficient measurement to calculate the level of democracy because it scores the ratings of both political rights and civil liberties in the method. Estimated on a scale from 1 (the freest conditions) to 7 (the least free conditions), the scores of these two characteristics are averaged to figure out a general status of “Free”, “Partly Free” or “Not Free” in each country. In particular, countries whose ratings average from 1.0 to 2.5 are considered as Free, from 3.0 to 5.0 as Partly Free, and from 5.5 to 7.0 as Not Free.

3.3. Independent variables

3.3.1. Human Development Index (HDI)

According to United Nations Development Program (UNDP, 1991), the Human Development Index (HDI) incorporates the average scores of three crucial aspects of human development: a long and healthy life, having the knowledge and a decent standard of living. While life expectancy

measures the importance of health, the index of education is calculated by the average years of education for adults who are over 25 years and the likely years of education for children. Also, the dimension of living standard is assessed by taking the natural logarithm of per capita national income (GNI). Then, HDI is measured as the geometric mean of these three dimensions' scores which captures the human development indices of a country. The score of HDI is classified into four cutoff points: less than 0.550 means low human development, from 0.550 to 0.699 indicating medium human development, from 0.700 to 0.799 as high human development and more than 0.800 for very high human development.

3.3.2. Industrialization (IND)

According to Guadagno (2016), the share of manufacturing in GDP is identified as a factor behind industrialization in various existing literature. Following this argument, the industrialization variable will be estimated by the contribution of manufacturing in GDP of each Asian country. Then, the data for the percentage of manufacturing in GDP is retrieved from the World Development Indicators database from the World Bank and measured in current U.S. dollars.

3.3.3. Urbanization (URB)

Similar to industrialization, urbanization factor is estimated in a typical method as the population living in an area categorized as “urban”, by taking the World Development Indicators database from World Bank. This approach of measurement is following several previous studies such as Dima, Leitao, and Dima (2011) and Glaeser and Steinberg (2017). The data then measures the percentage of urban population growth in 24 Asian countries from 1990 to 2015.

3.3.4. Income equality (IE)

The income equality variable is collected from the Standardized World Income Inequality Database (SWIID) which has been evolved and developed considerably since 2008 to provide researchers with a more comparable database for cross-national studies (Solt, 2009). The SWIID comprises two sources of Gini indices: the Luxembourg Income Studies' data as a baseline where the source data could be standardized. After this step, a data set with all countries and years for the

income inequality variable is conducted. Specifically, each of observation includes data on income inequality in a range from one to thirteen categories. Due to its advantages of maximizing comparison for the broadest possible example of countries and years, the SWIID becomes ideal for our analysis which used a time-series-cross-sectional data set (Solt, 2016). In this context, the data is primarily measured by the Gini index of income inequality in equivalized household income of post-tax and post-transfer while having Luxembourg Income Study (LIS) data as the principle.

3.3.5. Education (EDU)

School enrolment is one of several vital dimensions of educational attainment which has been used to estimate the indices of education as the work of Lipset (1959). Therefore, to estimate the education variable, data of secondary school enrolment is retrieved from the World Development Indicators database of World Bank. The score of secondary school enrolment, in general, is illustrated as the whole number of students (in both sexes) who enroll in general programs at public and private secondary educational institutions regardless of age.

3.3.6. Gender equality (GE)

With gender equality variable, the Global State of Democracy Indices of International IDEA is employed to collect our dataset. The distribution of gender equality is operationalized in this survey by aggregating five indicators. It includes two expert-coded indicators from V-Dem for gender and female participation in civil society organizations, and three observational indicators on the ratio between mean years of schooling, the proportion of lower chamber female legislators and the proportion of women in ministerial-level positions. In this calculation, the scale ranges from 0 as the lowest score to 1 as the highest score.

3.3.7. Freedom of expression (FoE)

Following the similar sources from the Global State of Democracy Indices of International IDEA, the data of freedom of expression is estimated by combining indicators from V-Dem and the Civil Liberty Dataset (CLD). Seven indicators are being aggregated into the freedom of expression, using several questions about different aspects of media freedom and the rights to openly discuss

political issues and express political opinions outside the mass media. The survey measures the freedom of expression respectively for men and women in each country.

3.4. Control variables

Before discussing the analytical technique applied in this study, it is necessary to mention three control variables which would be involved in the model to provide comprehensive explanations for the progress of democratization in Asian countries. The collection of these control variables is formed on the relevance of their theoretical framework to these hypotheses in the existing literature.

3.4.1. Oil rent (OIL)

According to Ross (2011), oil rent might influence the level of democracy besides other independent variables mentioned in Chapter 2. He argued that oil rent could hinder democracy and thus explain why economic growth per se is not an appropriate determinant of democracy as well since numerous rich countries are non-democracies. Taking the Middle East as an example, he noted that democratic transition did not affect these countries due to its heavy dependence on oil exports which increases the bureaucracy control in the society. From this point of view, countries with a high percentage of GDP which are dependent on oil rent would experience three distinctive effects, namely, the rentier effect, the repression effect, and the modernization effect.

First, the rentier effect includes three smaller component of taxation, spending, and group-formation effects. Together these effects indicated that whenever the government obtains sufficient profits from the sale of oil, they are likely to lessen the tax for their citizens. In this case, the population, in turn, will not demand more accountability and representation in their government. Second, the repression effect implies that resource wealth from oil exports could allow this government to oppress its population in cases of rebellion. Although citizens might be aware of democratic progress, they are afraid to appeal their political participation to the parliament. Lastly, derived from modernization theory, Ross (2011) underlined the situation when countries increase economic wealth due to oil exports do not usually lead to industrialization with higher education

levels and better occupational specialization. Therefore, it is not able to bring about democratization into these societies.

To estimate the level of democracy, Ross (2011) emphasized the harmful influence of oil wealth on the progress of democratization, especially in many oil-rich countries of Central and South East Asia. Hence, this control variable should be considered in our analysis. The data on oil rent is acquired from the World Bank. It measures the dependency of a state on oil by providing the percentage of the country's GDP determined by oil exports.

3.4.2. Corruption (COR)

Another control variable is corruption which is considered to decrease the level of democracy as illustrated in the study of Fjelde and Hegre (2014). In this research, practical elites could build networks and spend their financial resources to purchase high-ranking political positions in government. Moreover, they might use their power to manipulate regional and national elections. Therefore, corrupt leaders attempt not to provide any accountability to the population while citizens are not the one who had voted for them.

Due to its possible negative impact on democratization, corruption is also taken into account in the model. The data of corruption is retrieved from the Global State of Democracy Indices of International IDEA. In this dataset, corruption is measured as the “absence of corruption” which is operationalized by the degree that the executive and public administration do not abuse their office for personal gain (Tufis, 2017). Because I have labeled this indicator as corruption in the research, I need to convert the variable “absence of corruption” into the corruption variable. Therefore, corruption will be reported in the opposite way of “absence of corruption” when higher score means the higher level of corruption.

3.4.3. Population growth (PG)

The last control variable is population growth which illustrated the transformation in the level of the population over the time (Mutascu, 2009). In several previous research papers, it is indicated that the population growth is faster under dictatorship than under democracy (Handenius, 1997;

Przeworski et al., 2000). Moreover, Feng (2005) argued that the degree of democracy or political freedom is also has a diminishing influence on population growth.

Due to its detrimental effect to the level of democracy as previous literature had discussed, I would like to add annual population growth as a control variable in this empirical model. The data is also retrieved from the World Bank and measures the percentage of the development between the number of total population in a country regardless of legal status or citizenship for two consecutive years.

3.5. Method

Since there is a relatively low number of units (24 countries) observed for many reasonable measurement occasions (26 years), time-series-cross-section (TSCS) data is utilized to analyze our hypotheses (Beck & Katz, 1995). Also, TCSC data has recently become more popular since the mid-1980s due to Stimson's (1985) discussion of the influence of both TCSC and panel data in political science. It was known as the first political science research which brought up the general methodological issues of TSCS data. After that, according to Adolph, Butler, and Wilson (2005), there is an explosion of studies using terms related to TSCS data analysis with nearly 200 empirical articles applying TCSC data to their researches from 1996 to 2000. Academics find TSCS data interesting when it allows adding many additional observations in the temporal sphere to the data set in case of the limitation on a few units. Besides, TSCS data consists of more slowly shifting, historically persistent variables which is quite sufficient to apply mainly to political science issues (Bell & Jones, 2015). Therefore, the basic (pooled) model is then estimated as follows:

Level of democracy $_{i,t} = b_0 + b_1 \text{HDI}_{i,t} + b_2 \text{Industrialization}_{i,t} + b_3 \text{Urbanization}_{i,t} + b_4 \text{Economic Equality}_{i,t} + b_5 \text{Education}_{i,t} + b_6 \text{Gender Equality}_{i,t} + b_7 \text{Freedom of Expression}_{i,t} + \varepsilon_{i,t}$

While i denotes country i (24 observed Asia countries); t is the year t (from 1990 to 2015); b_0 is the intercept; $b_1, b_2, b_3, b_4, b_5, b_6, b_7$ are the slope, ε is the error term. The model assumes that the dependent variable is the level of democracy of country i in the year t with the k-vector of independent variables being HDI, Industrialization, Urbanization, Economic equality, Education, Gender Equality and Freedom of expression.

