The Logic of Authoritarianism
under Globalization and Multiethnic Societies:
A Theory and Statistical Analysis

Masaaki Higashijima

Working Paper No.25

If you have any comment or question on the working paper series, please contact each author.
When making a copy or reproduction of the content, please contact us in advance to request permission. The source should explicitly be credited.
GLOPE II Web Site: http://globalcoe-glope2.jp/
The Logic of Authoritarianism
under Globalization and Multiethnic Societies:
A Theory and Statistical Analyses
in the Developing World, 1961-2006*

Masaaki Higashijima†

* Comments welcome. This is an unpublished manuscript. Please do not cite without consulting the author.
† Research Fellow, Japan Society for the Promotion of Science (JSPS).
   Ph.D. Student, Graduate School of Political Science, Waseda University, Japan.
   E-mail: isonomia11@gmail.com
Introduction

The purpose of this paper is to investigate how and when economic globalization and ethnic diversity provoke political regime change in developing countries. Global market integration and ethnic heterogeneity are often regarded as one of the most influential factors on democratization. On the one hand, some scholars argue that economic globalization such as capital flow, growing foreign direct investment, and trade liberalization is more likely to promote democracy. On the other hand, economists and some political scientists have claimed that ethnic diversity tends to have negative impacts on democracy.

I argue, however, that these two views have theoretical faults for each. "Globalization optimists" assume that business elites are no doubt "democratizer" in developing countries. Their model does not consider the cases in which economic distribution is extremely biased toward business elites. In such condition, they will have an incentive to refuse to democratization for fear that they can be punished by the rest of society, or poorer people through a free and fair election.

On the other hand, "heterogeneity pessimists" suppose that people in multiethnic societies, whether elites or citizens, make their political decisions according to only ethnicities that they primordially possess. But even in such societies, people certainly have the other social properties such as class, gender, religion, and living place. This line of researchers ignore the mechanisms in which ethnicities, not the others, are transformed into political identity, which is driving force for people to make critical choice on their political regime.

Given these limitations in the two arguments, I propose a theory of regime change under globalization and domestic ethnic settings in the developing world. I construct a theoretical framework which is focused on the interaction between them. The essence of my argument is that whether globalization ameliorates or deteriorates democratization depends on the size of the dominant ethnic group(s)(DTEGs) and the degree of fractionalization among the dominated ethnic groups(DDEGs). The smaller the DTEGs and the more fractionalized the DDEGs are, the less democratic the country is under the pressure of globalization. In other words, if the size of the DTEG exceeds certain threshold and the DDTGs are less fractionalized, market integration promises democratization.

I explore the relationship between globalization and domestic ethnic settings in the 120 developing countries from 1961 to 2006. Statistical analyses demonstrate that
although neither globalization nor ethnic diversity per se have any impact on political regime change, globalization, especially trade liberalization under multi ethnic societies tends to shift political regimes to more authoritarian. Furthermore, in the other statistical models for robustness check which uses another index to measure ethnic settings, the same tendency has been confirmed. The result implies that it is when the DTEG is small and the DDEGs are fractionalized under the globalized economy that ethnic identity will emerge as a heuristics for political choice on regime change.

The organization of the paper is as follows. The next section critically reviews literature on globalization and ethnic diversity, particularly focusing on these effects on political regime change. The third section posits a theory of how interaction between globalization and domestic ethnic settings accelerate or brake democratization. In the fourth section, statistical analysis will be conducted to examine hypotheses drawn from the theory. Final section is devoted to derive some theoretical and empirical implications from the analysis.

**Literature: A Critical Review**

**The Convergence Effect of Globalization on Democracy?**

Economic globalization has been said to positively affects a constellation of political phenomena. According to these “globalization optimists,” global economic integration works as an engine for viable economic growth, refraining from waging war between nation-states\(^3\), avoiding broody civil wars\(^4\), and urging people to embrace the rule of law\(^5\).