For this analysis to be exhaustive, it is argued that control variables are necessarily added in the model although they will be not specifically examined because the concentration of this research is to understand the relationship between the level of democracy and seven indicators mentioned above, not to explain the effect of control variables. However, these control variables might also influence the level of democracy. Based on the literature review examined in the preceding chapter, it is feasible to contain three control variables in our model, which are oil rent, corruption, and population. Hence, now the model is expressed as below:

$$\text{Level of democracy}_{i,t} = b_0 + b_1 \text{HDI}_{i,t} + b_2 \text{Industrialization}_{i,t} + b_3 \text{Urbanization}_{i,t} + b_4 \text{Economic Equality}_{i,t} + b_5 \text{Education}_{i,t} + b_6 \text{Gender Equality}_{i,t} + b_7 \text{Freedom of Expression}_{i,t} + b_8 \text{Oil rent}_{i,t} + b_9 \text{Corruption}_{i,t} + b_{10} \text{Population}_{i,t} + \varepsilon_{i,t}$$

Before running our model estimations, TSCS data needs to be examined to determine several essential properties (Beck, 2008). First, to make valid inferences from our model, the residuals of the regression should be normally distributed. Hence, the normality test is utilized to examine a normal Predicted Probability (P-P) plot which is shown in Appendix A.1. Based on the result attained in the data set, the scattered dots are interconnected and symmetrically distributed to the diagonal normality line indicated in the plot. So, we could assume that the data analyzed in this research is normally distributed.

Second, the assumption of homoscedasticity is conducted to figure out whether the residuals of the regression are equally distributed, or they are likely to cluster together at some points and spread far apart at other points. By checking the scatterplot of the predicted values and residuals in Appendix A.2, it is supposed that the data is equally distributed both on the X-axis (above and below zero) and Y-axis (in the left and right side of zero) as the figure showed.

Lastly, another important step is to observe the correlation coefficient r which estimates the strength and direction of the linear correlation between pairs of continuous variables in the model. It could be an issue when the high correlations might lead to muddled results and incorrect inferences. Therefore, we have made a bivariate Pearson correlation matrix which is displayed in Table 1 to measure whether a causal relationship between specific variables is or is not likely to happen. According to Taylor (1990), there is low or weak correlation if correlation coefficients are ≤ 0.35 . If correlation coefficients are from 0.36 to 0.67, its relationship is considered as medium or moderate correlations. The r coefficients from 0.68 to 1.0 are a high correlation with $r \geq 0.9$ is

very high correlations (Taylor, 1990, p.37). Based on this scale values, the correlation matrix shows that there are approximately moderate correlations between all variables ($0.36 \leq r \leq 0.67$) except the strong correlation between freedom of expression and democracy ($r = 0.884$). However, it shows the significant causal effect between the dependent variable and independent variable in our analysis. Therefore, we do not consider it as an actual problem of high correlation coefficients in the dataset.

To be more comprehensive, it is crucial to check for multicollinearity with the variance inflation factor (VIF) to avoid any redundancy in the database. In this case, multicollinearity is a problem whether the VIF value is higher than 10 as the rule of thumb. Appendix B provided the collinearity statistics of the coefficients in our regression. Looking closely at the data, no correlation of variables has a VIF value which is higher than 10 when the highest point is only 4.204 in HDI factor. Therefore, multicollinearity is not a problem, and we then could run the analysis and estimate the model.

Table 3.1: Correlation matrix of factors affecting the level of democracy, 24 nations, 1990 – 2015.

	1	2	3	4	5	6	7	8	9	10
1. Level of democracy										
2. HDI	-0.416**									
3. Industrialization	-0.074	0.427**								
4. Urbanization	0.229**	-0.566**	-0.203**							
5. Economic equality	0.038	-0.168**	0.085	0.134**						
6. Education	-0.066	-0.049	0.244**	0.064	0.192**					
7. Gender equality	-0.535**	0.520**	0.260**	-0.328**	0.029	0.091*				
8. Freedom of expression	-0.884**	0.311**	0.017	-0.277**	-0.110*	0.121**	0.578**			
9. Oil rent	0.356**	0.190**	-0.129**	-0.153**	-0.095*	-0.046	-0.275**	-0.330**		
10. Corruption	0.540**	-0.613**	-0.286**	0.218**	0.135**	-0.136**	-0.349**	-0.441**	0.176**	
11. Population	0.230**	-0.491**	-0.145**	0.640**	0.211**	-0.115*	-0.450**	-0.260**	-0.115**	0.184**

* p < 0.05; ** p < 0.01; *** p < 0.001 (two-tailed)

After investigating several basic assumptions which might influence the model inferences seriously, here is the process to determine a good model for analyzing TSCS data in this study. According to Raffalovich and Chung (2015), there are various models which are available to analyze the pooled TSCS data. While it is usually recommended to begin with a simple model such as the pooled Ordinary Least Squares (OLS) regression, the authors had argued that OLS regression is not an appropriate method for this type of dataset. This is because observations in time-series data tend to be clustered within units (such as countries) which could lead to the strong correlation among these observations (Snijders & Bosker, 2011). In this case, the assumption of the independence of observations is violated, inducing biased estimation of variances and standard errors which made OLS regression not sufficient to test the model.

Therefore, some other approaches to the problem of correlated observations in the pooled TSCS data have used such as fixed effects and random effects. These methods aim to eliminate omitted variable bias by estimating changes within a cluster. The crucial distinction between fixed and random effects is the dummy variable's function in the model. While the parameter measures a dummy variable considered as an element of the intercept in the fixed effects model, it becomes a component of variance errors in a random effects model (Park, 2011). To be more precise, fixed effects model helps us adjust omitted variables which change between countries but persistent over time. On the contrary, the random effects model performs effectively where omitted variables are either persistent over time but vary between cases or constant between cases but change over time (Abiola & Olausi, 2014).

As Bell and Jones (2015) have emphasized, no model could be a remedy for all difficulties because there will remain biased in the analysis of higher-level entities whether possible omitted variables are not identified. Hence, researchers need to consider which techniques are appropriate to interpret their theories and data (Raffalovich & Chung, 2015). Otherwise, they might risk incorrect standard errors, type I and type II errors and so on, leading to wrong inferences in their estimation. Therefore, to identify the most suitable model among OLS regression, fixed effects and random effects model, I will perform several tests to estimate their efficiency in my data set.

To begin with, a fixed effect model is estimated by Least Square Dummy Variables (LSDV) regression. Observing the p-value which is smaller than our alpha of 0.05, it supposed that a fixed effects model is better than the pooled OLS regression to perform this analysis. In the

F-test, the null hypothesis means that the fixed effects which are both observed and unobserved equal to zero. When p-values is rejected at five percent level, the fixed effects model is non-zero, and the pooled OLS regression is not proper to analyze this research.

Then, a random effects model is conducted, and I will use the Breusch and Pagan Lagrangian multiplier test to examine whether a random effects model could perform the TSCS data better than the pooled OLS. The result of the test is briefly displayed in Figure 3.1. According to Breusch and Pagan Lagrangian multiplier test, the p-value is less than our alpha of 0.05. Therefore, the null hypothesis is rejected at five percent level, suggesting that a model of random effects will perform better than that of the pooled OLS in this TSCS data.

```

Breusch and Pagan Lagrangian multiplier test for random effects

Demo[Country_n,t] = Xb + u[Country_n] + e[Country_n,t]

Estimated results:

```

	Var	sd = sqrt(Var)
Demo	2.797675	1.672625
e	.1466242	.3829154
u	.4416098	.6645373

```

Test:  Var(u) = 0
      chibar2(01) = 528.04
      Prob > chibar2 = 0.0000

```

Figure 3.1: Result of Breusch and Pagan Lagrangian multiplier test

Finally, knowing that both fixed effects and random effects model have performed better inferences than pooled OLS regression, the Hausman specification test will be applied to compare evidently between the efficiency of these two models. According to Hausman (1978), the null hypothesis suggests that individual effects are not correlated with that in other regression in the model. The result of this test is indicated in Figure 3.2. Noticeably, the sentence in the bottom of the result (*V_b-V_B is not positive definite*) underlined that the Hausman statistic test might not have performed in the best possible values because the function which should be minimizing does

not have a global minimum. Therefore, the result is not satisfied and could not be trusted certainly in this case.

```
Test: Ho: difference in coefficients not systematic

      chi2(10) = (b-B)'[(V_b-V_B)^(-1)](b-B)
              =          5.66
Prob>chi2 =          0.8427
(V_b-V_B is not positive definite)
```

Figure 3.2: Result of the Hausman specification test

In this case, there is a possible solution to deal with this problem by applying an artificial regression version of the Hausman specification test as Wooldridge (2002) had suggested. Schaffer and Stillma (2016) indicated that the alternative technique is known as an overidentifying restrictions test, using the command *xtoverid* to examine whether fixed effects model or random effects model will conduct better in this TSCS dataset. Consequently, the result is estimated in Figure 3.3 as follows:

```
Test of overidentifying restrictions: fixed vs random effects
Cross-section time-series model: xtreg re
Sargan-Hansen statistic 30.190 Chi-sq(10) P-value = 0.0008
```

Figure 3.3: Result of overidentifying restrictions test

Overall, this test evaluates the similar null hypothesis as in the Hausman specification test when favored over random effects estimator to apply in the analysis. It could be observed in Figure 3.3 that the p-value is smaller than our alpha of 0.05. Hence, we can reject the null hypothesis and concluded that the fixed effects model becomes more effective in this TSCS dataset. Therefore, in this research, the fixed effects model will be used to examine my hypotheses.

Before running the analysis and discussing the result, two significant assumptions influencing the TSCS data structure are heteroskedasticity and serial correlation. As Cameron and

Trivedi (2005) have argued, falsely neglecting the potential correlation of regression disturbances over time and between countries could induce biased statistical inference. In other words, it could make the standard errors of the coefficient to be insignificant than they actually are as well as R-squared higher. Therefore, academics need to control the standard errors of the coefficient carefully, evaluating for the probable dependence of the residuals. In this context, I already conducted two tests for heteroskedasticity and serial correlation for our TCSC data. The results are displayed in Appendix C which underlined that there is a presence of heteroskedasticity and serial correlation in the dataset. Fortunately, Driscoll and Kraay (1998) have provided a non-parametric covariance matrix estimator which ensures the consistent standard errors and robust to the violations of autocorrelation and heteroskedasticity. Following their methodology, Hoechle (2007) proposed a Stata implementation of this covariance matrix estimator which could be applied with pooled OLS regression and a fixed effects model.

To sum up, I would like to use the *xtscc* program which produces Driscoll and Kraay's (1998) standard errors for coefficients estimated by fixed effects model, aiming to correct the violations of heteroskedasticity and autocorrelation in our TSCS dataset (p.282).

4. Empirical results and discussion

In this chapter, I will discuss the results from the fixed effects model that I have performed based on the theoretical framework presented in the previous section. First, the descriptive statistics provide a general view of the raw data set from ten variables in our hypothesis. Then, I have conducted seven different models which each of the variables is tested separately for the level of democracy. Finally, I will present a complete model with all significant variables from these respective models, including three control variables to help us understand better the general influence of these factors on the progress of democratization in Asian countries.

4.1. Descriptive statistics

To begin with, the summary of descriptive statistics for this study is provided in full on Table 4.1 below. I had used Stata processing to obtain data such as maximum, minimum, means, standard deviation and the total number of observations of the primary variables. As can be seen in this table, the TSCS data is strongly balanced with different observations in each variable. Noticeably, the variables vary along the size of cases which indicated a lot of missing values in the dataset. To present a proper fix effects model analysis, I deleted the missing value listwise, giving us the same valid N for each variable, namely 350 in this case. The new descriptive statistics of our variables after list-wising deletion is displayed in Table 4.2 as follows.

Table 4.1. Descriptive statistics on factors that may influence on the level of democracy, across 24 Asian countries, 1990 – 2015

	Valid N	Minimum	Maximum	Mean	Standard deviation
Level of democracy	620	1.0	7.0	4.715	1.758
HDI	594	0.295	0.925	0.611	0.141
Industrialization	508	5.524	40.452	19.020	7.224
Urbanization	624	-1.715	9.180	2.710	1.660
Economic equality	524	27.4	52.1	38.597	5.510
Education	489	0.012	12.785	1.000	2.058
Gender equality	620	0.082	0.743	0.468	0.117
Freedom of expression	616	0.056	0.838	0.498	0.205
Oil rents	593	0	31.098	2.915	5.782
Corruption	620	0.131	0.982	0.622	0.182
Population	624	-1.752	7.665	1.558	1.006

Table 4.2. Descriptive statistics after listwise deletion on factors that may influence on the level of democracy, across Asian countries, 1990 – 2015

	Valid N	Minimum	Maximum	Mean	Standard deviation
Level of democracy	350	1.0	7.0	4.334	1.673
HDI	350	0.386	0.902	0.635	0.133
Industrialization	350	6.043	34.244	19.731	7.377
Urbanization	350	-1.687	6.955	2.604	1.573
Economic equality	350	27.4	52.1	38.821	5.894
Education	350	0.012	10.096	1.103	2.145
Gender equality	350	0.230	0.743	0.488	0.104
Freedom of expression	350	0.096	0.838	0.549	0.185
Oil rents	350	0	31.098	2.816	6.329
Corruption	350	0.131	0.915	0.597	0.170
Population	350	-1.726	5.322	1.410	0.843

In general, the dependent variable (the level of democracy) has a mean value of 4.715 with the highest score of 7.0 and the lowest score of 1.0. However, it should be noted that data acquired from Freedom House has the minimum value of 1.0 as a very democratic country whereas the maximum value of 7.0 indicated to a very undemocratic country. Due to its differences from other data source, the results from a fixed effects model will be presented in the opposite direction: a negative number of beta coefficient presents for the positive outcome of the hypothesis. In other words, there will be a positive correlation between the level of democracy and seven predicted variables if the beta coefficient number is negative and vice versa.

4.2. Main results and discussions

It is clearly shown from Table 4.3 that HDI, economic equality, education and freedom of expression are found to have significant impacts on the level of democracy in 24 observed Asian countries during the period from 1990 to 2015. Besides, three factors of industrialization, urbanization and gender equality are reported to have no statistically significant effect on the level of democracy which refute our second, third and sixth hypothesis demonstrated in the chapter of the theoretical framework. Furthermore, all significant hypotheses are supported in this research since they witness the similar trend with what is anticipated in our models. It should be noted that the data retrieved from Freedom House has the minimum value of 1.0 as a very democratic country whereas the maximum value of 7.0 indicated a very undemocratic country. Therefore, the negative effects which are illustrated in the result determine the positive correlation between the level of democracy and independent variables. The detailed empirical results and discussions for each independent variable would be illustrated in detail as follows.

Table 4.3. The regression results on factors that may influence on the level of democracy, across 24 Asian countries, 1990 – 2015

Model	1	2	3	4	5	6	7	8
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
Intercep	5.426***	4.058***	4.380***	7.519***	4.543***	5.187***	6.619***	9.108***
t	(0.436)	(0.202)	(0.129)	(0.699)	(0.075)	(0.573)	(0.280)	(0.748)
HDI	-1.720*							-1.273*
	(0.650)							(0.488)
IND		0.014						
		(0.011)						
URB			-0.018					
			(0.046)					
IE				-0.082***				-0.035*
				(0.018)				(0.016)
EDU					-0.189***			-0.079
					(0.041)			(0.047)
GE						-1.750		
						(1.129)		
FoE							-4.163***	-3.896***
							(0.514)	(0.562)
OIL								0.006*
								(0.003)
COR								-0.292
								(0.570)
PG								-0.166***
								(0.036)
R²	0.035	0.008	0.001	0.091	0.045	0.023	0.197	0.274

N = 350

b unstandardized coefficient

Standard errors in parentheses

* *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001; (two – tailed)

4.2.1. Human Development Index (HDI)

By estimating the model 1, we tested the first hypothesis which indicates that the higher the Human Development Index (HDI) in a country, the higher the level of democracy. From table 7, it could be seen that the p-value is less than 0.05 indicating a moderate statistically significant coefficient in the regression. Therefore, the null hypothesis is rejected, and we can support the hypothesis 1. Moreover, with the value of -1.720, the coefficient displays a negative direction which determines the positive correlation between HDI and the level of democracy. To be specific, the result indicates that when the value of HDI increases by 1%, the level of democracy will rise by 1.72%. It implies that nations with a better value of HDI are more likely to make a transition to democracy. Hence, HDI is a crucial determinant on democratization in Asian regimes.

This empirical finding is in line with a large part of previous literature. For example, Ranganathan et al. (2015) suggested the same result in their research for democracy and development traps in many developing countries with low levels of socio-economic development. They found that a critical level of HDI would trigger democratization and thus the emancipation of people. Their best fit model linking democracy and HDI does not show that every regime below the socio-economic development line fails to rise regarding democracy. Instead, it implies the fact that several countries which have not fulfilled the conditions of HDI over the last 30 years would usually experience the declines in democracy. In turn, those countries which reach a sufficient level of HDI have been witnessed to increase the level of democracy.

Another similar result is provided by the work of Doorenspleet (2000) for the ECPR Joint Sessions. In the study, the author tested the hypothesis arguing that there is a strong correlation between development and the existence of a democratic institution whether development is seen as human development instead of the economic development of a regime. The finding indicated that HDI strongly enhances the likelihood of the democratic transformation with 76 percent correctly classified by the model. He claimed this positive relationship with an argument that regimes with a developed population on average are democratic while regimes with limited HDI values such as some sub-Saharan African countries are mostly authoritarian.

As conveyed in Asia-Pacific Human Development Report (2016), among developing continents in the last quarter century, South Asia has perceived the fastest process of human development, followed by East Asia and the Pacific. However, these subregions still move slowly

behind Europe, Latin America and the Caribbean concerning HDI values. It is reported that most people who are beyond low levels of human development live in Asia-Pacific region. Therefore, despite such remarkable progress in improving human development, 19 Asia countries are still under the average global values of HDI, emphasizing that while this region might attain an “economic miracle”, it has not yet reached a “human development miracle” (Asia-Pacific Human Development Report, 2016, p.3). Therefore, this HDI progress could explain some problems regarding many fundamental political rights and civil liberties, which make the process of democracy happened at a low pace in Asian countries at present.