Concurring with this line of arguments, some researchers claim that democratization is more likely to be achieved among the countries which are exposed to economic globalization. For example, in light of Latin American experiences, Weyland (2004) argues that economic reform and the resulting move to market integration have increased the exposure of Latin American countries to the international pressure by the United States and international organizations. According to him, such international pressure transformed business elites from strong and conservative defenders for authoritarianism to enthusiastic supporters for democracy. For Maxfield (2000), growing capital flow works as driving force for democratization, because it undermines

\(^3\) Russett & Oneal 2000, Schneider eds. 2003.  
\(^4\) Hegre et al. 2003.  
authoritarian governments by preventing from rent-seeking activities, shaking up oligopolistic corporate structure, and increasing the bargaining power of the business. There are also some works which investigate the positive effect of globalization on democratization by conducting cross-national statistical analysis. Dailami (1999) claims that financial globalization is positively correlated with democratic rights and civil liberties. Quinn (2001)'s statistical analysis of 42 countries showed that although the capital account liberalization tends to undermine democracy, the current account liberalization has a tendency to make the countries more democratic. They all share the view that business elites are powerful “democratizers” in the open economy.

These arguments, however, have two faults that must be considered. The first lies in that “globalization optimists” put a simple assumption on the preferences of political actors, namely, those of business elites. Globalization optimists regard business elites as powerful democracy promoters regardless of economic distribution between the elites and non-elites. But this logic ignores the function of election under extremely distorted distribution of assets. In a democratic system, where the economic distribution is extraordinarily biased in favor of economic elites, they are subjected to real dangers of losing some of their assets, since their votes no more than the votes of the poor. Thus, in domestic settings where business elites are a wealthy minority (e.g. in plural societies where a dominant minority ethnic group exists or in emerging capitalist countries where bourgeoisie is an extremely rich minority, compared with other classes such as working class), business elites will be opposed to increasing political competitiveness and suffrage extension. In other words, we need to elucidate under what conditions of domestic structure globalization works as driving force for democratization.

Second, in many statistical analyses of the relationship between globalization and democracy, the positive impact of globalization cannot be confirmed in a robust way. While some researchers report that globalization tends to promote democracy, other authors point out that trade openness and portfolio investment negatively affect democracy. Since these studies collect different samples and do not posit any theoretical scope conditions, we need to specify those of the developing world. Therefore, I take the following two points into account: (1) I construct a theory of the nexus among

---

7 An important exception is the work by Rudra (2005) in which she points out that globalization tends to promote democracy only if the governments provide enough social spending before they are exposed to global market integration. While I agree with her argument and theoretical logic, I will more focus on the interaction between globalization and one of the domestic structure, that is, domestic ethnic settings.
9 Li & Reuveny 2003.
globalization, ethnic diversity and democracy in developing countries in which the process and effect of globalization is quite different from those of the developed countries. (2) My analysis includes as many samples of developing countries (120 countries) as possible in order to estimate more exact effect of globalization on democracy in the developing world.

The Perils of Ethnic Heterogeneity?

In contrast with economic globalization, ethnic diversity has been considered as a menace for many things. It is said that ethnic heterogeneity impedes economic growth, makes supplies of public goods more inefficiently, provokes separatism within nation states, and decreases political stability. Among them, perils of ethnic heterogeneity for democratization have been often discussed by political scientists and economists. For example, Barro (1999) showed that in ethnically, linguistically and culturally heterogeneous nations it is difficult to sustain democracy. In a similar way, Alesina et al. (2003) assert that both ethnic and linguistic fractionalization have negative impacts on promoting political rights and quality of government. These “heterogeneity pessimists” claim that people in multiethnic societies have more diverse values and interests than those in homogeneous societies, which make democratic governments less efficient and are more likely to invite authoritarian governance.

The argument of “heterogeneity pessimism”, however, does not take the following two things into account. The first can be found in their strong assumption on people’s political identity: they assume that in plural societies people’s political behavior is primordially based on ethnic identity. But, as Fearon & Laitin (1996) demonstrated in the case of ethnically diversified African region where ethnic conflicts break out most frequently, violence derived from ethnic cleavages is so rare. Ethnicity is just one of the social properties that people have. Therefore, we need to theoretically elucidate the mechanisms in which people’s ethnicity is actualized as ethnic identity that drives their

---

10 According to Rudra (2005), the effect of globalization on democracy in the developing world differs from that of the industrialized democratic countries, because developed countries has already achieved democratization and economic development, the degree of which has exceeded the threshold of democratic consolidation. Further reasons why my analysis is limited in developing countries will be stated in the following empirical part of this paper.
14 Rabushka & Shepsle 1972 [2008].
15 For example, see Weingast (1999): 256-257, Mill (1861), and Almond (1956).
political decisions. In this article, particularly focusing on domestic ethnic settings and economic distribution that globalization produces, I identify when and under what conditions ethnicity, not other social properties, becomes a dominant identity which galvanizes peoples' behavior under the phase of regime change.