4.2.2. Industrialization (IND)

In model 2, the hypothesis emphasized the impact of the level of industrialization on the likelihood of democratization. As a result, the p-value is larger than our alpha of 0.05, leading to the fact that industrialization could not be considered as a statistically significant variable in this model. Furthermore, a positive regression coefficient of 0.014 indicates that there is a negative correlation between industrialization and the level of democracy in our research. Then, the surprising trend between this indicator and democratization is not in accordance with what is predicted before running the fixed effects model. Because we cannot reject the null hypothesis in the model 2 and the anticipated direction of this relationship is not observed either, hypothesis 2 is not supported. It means that there is no evidence to determine the positive influence of industrialization on the level of democracy in Asian countries from 1990 to 2015.

In my opinion, the unexpected result is caused due to the particular nature of Asian institutions which has witnessed the emergence and stability of some authoritarian regimes and communist countries over a sustained period. There is a few some literature focusing on the differences in economic development among authoritarian regimes in Asia which are distinctive to other parts of the world. Unlike the rest of the democratic progress in other countries, many Asian states have managed to attain astonishing levels of industrialization under authoritarian rule. Linz and Stepan (1996) pointed out that this pattern of growing economic prosperity and broadening social modernization in Asian authoritarian regimes is in contrast to that of economic stagnation and social deterioration in Central and Eastern Europe under communist rule and Latin American under successive military dictatorships. Due to the developed prosperity under

authoritarian rule, citizens of Asian countries have reduced incentives to abandon authoritarian institutions in favor of democratic transitions than their counterparts in other authoritarian regimes. Hence, these impressive economic performances have induced the legitimacy of authoritarian governments in Asia and produced a stable political system in some particular countries that could resist pressures to democratization longer than institutions in other regions (Kunaraja, 2014). These decisive explanations could clarify why there is no relationship between industrialization and the possibility of democratic transitions in our research as modernization theory (Lipset, 1959) had demonstrated earlier.

For instance, Singapore is considered as a most successful case representing the remarkable economic performances under the authoritarian regime. In the economic sphere, the People's Action Party has established ambitious industrialization programs which focused on the development of export-oriented manufacturing to promote economic growth. To encourage export-led investment, the Singaporean government attempts to improve infrastructure, communications, and control labor costs at a low price to facilitate the activities of all kinds of business. At the same time, the bureaucracy is also isolated from social and political fields in Singapore, enhancing efficiency and reducing corruption significantly (Case, 2003). Through these astounding policies, the People's Action Party managed to increase the economic performance, attaining incredibly high and consistent growth rates during the 80s and 90s. Singapore is then known as one of Asia's Tiger economies beside South Korea, Taiwan, and Hong Kong. As a direct outcome of all these undertakings, the People's Action Party has become the dominant party as well as secured its political legitimacy strongly in Singapore. Therefore, the example of Singapore's economic development could be seen as a suitable explanation to our unpredicted result in model 2, indicating that the higher level of industrialization might not lead to the higher likelihood of democratic emergence in Asia countries.

4.2.3. Urbanization (URB)

Hypothesis 3 holds that urbanization index could have an impact on the likelihood of democratization in Asian countries. In the result, we observed a positive relationship between the variable of urbanization and the level of democracy due to the negative value of the regression coefficient at -0.018. Nevertheless, as the p-value is larger than 0.05, we cannot reject the null

hypothesis, and thus, the influence of urbanization on democratization is not statistically significant in model 3. In other words, hypothesis 3 is not supported, implying that urbanization is not a crucial determinant to bring about the transition of democratic institutions in Asia in our research.

Although the result is not in line with a large body of literature mentioned earlier in the previous chapter, there are several studies which provided the same outcome and are able to explain the surprising direction of no relationship between urbanization and democratization as our result in Asia countries indicated. For instance, Barro (1999) disagreed with the argument which presented a significant impact of urbanization on the level of democracy. He suggested that it would be easier for a dictator to monitor and repress the activities of protestors in a densely populated area. Thus, he argued that urbanization does not necessarily generate democratization. In his analysis, there was a negative and slightly significant correlation between urbanization and the level of democracy. As a result, it is not true that more rural areas are less likely to achieve the democratic process in a given standard of residing.

Moreover, while proving that a higher level of urban percentage is significantly related to the democratic trajectories, Anthony (2014) also pointed out its limitations. When adding other urban size conditions as control variables such as urban population density, the log of the largest urban's population, and urban primacy, the ratio of urban becomes insignificant. This result shows that the percentage of urbanization is too far-reaching to capture the unique influence of various size aspects of the urban system on democratic transitions.

4.2.4. Income equality (IE)

It is expected that the higher level of economic equality in a country could contribute to the higher level of democracy in hypothesis 4. With the p-value less than our alpha of 0.001, the null hypothesis is rejected. Thus, there is evidence for a correlation between this indicator and the level of democracy at the 1 percent confidence level. Due to the negative regression coefficient at -0.082, we can conclude the positive impact of economic equality on the progress of democratization in Asian countries. In other words, as the amount of economic equality increase by 1%, the level of democracy is likely to rise by 8.2%. Because this positive effect is similar to the prediction in our theoretical research, the hypothesis is supported in the model 4.

This positive finding had refuted the argument of Pengl (2013) when he claimed that there is no significant influence on economic equality on democratization as pre-existing theories mentioned. The author provides two reasons related to this problem, namely the problems of methodology and the difficulties to appropriately conceptualize both variables of economic equality and democracy. Therefore, these structuralist theories are found to have limited and weak evidence in quantitative empirical research when observing the relationship between economic equality and the process of democratization in Asia (Pengl, 2013).

On the other hand, this result in model 4 claimed the assumption of Boix and Stokes (2003), demonstrating that economic equality is a crucial determinant driving to the higher level of democracy instead of economic growth. The wealthy class tends to support the emergence of democracy when there is economic equality, and thus they fear less about the economic redistribution in society. Following the same pattern, Acemoglu and Robinson (2005) focused on the mass revolution to support the economic equality theory of Boix and Stokes (2003). They argued that the elite might have enough power to repress the mass when they demand the government to have economic redistribution and more political participation. However, while the suppression of these revolutions is too costly, compromises about economic equality could be reached, and the elite would agree to make a transition to democracy, which prevents the mass from raising revolts.

Furthermore, when observing the empirical evidence including economic inequality to several social variables, Thorbecke and Charumilind (2002) have illustrated a causal mechanism for the effect of income distribution on democratic institutions. They argued that whether there is a considerable difference between the rich and the poor in a society, the median voters tend to support liberal taxes or policies of land reform because it could bring them to higher chances for redistribution. In this context, reducing directly in inequality through income redistribution could lead to democratization. In contrast, economic inequality might affect the instability of democratic institutions profoundly and contribute to severe social revolution.

4.2.5. Education (EDU)

Hypothesis 5 indicates that the higher number of educated people lead to the higher level of democratic institutions in this particular country. By observing the p-value which is smaller than

our alpha of 0.001, the variable education is then significantly correlated to the level of democracy at the 1 percent confidence level. Besides, model 5 provides a negative regression coefficient of -0.189, implying the positive relationship between education and the progress of democracy in Asian countries. In other words, education raises the level of democracy by 0.189 points per year of schooling. Therefore, this empirical result is in accordance with what is assumed in our theory-based research, and thus we can support hypothesis 5.

Since this significant correlation approves our expected hypothesis, it came up with the same results of several previous studies. Russell (1939) emphasized that education has played an influential part in establishing democracy as a workable system. In general, people surely cannot work in a democratic institution when they are illiterate. They also do not know how to utilize all the machinery which might be required for democracy if the population cannot read or write correctly. Hence, the population needs to have a fair amount of education before there is any probability of emerging democracy.

Based on these similar theoretical frameworks, Glaeser et al. (2007) examined the relationship between education and the level of democracy by modeling a channel which estimated the possibility of education making a transition to democracy and increasing its stability. This empirical result strengthens the correlation between education and democracy, implying that when education increases the benefits of civic engagement, it raises political participation in support for democracy rather than a dictatorship. This educational transformation leads to the likelihood of successful democratic rebellions against dictatorships and weakens that of fruitful anti-democratic coups.

Applying to the situation in Asia with some authoritarian regimes, there are several points of view to explain the democratic transition by education when more educated people are likely to experience the political disengagement (Croke et al., 2014). First, education provides citizens with cognitive abilities to increase their critical thinking, which may induce a lower level of support for the incumbent government. Thus, citizens have less attention in legitimizing it with their political participation. Second, educational progress might lead to post-material values, supporting self-expression and individual voice which is opposite to social conformity and solidarity (Inglehart & Welzel, 2005). Third, when education increases population knowledge and understanding of politics, educated people might be more recognized that political participation will not indeed

affect political outcomes. Lastly, educated citizens may have disappointed feelings with autocratic politics in their mismanagement of economic and social spheres (Croke et al., 2014). Therefore, throughout this procedure, educated citizens might demand their government to establish democracy and install democratic institutions.

4.2.6. Gender equality (GE)

Hypothesis 6 holds that if the level of gender equality increases, it is more likely to contribute to the growth of democracy in a country. Model 6 in Table 4.3 shows that there is a positive trend between gender equality and the level of democracy with the negative value of the regression coefficient at -1.750. However, because the p-value is larger than our alpha of 0.05, this effect is not statistically significant, and we cannot reject the null hypothesis in the model. It means that the hypothesis 6 is not supported, leading to the fact that gender equality is found to have no significant influence on the level of democracy in this research.

Gender equality shows a positive trend on the dependent variable of democracy which is following what is expected before running the fixed effects model. Nevertheless, there is no significant effect of gender equality contributing to the higher level of democracy. This unexpected result seems against some earlier studies. Inglehart et al. (2004) argued that the rise of gender equality advances the probability that democratization will emerge and flourish. In their analysis, the correlation between support for gender equality and democracy is observed significantly with $r = 0.82$. Moreover, this relationship is measured remarkably with 67 percent of the variance in democracy infers the emphasis on gender equality.

On the other hand, the results of Linder and Bachtiger (2005) implies the same direction as ours when male dominance found no significant correlation on democratization in 62 African and Asian countries during 1965 and 1995. Also, other particular studies could explain why there is no significant linkage between gender equality and the level of democracy in Asia. As Beer (2009) stated in her article, due to the variety of authoritarian regimes, the relationship between gender equality and the type of governments is much more complicated. On the one hand, many military regimes and dictatorships taking roots in conservative, religious, or nationalistic ideologies could impede the equality of women. On the other hand, some communist countries, as well as populist dictatorships, have been witnessed to enhance the level of gender equality as well.

She reasoned that it is not a certain possibility when dictators must refuse gender equality; there are some cases they tend to grant rights to women from above which might improve the equality of women to maintain their legitimate authorities.

Similarly, Ertan (2012) argued that gender equality does not happen only in democratic institutions. Some authoritarian regimes also have been perceived to promote the women's status in both social and political spheres. Besides, international influence and pressure might be another reason which demands these authoritarian governments to encourage the progress of gender equality. For instance, the transnational women's rights movements and international conventions such as the UN and the ILO conventions are likely to put pressure on authoritarian regimes to improve women's conditions. In turn, these regimes apply the ratification of conventions as "a source of international legitimacy" (Ertan, 2012, p.4).

Furthermore, there is evidence to demonstrate that communist countries which followed Marxist and Leninist ideologies primarily supported various issues related to gender equality. In these regimes, the progress of women's equality is somehow recorded even more advantageous than these campaigns for women living in advanced industrial countries (Pollert, 2003). However, it is pointed out that the higher number of women participating in society and politics does not always reflect peer equality, especially in these authoritarian and communist countries. Pollert (2003) has indicated that the political representation of women in communism is symbolic more than actually effective since women usually are hired in lower paid jobs. Therefore, the ideology to commit to gender equality did not hinder the patriarchal structures of the state, which explains why the higher level of gender equality might not be considered to enhance democracy in these Asian countries.

4.2.7. Freedom of expression (FoE)

Because the p-value of model 7 is less than our alpha of 0.001, the variable freedom of expression is considered to be statistically significant at the 1 percent confidence level. Moreover, the sign of the coefficient is negative which illustrates a positive impact of freedom of expression on the dependent variable. This positive trend is in accordance with what is expected in hypothesis 7 before running the fixed effects model. Hence, this finding suggests that when the value of freedom of expression increases by 1%, the level of democracy is likely to rise by 4.2%. With the R-square

of 0.197, freedom of expression could explain 19.7% of the total variance of the level of democracy in Asian countries. It is also the highest value of R-square recorded in all seven respective models. Therefore, hypothesis 7 is supported, and we can conclude that there is a strong and positive effect of freedom of expression on Asian democratization.

This result is in line with various earlier literature suggesting that freedom of expression stimulates changes in levels of democracy significantly. Chang et al. (2013) considered freedom of expression as one of some standard institutional fundamentals of representative democracy. Moreover, Gomez (2004) has claimed that the growth of freedom of expression and the deterioration of censorship has usually been linked to the movement toward democracy. Nowadays, Asia has witnessed frequent movements leading to the transition of democracy with the expansion of freedom of expression (AMIC, 2000). However, it is recorded that there are forms of containment of freedom of expression, comprising the practice of legislation to restrict access, forbid a few particular contents, and exercise self-censorship (Gomez, 2004).

Also, Inglehart and Welzel (2009) argued that self-expression values show strong causal linkage, contributing to the emergence of democracy through a procedure of intergenerational value changes which occurs not only in Western democracies but also within some authoritarian regimes. They explained that self-expression has been spreading and developing stronger, encouraging people to be more likely to get involved in the political sphere directly. The movement of this political participation tends to bring about the wave of democratization which took place in several Asian countries such as Japan, Korea, and Taiwan. On the other hand, although intensifying emphasis on self-expression values could deteriorate the legitimacy of authoritarian systems, authoritarian elites still regulate the public and prevent pro-democratic forces whenever they maintain to control the military and secret polices. For instance, as long as Iran's theocratic leaders and the Chinese Communist Party administer their regimes' army and security forces, the democratic movement might not occur at the national level (Inglehart & Welzel, 2009).

In short, countries have a responsibility to protect the right and freedom of public expression to induce the rise of democratization. In some cases, restrictions or limitation are only applied if they are necessary for democratic institutions and being prescribed by law, attempting to maintain public good and restraining hate speech for social and racial harmony (Azizuddin Mohd Sani, 2008).

4.2.8. Mixed variables

Model 8 would like to examine the multiple regression of significant factors contributing to the emergence of democracy in Asian countries. As explained respectively in each hypothesis, there are four variables considered to be statistically significant, thus have moderate correlations to the level of democracy in our research, namely Human Development Index (HDI), economic equality, education and freedom of expression. Therefore, I combine these four significant variables and three more control variables to demonstrate a comprehensive assessment for the effect of these determinants on the democratization in Asia. The three control variables used in our study are oil rents, corruption, and population.

In a result, although the value of regression coefficients decreases slightly comparing to these previous respective models, three variables of HDI, economic equality and freedom of expression remain its critical influence on the level of democracy in this multiple regression. Furthermore, all three indicators provided negative regression coefficients of -1.273 (in HDI), -0.035 (in economic equality), and -3.896 (in freedom of expression), illustrating the positive impact of these factors on the progress of democratic transition in Asia. These positive directions in model 8 are also similar to what was described in the previous respective hypotheses. On the other hand, education is the only variable performing no significant correlation to democratization in this regression. As the p-value is larger than our alpha of 0.05, we cannot reject the null hypothesis, and then the relationship between education and the level of democracy is not supported in this context. It means that when combining with other indicators such as HDI, economic equality and freedom of expression, education variable does not show any effect on the democratization.

Among four independent factors and three control variables, freedom of expression is considered as the most influential determinant with the high value of regression coefficients of -3.896 and the significant correlation at the 1 percent confidence level, indicating its considerable impact on the emergence of democracy in Asian countries. Moreover, with the R-square of 0.274, model 8 could explain 27.4% of the total variance of the motivation bringing about democratization in Asia. It means that there is still room for improvement to find another model that can explain more variances in our estimation. However, when comparing eight models

together, we could see that the more variables included in the model, the more variances are explained to the level of democracy with our final model 8 explaining 27.4% of the total variance.

Regarding control variables, oil rent showed a significant negative effect on the level of democracy with a positive coefficient of 0.006 in the model. In other words, it implies that the higher the GDP of a country due to oil rent, the lower the level of democracy. This result is in line with Ross (2001)'s theory that oil might hinder democracy based on the rentier, repression and modernization effects, particularly in several oil-rich countries. As Ross (2001) stated in his conclusion, the significant impact of oil rent on democratization could help account for the political problems leading to the absence or weakness of democracy in Central Asia and Southeast Asia where include a lot of oil-exporter countries.

Another control variable which has an essential relationship to democracy is population. With a moderate coefficient -0.166 significant at the 1 percent confidence level, population variable is considered to have a positive impact on the level of democracy in Asian countries. This outcome is in line with the study of Roberts (2006). In his research, there is a positive influence of democracy on economic growth over time which includes an essential mediating role for fertility. To be more precise, it indicates that the faster the growth of population, the higher the level of democratization. In an empirical study in a case of China, Feng, Kugler, and Zak (1999) argued their theoretical model in which political instability would increase birth rates while political capacity is likely to reduce them. It means the stability of politics and the capacity of government are two central factors which could influence the decision of each family concerning the total number of children. According to Wolf (1986), the success of birth control is more regulated by politics since the Chinese government has played a significant role in regulating the declining trends toward population growth in their country. Consequently, the achievement of family planning program has maintained the stability and influence of China's authoritarian government which might impede the emergence of democratization.

Corruption is the last control variable and the only variable which is not statistically significant with the level of democracy in the model. With the p-value is larger than our alpha of 0.05, we cannot reject the null hypothesis. Thus, corruption is not supported to have any impact on democratization. However, it is noticeable that the result indicates a negative regression coefficient of -0.292, contributing to the positive trend between corruption and the level of

democracy. The increasing level of corruption is likely to induce the transition of democratic institutions which is opposite to arguments stated by Del Monte and Papagni (2001) and Poisson (2010). They specified that corruption would decrease the government's financial resources, leading to less public expenditure being made and contributing to the economy and general public good. In this case, there is a different causal mechanism which could explain to the positive direction between corruption and democracy in particular countries within Asia-Pacific region. Campbell and Saha (2013) illustrated that there is a non-monotonic relationship between corruption and the level of democracy in Asia-Pacific countries. When countries shift from authoritarian regimes to highly imperfect democracies (considered as electoral democracy), it is typically perceived that the level of corruption does not fall, but it might be observed to increase (Cohen, 1995). Conversely, when countries transform from authoritarian regimes to electoral democracy to mature democracy, corruption is only likely to fall when the democracy level is already moderately high (considered as fully mature democracy). Using the case of recent South Korea history and panel data to analyze the impact of democracy on regulating corruption in Asia-Pacific countries from 1995 to 2008, Campbell and Saha (2013) concluded that there is a cubic relationship between democracy and corruption. A democratic transformation beginning at an extremely authoritarian level would reduce corruption, but then the intermediate levels of democracy are likely to increase corruption. Finally, at fully mature stages of democracy, its complete democratic systems and institutions could lead to reduce corruption. In addition, the authors found that the turning point where democracy will lessen corruption is relatively high in Asia-Pacific countries. Therefore, this evidence could explain why there is a positive trend observed in our model between corruption and democracy in the case of Asian countries.