Second, negative impact of ethnic diversity on democratization can be disappeared if we consider “omitted variables bias” caused by other socio-economic factors including economic development, economic crisis, the degree of urbanization and so on. In my statistical analysis, I construct statistical models which control for these variables while at the same time taking into account economic motives that each of ethnic groups possess and the conditions ethnic leaders mobilize the members those who embrace the same ethnicity.

The Combined Effect of Globalization and Ethnic Diversity on Democratization

Compared with the discussions dedicated to the isolated effects on globalization or ethnic diversity on democratization, research on the combined impact of these two factors are less abundant. Chua (2003) and Im (1996) are important exceptions. Nonetheless, Chua’s study is case-oriented and lack a clear theoretical framework and research design. On the other hand, Im’s research is purely theoretical and it presents little empirical evidence in support of his argument. Therefore, this paper fills the gap between theory and empirical work regarding the combined effect of globalization and ethnicity on democracy. In the next section, I construct a theoretical framework which explains under what conditions of domestic ethnic settings economic globalization will impede or promote democratization.

Theory

Democracy

In this paper, I define democracy as a political regime that seeks to guarantee “political equality”\textsuperscript{16}. Political equality means that all people within a political community have comparable opportunities to influence the process and the outcome of politics regardless of the amount of economic and social resources he or she possesses. The level of political equality is a function of how freely and fair elections are held, and the degree to which political rights and civil liberties are guaranteed. Such a definition

of democracy tells us that in democracy political elites have to adopt policies that are more favorable to the majority of the populace. On the contrary, in autocracy, they are more likely to concern their privileged interests.

**Economic Globalization and Ethnic Diversity: Causal Mechanisms**

Economic globalization means the integration of domestic and international markets, or the phenomena of borderless economy caused by free trade and liberalizing capital market. Globalization has not necessarily been good for developing countries, as scholars have suggested that economic globalization has often widened the economic gap between those who engage in the international sectors and the rest of society\(^\text{17}\). In the developing world, the mean of trade dependence (defined as sum of imports and exports relative to GDP) has been increasing from 24% in 1955, reaching 40% immediately after the end of Cold War, to about 50% by 2002\(^\text{18}\). The amount of foreign direct investment (relative to GDP) in those countries also turns up from 0.5% (1950's) to 4% (2005)\(^\text{19}\). During around the same period, economic inequality (operationalized as GINI index) has been gradually growing from 0.4 in 1966 to 0.44 in 1995\(^\text{20}\). Based on these time-series changes, Rudra (2008)'s multiple regression analysis demonstrates that trade and financial liberalization tend to widen the economic gap in developing countries\(^\text{21}\). Economic globalization often benefits the economic elite, while threatening the lives of many others.

Economic elites who dominate the international sectors, as well as their political allies, are more likely to belong to one ethnic group\(^\text{22}\). Stated differently, in developing countries, the winners and losers of globalization are not simply determined by classes (capitalists versus laborers), but fall along ethnic cleavages. Therefore, on the one hand, there is one ethnic group that controls the state and enjoys the benefit created by the international market. For example, Suharto’s Indonesia and Marcos’s Philippines were dominated by Javanese and Filipino respectively, allying with Chinese minorities. Also in Post-Soviet countries, titular ethnic groups tend to dominate political posts and big businesses, excluding other ethnic groups including Russians. On the other hand, the other ethnic groups within a polity do not see the gains from economic globalization and become unsatisfied with their political and economic circumstances. I call the former

---


\(^{18}\) The author calculated, using trade dependence data of *Pen World Table 6.1*.

\(^{19}\) I used FDI data by *World Development Indicators*.

\(^{20}\) This is a result of using the data created by *Inequality Project at the University of Texas, Austin*.

\(^{21}\) Rudra 2008: Chap.3.

“dominant ethnic group(s)” (DTEG) and the latter “dominated ethnic groups” (DDEGs). And given this condition of increasing openness to the international market, ethnic diversity provides the DTEG and DDEGs with the incentives to strengthen authoritarianism.

Firstly, in multiethnic countries, the DTEG is relatively smaller than in homogeneous countries because the more fragmented domestic ethnic settings are, the smaller each ethnic group is. This can be shown by correlating Roeder (2001)’s

\[23\] In this paper, I assume that the DTEG is the ethnic group that dominates both of politics and the economy in a country. Such an ethnic setting, however, does not appropriately simplify ethnic situations of all countries in the developing world. In some countries, politically dominant ethnic group is clearly distinguished from economically dominant ethnic group as we can see the cases of Indonesia’s Javanese and Chinese, Phillipine’s Filipino and Chinese, Sierra Leone’s Limba and Lebanese, and Kenya’s Kalenjin and Indian minority (Chua 2003: Chap6). On the other hand, in the countries like Kazakhstan and Kyrgyz, Kazakhs and Kyrgyzs tend to gain power in both of fields. Although we need further investigation on whether this distinction generates some differences or not, I think that it does not so matter especially when we explain political regime change. The more crucial point is the size of politically dominant ethnic group. This is because the smaller the size of politically dominant ethnic group is, it is more rational for them to protect economically dominant ethnic group in order to spoil economic wealth and also rational for economically dominant ethnic group to ally with politically ethnic group in order to smoothly make a profit in their business (In fact, above mentioned-cases such as Indonesia, Phillipine, and Kenya, politically dominant ethnic groups are so small that they more easily had an incentive to ally with economically dominant ethnic groups. This alliance has led to “backlash against democracy” [Chua 2003: Chap6. ]).

On the other hand, when the size of politically dominant ethnic group is large, its alliance with economically dominant ethnic group is so weak that the farmer’s ethnic violence against the latter may be more likely to occur by populism. For example, we can cite such cases as Putin government’s ostracism against Jew’s business elites in Russia, and Mugabe’s requisitioning of the whites’ land in Zimbabwe. In the countries where there are large political dominant ethnic group and small economic dominant minorities, the outcome is not “backlash against democracy” by the alliance between them but ethnic violence by the farmer’s populism under the guise of “democracy”. But this interesting point is far beyond my topic of this paper.
Ethnic-Linguistic Fractionalization (ELF) with the proportion of the DTEG in the 55 developing countries (using Cederman & Girardin [2007] data set). Figure 1 illustrates that the proportion of the ODEG tends to be smaller in the more multi-ethnic countries. The correlation coefficient between two variables is -0.5478 (statistically significant at 0.1% level).

[Figure 1 here]

In multi-ethnic states under globalization, the DTEG will have no incentive to democratize the regime. This is because under democracy, unsatisfied with their circumstances, the DDEGs’ constituencies will sanction the DTEG by voting against it in an election. Since the DDEGs are more likely to overwhelm the DTEG by numbers in the multi-ethnic settings, the ODEG will lose the election, and may become deprived of their assets by the newly established government’s distributive policies, or even by naked state repression. Due to these possibilities, the DTEG will have the incentive to strengthen their authoritarian regime and restrict political equality to protect its wealth and hegemony.

Secondly, dominated ethnic groups (DDEGs) will be more fragmented in multi-ethnic countries. Therefore, it becomes more difficult for them to solve collective action problem24 when they attempt to counter the DTEG’s repressive strategy. For the DDEGs as a whole, Challenging the DTEG and protecting democracy is the most rational option because democracy ensures their political power through sufficiently high political equality. However, each DDEG does not have the assurance other DDEGs will definitely join them to oppose the DTEG, and the fear of defection by other DDEGs are always present. Given this circumstance, each DDEG will be unable to cooperate, leading to acquiescence. In other words, how one dominated ethnic group reacts to autocratic rule by the DTEG depends on how it anticipates what the other dominated ethnic groups will do. If one believes that the others will acquiesce, then it is better off acquiescing.

Specifically, in multi-ethnic societies, the following two mechanisms prevent the DDEGs from partaking in collective action: First, collective action problem appears at the level of ethnic entrepreneurs. Because a great number of ethnic entrepreneurs who rule the DDEGs exist in multi-ethnic countries, it will be difficult for each of them to cooperate beyond their own ethnic group and bring their group into “horizontal alignment” with the other ethnic entrepreneurs. Since ethnic entrepreneurs are those

24 Olson (1965).
that have the ability to mobilize and strengthen the organizational base of ethnic groups, their decision not to counter the ODEG will have a devastating impact on the organizational capability of ethnic groups. When ethnic entrepreneurs decide not to mobilize, the rank & file ethnic group members will not partake in political behavior on the basis of their ethnic identity. The result is the emergence of a “silent” ethnic society, as seen in some Central Asian countries where authoritarianism has consolidated.