5. Conclusion

Democratization and its progress have been continuously examined and addressed by academics and international institutions. In these debates, democracy is known as “the only game in town” (Linz & Stepan, 1996) implying the belief that it might be an optimal system for establishing politics and government in countries all around the world. However, the progress of democratization seems to be fragile and uncertain, characterized by several authoritarian hindrances in Africa, Asia and Latin America (Linder & Bächtiger, 2005). In particular, there has been an uneven democratic development in Asia. While many countries were not able to preserve their democratic institutions after the transition to democracy (Gilley, 2014), authoritarian forms of government started to emerge in other states. Hence, my thesis attempts to get more understanding of many socio-economic determinants which could have an impact on the transition of democratization in Asia by analyzing the primary research question: *Which factors influence the level of democracy in Asian countries?*

Based on the foundation of modernization theory by Lipset (1959) and various previous theoretical and empirical studies about the level of democracy, seven hypotheses were proposed in our research concerning some initial existing assumptions. It is expected that there is a positive correlation between the level of democracy and seven socio-economic factors, namely Human Development Index (HDI), industrialization, urbanization, economic equality, education, gender equality and freedom of expression. Besides, due to its theoretical relevance to our hypotheses in current literature, three more control variables of oil rents, corruption and population will be involved in the model to analysis our explanations in a broader assessment.

After operationalizing these factors and hypotheses, the fixed effects model is chosen to examine the time-series-cross-section (TSCS) data in this study. As a result, four out of seven independent variables are found to have effects on the progress of democratization in Asia. Moreover, these significant variables also perform a positive correlation with the level of democracy, which is similar to these predicted hypotheses. First, HDI provides a significant correlation with democracy, which supported for Diamond (1992)’s suggestion when he pointed out the drawbacks of per capita national income. Second, the significant and positive result of economic equality to the level of democracy in our research approves Boix and Stokes (2003)’s causal mechanism which emphasized the influence of the equal distribution of economic income

on democracy instead of per capita income. Third, in social development, both education and freedom of expression are reported to correlate positively to the level of democracy. While the significant impact of education on democratization is in accordance with the modernization theory of Lipset (1959), freedom of expression turns out to be the most influential determinant affecting to the democratic transition among seven factors in our model. With the highest value of both R-square and the regression coefficient, the variable of freedom of expression could explain 19.7% of the total variance of the level of democracy in Asian countries.

On the other hand, industrialization, urbanization and gender equality is not supported by our model, indicating that there is no significant influence on the level of Asian democracy. Furthermore, urbanization is found not only have no effect but also experience a negative trend to the level of democracy which is opposite to what we proposed in the hypothesis. Regarding industrialization, in Asia, it could be seen that numerous impressive economic performances occur under authoritarian regimes such as Singapore and China, which have induced the legitimacy to these governments, produced a stable political system and reduced population incentives in favor of democratic transitions. Besides, the surprising outcome of gender equality could be explained since the number of women participating in social and political spheres in some authoritarian and communist states is somehow even higher than that number of women living under advanced industrial countries. Moreover, Pollert (2003) argued that the political representation of women in communism is more symbolic than effective since this record does not always reflect peer equality.

Also, in the multiple regression with four significant variables and three control variables, except education, three factors of HDI, economic equality and freedom of expression remain its positive influence on the level of democracy. In this model, freedom of expression continues to be the most influential determinant with the highest value of regression coefficients and the significant correlation at the 1 percent confidence level. Regarding control variables, while corruption is not statistically significant and provides a negative trend with democracy, both oil rents and population show a strong correlation to the democratic transition in Asian countries.

Although limitations are reduced as much as possible, some restraints of my study should be mentioned. First, concerning empirical analysis, we only utilized 24 Asian countries in this research due to the limited availability of the data set which usually is a challenge whenever it comes to developing countries. In fact, Asia consists of 48 countries in total, which makes it the

largest continent in the world. Therefore, compared to 24 units observed in the study, our research only covers a partial number of countries in the whole Asian region. Moreover, there are some missing data in our analysis. Therefore, it will be a significant enhancement when more primary data is available in the future. Thus, more empirical research could be demonstrated to generalize expected theories and provide a comprehensive analysis of the relationship between democratization and socio-economic determinants.

Second, our research examined factors which are likely to drive democratization in Asian countries at the country level. However, according to Grugel and Bishop (2014), there are three crucial aspects of democratization: the state, civil society, and global politics. It means that whenever we would like to understand the transition of democracy, we need to investigate the importance and connotation of democratic progress in various areas and at different level of individuals, national, regional and global politics. Therefore, some further studies should consider these different levels of democratization in case of more accurate data availability to grasp a better and broader knowledge of this progress in Asia.

Third, this research gives an overview of seven socio-economic factors influencing on the level of democracy in Asia countries. However, as R-squared of the multiple regression has shown, the mixed model could only explain 27.4% of the total variance of the motivation bringing about democratization in Asia. It means that there is still room for improvement to find another model that can explain more variances in the estimation. Hence, future studies are encouraged to advance our understanding about the progress of democracy in Asia by adding more social variables such as religious fragmentation, ethnic tensions and the effect of former colonies. Due to the limitation of data availability, once again, I was not able to examine these potential determinants into this analysis.

Lastly, this empirical research could help us to recognize whether there is a significant correlation between the level of democracy and numerous predicted variables. However, it seems not a proper method to explain the causal mechanism to which happened inside causing the relationship between democracy and these socio-economic factors. For example, gender equality has been found to have no significant impact on Asian democratization in our study. However, to understand the reason why and how it does so in particular, we need several case studies to investigate carefully the causal mechanism producing inside this relationship to have a complete

explanation of this issue. Therefore, after taking advantage of empirical results, I suggest other future research to look at some case studies to figure out what are underlying reasons behinds such results, leading to understanding better the characteristics of certain Asia countries regarding the transformation to democratization.

References

- Abiola, I., & Olausi, A. S. (2014). The impact of credit risk management on the commercial banks performance in Nigeria. *International Journal of Management and Sustainability*, 3(5), 295 – 306.
- Acemoglu, D. & Robinson, J. A. (2005). *Economic origins of dictatorship and democracy*. Cambridge University Press.
- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2005). From education to democracy?. *American Economic Review*, 95(2), 44 – 49.
- Adolph, C., Butler, D. M., & Wilson, S. E. (2005). Which time – series cross – section estimator should I use now? Guidance from Monte Carlo experiments. In *annual meeting of the American Political Science Association, Washington, DC*.
- Ahlqvist, H. (2018). What factors explain the uneven development of democracy across Asian states?. *Undergraduate Journal of Politics, Policy and Society*, 1(1), 140 – 152.
- Anthony, R. M. (2014). Urbanization and political change in the developing world: A cross – national analysis, 1965 – 2010. *Urban Affair Review*, 50(6), 743 – 780.
- Arslan, Z. (2015). Freedom of expression, democracy and challenges [Presentation]. *Paper presented at the opening session of the Conference on “Freedom of Expression: Still a Precondition for democracy?” organized by the Council of Europe*. Strasbourg, France.
- Asia Media Information & Communication Centre. (2000). *Media and Democracy in Asia*, Singapore: AMIC.
- Azizuddin Mohd Sani, M. (2008). Freedom of speech and democracy in Malaysia. *Asian Journal of Political Science*, 16(1), 85 – 104.
- Balaev, M. (2014). Improving models of democracy: the example of lagged effects of economic development, education, and gender equality. *Social science research*, 46, 169 – 183.
- Barro, R. J. (1999). Determinants of democracy. *Journal of Political economy*, 107(S6), S158 – S183.
- Beck, N., & Katz, J. N. (1995). What to do (and not to do) with time-series cross-section data. *American political science review*, 89(03), 634-647.

- Beck, N. (2008). Time – series – cross – section methods. *Oxford handbook of political methodology*, 475 – 493.
- Beer, C. (2009). Democracy and gender equality. *Studies in Comparative International Development*, 44(3), 212 – 227.
- Bell, D. A. (2009). *Beyond liberal democracy: Political thinking for an East Asian context*. Princeton University Press.
- Bell, A., & Jones, K. (2015). Explaining fixed effects: Random effects modelling of time – series cross – sectional and panel data. *Political Science Research and Methods*, 3(1), 133 – 153.
- Boix, C., & Stokes, S. C. (2003). Endogenous democratization. *World politics*, 55(4), 517-549.
- Bollen, K. A. (1990). Political democracy: Conceptual and measurement traps. *Studies in Comparative International Development*, 25(1), 7 – 24.
- Bomhoff, E. J., & Gu, M. M. L. (2012). East Asia remains different: A comment on the index of “self – expression values,” by Inglehart and Welzel. *Journal of Cross – Cultural Psychology*, 43(3), 373 – 383.
- Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics: Methods and Applications*. Cambridge University Press.
- Campbell, N., & Saha, S. (2013). Corruption, democracy and Asia – Pacific countries. *Journal of the Asia Pacific Economy*, 18(2), 290 – 303.
- Case, W. (2013). *Politics in Southeast Asia: democracy or less*. London: RoutledgeCurzon.
- Castelló – Climent, A. (2008). On the distribution of education and democracy. *Journal of Development Economics*, 87(2), 179 – 190.
- Chang, A., Chu, Y., & Welsh, B. (2013). Southeast Asia: Sources of regime support. *Journal of Democracy*, 24(2), 150 – 164.
- Chu, Y. H., Huang, M. H., & Lu, J. (2013). Understanding of democracy in East Asian societies [Presentation]. *Paper presented at an Asian Barometer Conference on Democracy and Citizen*, Taipei, Taiwan.

- Cohen, A. (1995). *Crime and corruption in Eurasia: A threat to democracy and international security*. Heritage Foundation.
- Coleman, J. S. (1960). Conclusion: The political systems of developing areas. In G. A. Almond & J. S. Coleman (Eds.), *The politics of developing areas*. Princeton, NJ: Princeton University Press.
- Dahl, R. A. (1989). *Democracy and its Critics*. London: Yale University Press.
- Del Monte, A., & Papagni, E. (2001). Public expenditure, corruption, and economic growth: the case of Italy. *European journal of political economy*, 17(1), 1 – 16.
- Deutsch, K. W. (1964). Social mobilization and political development. *American political science Review*, 55(3), 493 – 514.
- Diamond, L. (1992). Economic development and democracy reconsidered. *American behavioral scientist*, 35(4-5), 450-499.
- Diamond, L. (1999). *Developing democracy: Toward consolidation*. London: Johns Hopkins University Press.
- Diamond, L. (2012). The coming wave. *Journal of Democracy*, 23(1), 5 -13.
- Dima, B., Leitao, N. C., & Dima, S. (2011). Urbanization and democracy in the framework of modernization theory: recent empirical evidences. *Actual problems of Economics*, 390 – 398.
- Doorenspleet, R. (2000). Development and Democracy: Power and Problems of Empirical Research [Presentation]. *Paper prepared for the ECPR Joint Sessions, Workshop 4*. Copenhagen, Denmark.
- Driscoll, J. C., & Kraay, A. C. (1998). Consistent covariance matrix estimation with spatially dependent panel data. *Review of economics and statistics*, 80(4), 549 – 560.
- Ertan, S. (2012). Gender equality policies in authoritarian regimes and electoral democracies. *Paper presented at 4th ECPR Graduate Conference*. Jacobs University.
- Feng, Y., Kugler, J., & Zak, P. J. (2002). Population growth, urbanization and the role of government in China: A political economic model of demographic change. *Urban Studies*, 39(12), 2329 – 2343.

- Feng, Y. (2005). *Democracy, governance, and economic performance: Theory and evidence*. MIT Press, 278 – 298.
- Fish, M. S. (2002). Islam and authoritarianism. *World politics*, 55(1), 4 – 37.
- Fukuyama, F. (1989). The end of history?. *The national interest*, 16, 3 – 18.
- Gastil, R. D. (1990). The comparative survey of freedom: Experiences and suggestions. *Studies in Comparative International Development*, 25(1), 25 – 50.
- Gastil, R. D. (1991). *Freedom in the world: Political rights and civil liberties*. Freedom House.
- Gilley, B. (2014). *The Nature of Asian Politics* (p. 89 – 141). Cambridge University Press.
- Glaeser, E. L., Ponzetto, G. A. M., & Shleifer, A. (2007). Why does democracy need education?. *Journal of economic growth*, 12(2), 77 – 99.
- Glaeser, E. L., & Steinberg, B. M. (2017). Transforming cities: Does urbanization promote democratic change?. *Regional Studies*, 51(1), 58 – 68.
- Gomez, J. (2004). Dumbing down democracy: Trends in internet regulation, surveillance and control in Asia. *Pacific Journalism Review*, 10(2), 130.
- Grugel, J., & Bishop, M. L. (2014). *Democratization: a critical introduction*. Macmillan International Higher Education.
- Guadagno, F. (2016). *The determinants of industrialization in developing countries, 1960 – 2005*. Merit Working Paper 031, United Nations University – Maastricht Economic and Social Research Institute on Innovation and Technology (MERIT).
- Handenius, A. (1997). *Democracy's victory and crisis*. Cambridge University Press, 172.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the econometric society*, 46(6), 1251 – 1271.
- Hoechle, D. (2007). Robust standard errors for panel regressions with cross – sectional dependence. *Stata Journal*, 7(3), 281 – 312.
- Huntington, S. P. (1991). *The Third Wave: Democratization in the late twentieth century* (Vol.4). Norman: University of Oklahoma Press.
- Huntington, S. P. (1993). The clash of civilization?. *Foreign affairs*, 72, 3.

- Inglehart, R., Norris, P., & Welzel, C. (2002). Gender equality and democracy. *Comparative sociology*, 1(3), 321 – 345.
- Inglehart, R., & Norris, P. (2003). *Rising tide: Gender equality and cultural change around the world*. Cambridge University Press.
- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence*. Cambridge University Press.
- Inglehart, R., & Welzel, C. (2009). Development and democracy: What we know about modernization today. *Foreign Affairs*, 5, 33 – 41.
- Inglehart, R., & Welzel, C. (2010). Changing mass priorities: The link between modernization and democracy. *Perspectives on Politics*, 8(2), 551 – 567.
- Inkeles, A. (1978). National Differences in Individual Modernity. *Comparative Studies in Sociology*, 1, 47 – 72.
- Inoguchi, T., & Newman, E. (1997). Introduction: “Asian Values” and Democracy in Asia. *Asian Values’ and Democracy in Asia*, 27. Retrieved from: <http://www.unu.edu/unupress/asian-values.html>.
- International Institute for Democracy and Electoral Assistance (International IDEA). (2018). *Gender equality*. Retrieved from: https://www.idea.int/gsod-indices/#/indices/world-map-table?attr=%5B%22SC_02_03_c%22%5D
- International Institute for Democracy and Electoral Assistance (International IDEA). (2018). *Freedom of expression*. Retrieved from: https://www.idea.int/gsod-indices/#/indices/world-map-table?attr=%5B%22SC_02_02_a%22%5D
- International Institute for Democracy and Electoral Assistance (International IDEA). (2018). *Absence of corruption*. Retrieved from: https://www.idea.int/gsod-indices/#/indices/world-map-table?attr=%5B%22SA_04_01%22%5D
- Keane, J. (2009). *The life and death of democracy*. London: Simon and Schuster.
- Kostenko, V. V., Kuzmichev, P. A., & Ponarin, E. D. (2016). Attitudes towards gender equality and perception of democracy in the Arab world. *Democratization*, 23(5), 862 – 891.

Kunaraja, A. A. S. (2014). Democracy in authoritarian states? Political change and regime stability in Malaysia and Singapore (Master thesis). Retrieved from:

<https://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/3730/thesis.pdf?sequence=2>.

Linz, J. J., & Stepan, A. C. (1996). Toward consolidated democracies. *Journal of democracy*, 7(2), 14 – 33.

Linder, W., & Bächtiger, A. (2005). What drives democratization in Asia and Africa?. *European Journal of Political Research*, 44(6), 861-880.

Lipset, S. M. (1959). Some social requisites of democracy: Economic development and political legitimacy. *American political science review*, 53(1), 69-105.

Lerner, D. (1958). *The passing of traditional society: Modernizing the Middle East*. London: The Free Press of Glencoe.

Martin, R. (2002). Promoting freedom of expression in the Commonwealth. *The Round Table*, 91(366), 521 – 531.

Menocal, A. R. (2007). Analyzing the relationship between democracy and development: Defining basic concepts and assessing key linkages [Presentation]. *Background note (1) prepared for the Wilton Park Conference on Democracy and Development*.

Moore, B. (1966). *The Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World*. Boston: Beacon Press.

Müller, H. – P. (2002). Input paper for Monte Verità Conference [Presentation]. *Paper presented at the conference on Culture, Democracy and Development*. Monte Verità, Switzerland.

Mutascu, M. I. (2009). Population growth and democracy: an extreme value analyses in Romania's case. *Journal of Applied Quantitative Methods*, 4(3).

Park, H. M. (2011). Practical guides to panel data modeling: A step by step analysis using Stata. *Public Management and Policy Analysis Program, Graduate School of International Relations, International University of Japan*, 1 – 52.

Pengl, Y. (2013). Strong theories, weak evidence: The effect of economic inequality on democratization. *Living Reviews in Democracy*, 4.