Second, the above inhibitions toward collective action are magnified by the DTEG’s ability to effectively engage in “divide and conquer” tactics in ethnically diverse societies. Ethnic fragmentation means that each DDEG can be bought off by the DTEG quite easily, given that the smaller each DDEG is, the less resources that must be used to “buy” that group. And because every DDEG knows that the chances of other DDEGs being “bought” are high, there is a lack of trust among the DDEGs. Meanwhile, each DDEG fears the punishment of the DTEG, given that each DDEG is individually a minority, and can be easily crushed by the DTEG.

Once collective action problem gets more acute through the above-stated causal mechanisms, the DDEGs will not be able to cooperate with one another to counter the DTEG’s transgression, so that they might help DTEG consolidate its authoritarian regime.

Here is a summary of my arguments:

● On the one hand, economic globalization tends to serve the interest of economic elites, in particular those who participate in the international economy through trade or financial transactions. On the other hand, the inequality that results from economic liberalization aggravates the grievances of those that do not participate in the international economy.

● The more ethnically diverse a society is, the smaller is the DTEG, to which many of the political and economic elites belong. Therefore, they try to transgress political equality for fear of being sanctioned by the DDEGs under democracy.

● The more ethnically diverse a society is, the more fragmented the DDEGs are. As a result, they cannot challenge the DTEG in concert due to collective action problems that arise from the incentive structures of both individuals and ethnic leaders.

● The more ethnically diverse a society is, the higher is the possibility that the ODEG could successfully divide and conquer the DDEGs. Therefore, collective action
problems arise on account of the strategies of DTEG’s.

● The outcome is that democracy is likely to be undermined or authoritarianism tend to be intensified in multi-ethnic developing countries under globalization.

The Evidence

Having laid out my argument, this section is devoted to investigate my hypothesis by conducting cross-national statistical analysis in developing countries. The results confirm that neither economic globalization nor ethnic diversity per se has any impact on democracy, but market integration under plural societies tends to hinder democratization and consolidate authoritarianism.

Variables

Dependent Variables: Democracy

My research is concerned with grasping how political equality—the key to political regime—is guaranteed or impeded. In order to make my analysis more robust, I use both of binary and continuous indices to evaluate political regime from different aspects. First, Przeworski’s binary dataset of democracy is available to examine when the countries satisfy minimalist definitions of democracy. In this dataset, A regime is classified as a democracy if all of the following conditions are satisfied: (1) executive selection, (2) legislative selection, (3) existence of no more than one party, (4) government alternation. Second, Polity IV is also another valuable dataset which continuously assesses political regime in the world. It mainly measures political regime by three main criteria: regulation, competitiveness, and openness of executive recruitment; executive constraints; and competitiveness of political competition. In Polity IV data set, there are two indices regarding political regime: (1) the 10-point democracy index (DEMOC) measures the democratic characteristics of the regime; (2) The 10-point autocracy index (AUTOC) measures the autocratic characteristics of the regime. As pointed out by Li & Reuveny (2003), because many governments have both democratic and autocratic characteristics, DEMOC and AUTOC do not provide redundant information about regime type and both should be used to measure the level

of democracy\textsuperscript{26}. Therefore, I measure democracy as the difference between DEMOC and AUTOC, generating an index (POLITYIV) ranging between -10 (the most authoritarian) to 10 (the most democratic).

**Independent Variables**

I measure economic globalization through trade and foreign direct investment data. Exports plus imports relative to GDP (trade dependence), is used as the trade variable (TRADE) and I test the effects of foreign direct investment (FDI) by using FDI relative to GDP. If the coefficients of TRADE, and FDI are positive and significant, it implies that economic globalization promotes democratization and confirms that the “globalization optimism” holds true in the developing world.

For ethnic diversity, I use Roeder (2001)’s Ethnic Linguistic Fractionalization Index (ELF). This index ranges from 0 to 1, with 1 being more ethnically diverse and 0 being less so.\textsuperscript{27} Because Roeder creates ELF index as of 1961 and 1985, it can relatively more grasp the changing pattern of the countries’ ethnic diversity over time, compared with the other ELF indices\textsuperscript{28}. If the “Heterogeneity Pessimism” is correct, the coefficient of this variable is expected to be negative and statistically significant.