- Piccone, T. (2017). Democracy, gender equality, and gender security. *Brookings*. Retrieved from https://www.brookings.edu/wp-content/uploads/2017/08/fp_20170905_democracy_gender_security.pdf.
- Poisson, M. (2010). Corruption and education. UNESCO. Retrieved from: <http://unesdoc.unesco.org/images/0019/001902/190247e.pdf>.
- Pollert, A. (2003). Women, work and equal opportunities in post – communist transition. *Work, employment and society*, 17(2), 331 – 357.
- Przeworski, A., Cheibub, J. A., Limongi Neto, F. P., & Alvarez, M. M. (1996). What makes democracies endure?. *Journal of democracy*, 7(1), 39 – 55.
- Przeworski, A., & Limongi, F. (1997). Modernization: Theories and facts. *World Politics*, 49(2), 155-183.
- Przeworski, A., Alvarez, M. E., Cheibub, J. A., & Limongi, F. (2000). *Democracy and development: Political institutions and well – being in the world, 1950 – 1990* (Vol. 3). Cambridge University Press.
- Raffalovich, L. E., & Chung, R. (2015). Models for Pooled Time – Series Cross – Section Data. *International Journal of Conflict and Violence (IJCV)*, 8(2), 209 – 221.
- Ranganathan, S., Nicolis, S. C., Spaiser, V., & Sumpter, D. J. (2015). Understanding democracy and development traps using a data – driven approach. *Big data*, 3(1), 22 – 33.
- Roberts, W. (2006). Political regimes as demographic regimes: Unpacking the democracy – economic growth relationship. *Paper presented at the Annual Meeting of the American Sociological Association*, Montreal Convention Center, Montreal, Quebec, Canada (p. 1).
- Robinson, J. A. (2006). Economic development and democracy. *Annu. Rev. Polit. Sci.*, 9, 503 – 527.
- Ross, M. L. (2001). Does oil hinder democracy?. *World politics*, 53(3), 325 – 361.
- Rueschemeyer, D., Stephens, E. H., & Stephens, J. D. (1992). *Capitalist development and democracy* (p. 75057). Cambridge: Cambridge University Press.
- Russell, B. (1939). Education for democracy. *Bulletin of the Department of Secondary – School Principals of the National Education Association*, 23(81), 6 – 16.

- Schumpeter, J. (1947). *Capitalism, Socialism and Democracy* (2nd ed.). New York: Harper.
- Shin, D. C., & Wells, J. (2005). Is democracy the only game in town?. *Journal of democracy*, 16(2), 88 – 101.
- Shin, D. C. (2008). The Third Wave in East Asia Comparative and Dynamic Perspectives. *Taiwan Journal of Democracy*, 4(2).
- Smith, G. H. (1948). Liberalism and level of information. *Journal of Education Psychology*, 39(2), 65 – 82.
- Solt, F. (2008). Economic inequality and democratic political engagement. *American Journal of Political Science*, 52(1), 48 – 60.
- Solt, F. (2009). Standardizing the World Income Inequality Database. *Social Science Quarterly*, 90(2), 231 – 242.
- Solt, F. (2016). The Standardized World Income Inequality Database. *Social Science Quarterly*, 97(5), 1267 – 1281. Retrieved from: <https://fsolt.org/swiid/>
- Stimson, J. A. (1985). Regression in space and time: A statistical essay. *American Journal of Political Science*, 914 – 947.
- Taylor, R. (1990). Interpretation of the correlation coefficient: a basic review. *Journal of diagnostic medical sonography*, 6(1), 35 – 39.
- Thorbecke, E., & Charumilind, C. (2002). Economic inequality and its socioeconomic impact. *World Development*, 30(9), 1477 – 1495.
- Tufis, C. D. (2017). *The Global State of Democracy Indices Codebook*. Stockholm: International Institute for Democracy and Electoral Assistance. Retrieved from The Global State of Democracy Indices: <https://www.idea.int/gsod/files/IDEA-GSOD-2017-CODEBOOK.pdf>.
- United Nations Development Program. (1991). *Human development report 1991*. New York: Oxford University Press.
- United Nations Development Programme (2016). *Human Development Index and its components*. Human Development Reports. Retrieved from: <http://hdr.undp.org/en/composite/HDI>

United Nations Development Program. (2016). *Asia – Pacific Human Development Report – Shaping the Future: How changing demographics can power human development*. Retrieved from: <http://hdr.undp.org/sites/default/files/rhdr2016-full-report-final-version1.pdf>.

Weber, M., Runciman, W. G., & Matthews, E. (1978). Urbanization and social structure in the Ancient World. *Max Weber Selections in Translation*. Cambridge: Cambridge University Press.

Wolf, A. P. (1986). The preeminent role of government intervention in China's family revolution. *Population and Development Review*, 101 – 116.

World Bank (2018). *Manufacturing, value added (% of GDP)*. Retrieved from: <https://data.worldbank.org/indicator/NV.IND.MANF.ZS>

World Bank (2018). *Urban population growth (annual %)*. Retrieved from: <https://data.worldbank.org/indicator/SP.URB.GROW>

World Bank (2018). *Enrolment in lower secondary general, both sexes (number)*. Retrieved from: http://databank.worldbank.org/Data/indicator/UIS.E.2.GPV?id=c755d342&report_name=EdStats_Indicators_Report&populartype=series

World Bank (2018). *Oil rents (% of GDP)*. Retrieved from: <https://data.worldbank.org/indicator/NY.GDP.PETR.RT.ZS>

World Bank (2018). *Population growth (annual %)*. Retrieved from: <https://data.worldbank.org/indicator/SP.POP.GROW>

Wucherpfennig, J., & Deutsch, F. (2009). Modernization and democracy: Theories and evidence revisited. *Living Reviews in Democracy*, 1.

Appendix

Appendix A: Testing the assumptions of linear (OLS) regression

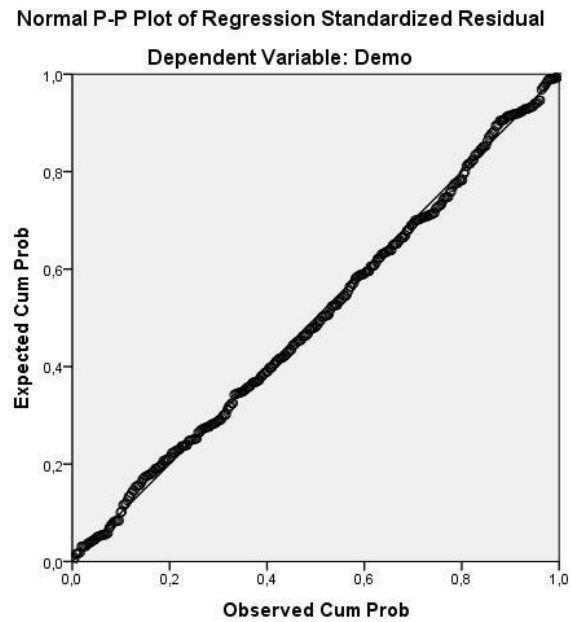


Figure A.1: P-P Plot Test normality of the level of democracy processed with SPSS

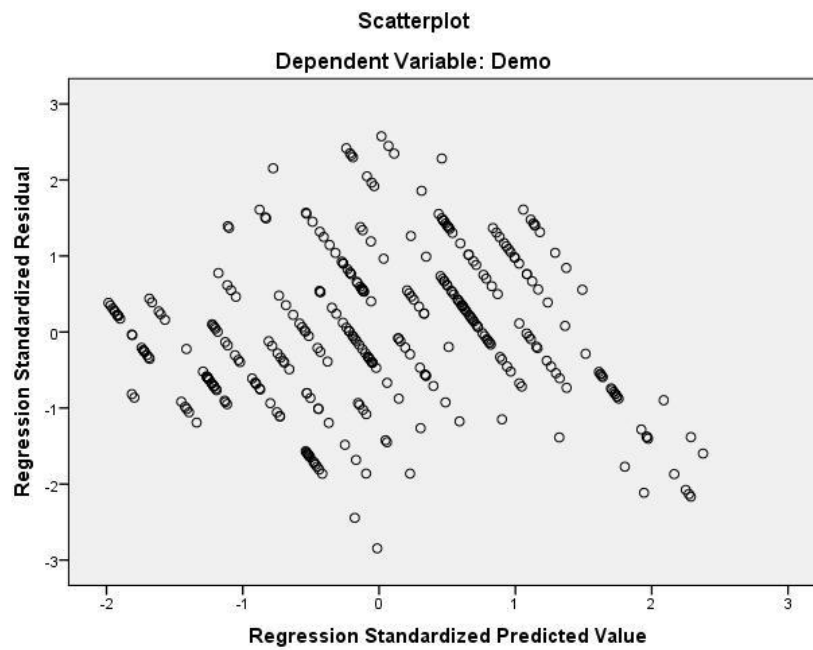


Figure A.2: A scatterplot of the predicted value and residuals processed with SPSS

Appendix B: Collinearity Statistic

Table B.1: Collinearity Statistics of the coefficients in multiple regression analysis

	Tolerance	VIF
HDI	0.238	4.204
Industrialization	0.618	1.618
Urbanization	0.464	2.155
Economic equality	0.773	1.294
Education	0.651	1.537
Gender equality	0.512	1.953
Freedom of expression	0.459	2.179
Oil rent	0.615	1.626
Corruption	0.401	2.494
Population	0.543	1.841

Appendix C: Testing the assumptions of time-series-cross-section (TSCS) data

```
Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0:  $\sigma(i)^2 = \sigma^2$  for all i

chi2 (22) =    1.1e+29
Prob>chi2 =    0.0000
```

Figure C.1: Result of heteroskedasticity test

```
Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation

F( 1,      20) =    12.104
  Prob > F =    0.0024
```

Figure C.2: Result of serial correlation test