Finally, in order to test my hypothesis of the Combined Effect (CE), I introduce interaction terms of economic globalization and ethnic diversity, namely, TRADE*EFI, and FDI*EFI. I expect these interaction terms of globalization and ethnic diversity to be negative and significant. As the interpretation of statistical models including interaction terms is a little more complex, I add some comments on the precise interpretation after reporting results.

**Control Variables**

The control variables are as follows: economic development, economic crisis, urbanization, asset specificity, and the demonstration effect of democratization.

Economic development is the most widely proclaimed facilitator of democracy, a relationship first suggested by Lipset (1959). After Lipset, many researchers have

\textsuperscript{26} Li & Reuveny 2003: 41.
\textsuperscript{27} Ethnic Fractionalization is gained by the following Herhindahl index:
\[ ELF = \sum (1 - (si)^2) \], si stands for a ethnic group \((i = 1, \cdots, n)\). For instance, in the country where there are three ethnic groups \((A = 20\%, B = 40\%, C = 40\%)\), ELF is calculated as \( 1 - (0.2)^2 + (0.4)^2 + (0.4)^2 \) = 0.64.

\textsuperscript{28} Posner (2004) and Campos & Kuzeyev (2007) are important exceptions which measure ethnic diversity by shorter span. But the former only covers African nations, and the latter is limited in post-communist countries.
argued that economic development has positive effects on democracy. I operationalize economic development by logged GDP per capita (LN_GDP).

The second control variable is economic crisis. Many researchers argue that economic crisis creates the opportunities to democratize because authoritarian governmental elites lose support from business elites. Following Haggard & Kaufman (1995) and Gasiorowski (1995), I use economic growth rate (GROWTH) and inflation rate (INFLATION) as a proxy for economic crisis. The expected direction of the relationship will be negative and significant.

Third, I add urbanization variables to my statistical model. Urbanization has been used in several studies of democracy, but its presumed causal mechanisms have depended on the arguments researchers have made. For example, Vanhanen (1997) argues that urbanization will create more diversified interest groups that then become the drivers of democratization. Acemoglu & Robinson (2001) argue that urbanization will make it costly for the elite to maintain strong societal control. Nonetheless, although different researchers stress different causal mechanisms, their conclusions are the same: urbanization induces democratization. I measure this variable (URBANIZATION) by the rate of urban population increase. It is expected that URBANIZATION will have a positive relationship with democratization.

The fourth control variable is asset specificity. According to Boix (2003), fixed assets such as natural resources and agricultural goods are more likely to impede democratization. Since these assets cannot be moved beyond the sea, those who possess these resources will oppose political liberalization in which poorer people demand distributive policies. I operationalize asset specificity by measuring the rate of agriculture relative to GDP (AGRI). If Boix is correct, the coefficients of AGRI are negative and statistically significant.

Finally, I control for an international political environment. Is there a contagion effect given that the average level of democracy globally has been increasing since the late seventies? To take this third wave of democracy (Huntington 1991) into account, I included world democracy variable, which is created by calculating the mean of dependent variables in each of years (both of dichotomy index and POLITYIV). It is anticipated that the sign on this coefficients will be positive.

---


Sample and Statistical Models

I have designed three equations as follows:

(1) The equation to test the “Globalization Optimism” and “Heterogeneity Pessimism”

\[
DEMOC_{it} = \beta_1 + \beta_2 ELF_i + \text{TRADE}_{i(t-1)} + \beta_3 \text{FDI}_{i(t-1)} + \sum \text{CONTROL}_i(t-1) + \epsilon_{it}
\]

--------------------- (1)

(2) The equation to test the CE hypothesis

\[
DEMOC_{it} = \beta_1 + \beta_2 ELF_i + (\beta_3 + \beta_4 ELF_i) \times \text{TRADE}_{i(t-1)} + (\beta_5 + \beta_6 ELF_i) \times \text{FDI}_{i(t-1)} + \sum \text{CONTROL}_i(t-1) + \epsilon_{it} \]

--------------------- (2)

Equation (1) attempts to directly examine both the “globalization optimism” that market integration promotes democracy and the “heterogeneity pessimism” that ethnic diversity has negative effects on democracy. Equation (2) is the model for estimating Combined Effect (CE) of globalization and ethnic diversity on democratization. \( \beta_1 \) in each model are constant coefficients and the other \( \beta \)s are parameter estimates in these equations, while the subscripts \( i \) and \( t \) represent the country and year of the observations respectively; \( \epsilon \) is an error term; \( \beta \)j is the vector control variables.

Except for ELF, independent variables are \((t-1)\) lagged in order to take into account the possibility of simultaneity bias. In the models using Przeworski et al. (2000)'s binary index as dependent variable, I estimate random effect logistic regression (Model 1, Model 3)\(^{31}\). As for the models in which POLITYIV index is dependent variable, I estimate both of random and fixed effect models and adopt appropriate one according to the result of Hausman test (Model 2, Model 4). Furthermore, in case of continuous model, I estimate another model in order to check robustness of the analysis. In the Model 5, based on econometric technique advocated by Beck & Katz (1995), I correct for both panel heteroscedasticity and spacial contemporaneous autocorrelation.\(^{32}\) In addition, problems of potential serial autocorrelation within each panel are addressed by estimating and adjusting for a panel-specific AR (1) process. This model follows Achen (2000)'s recommendation against applying the standard practice of simply using a lagged dependent variable to

\(^{31}\) I avoided fixed effect logistic regression because it excludes the countries which do not experience any change of value in dependent variable over time.

\(^{32}\) If serial correlation, spatial correlation and heteroscedasticity are ignored, standard errors are underestimated, so that the statistical significance might be overestimated.
correct for serial autocorrelation. These results provide Prais-Winsten coefficients with Panel Corrected Standard Errors (PCSEs).\textsuperscript{33}

The sample is the nation states in the 120 developing world from 1961-2006. There are two reasons why my analysis covers not all of countries including the developed countries but only developing countries. First, in developing countries, national integration was not followed by industrialization\textsuperscript{34}. Therefore, the process in which ethnic identity emerges in those countries during globalization will quite different from that of developed countries where modernization had more or less succeeded in integrate people into a nation-state. Second, as Rudra (2005) pointed out, if I include samples of developed countries in analysis, “inevitably strong income effects overwhelm the impact of the causal variables of interest.”\textsuperscript{35} In sum, in order to estimate the effect of globalization and ethnic diversity in the developing world, including developed countries in the samples can bias the result.

The Results

[Table 1 here]

The empirical results disprove conventional wisdoms and support my CE hypothesis. Model 1 and Model 2 in Table 1 summarize the statistical analysis of the “Globalization Optimism” and “Heterogeneity Pessimism”. Trade and FDI do not have anticipated effect on democratization. The coefficients of TRADE and FDI are unstable and not statistically significant in both models. These facts suggest that economic liberalization per se has no direct impact on democracy and we need to further explore that whether it has different effects on democracy or not depends on domestic structures. Second, ELF variable does not have the coefficient as the heterogeneity pessimists predicts; In Model 1, it is statistically insignificant and in Model 2 the coefficient turns significantly positive. The strikingly crucial point is that \textit{after controlling other socio-economic variables, ethnic diversity does not have the predicted effect on democratization}. The result suggests that even in multiethnic societies people do not choose their political regime, exclusively referring to their ethnicities.

Equation (1) does not consider what happens when the distributive aspects of globalization and the domestic ethnic settings are taken into account. The following three models report the results from Equation (2), which assess whether globalization

\textsuperscript{33} For example, Rudra (2005) and Huber & Stephens (2001) used the same statistical model in their analysis.

\textsuperscript{34} Bates 1982.

\textsuperscript{35} Rudra 2005: 707.
under plural societies make a difference for democratization. In Model (3) (4) (5), I introduced two interaction terms including TRADE*EFI and FDI*EFI, and these constitutive terms: TRADE, FDI, and ELF. In Model 3, TRADE and TRADE*ELF is positive (statistically significant at 5 %) and negative (significant at 1%) respectively. These results can be interpreted that the larger the ELF is, the more negative the coefficient of TRADE changes. In other words, increasing trade dependence reduces the likelihood of establishing competitive electoral democracy in more multiethnic societies, and even come to undermine it if ELF is more than 0.35 (Figure 2). This result coincides with my CE hypothesis. The effect of trade liberalization on democratization dramatically changes according to domestic ethnic settings. It is when the multiethnic developing countries deeply depend on free trade to achieve modernization that the DTEG decides to undermine democracy.

[Figure 2 here]

Model 4 shows that the NC hypothesis has also been demonstrated if I use a continuous variable (POLITYIV) as dependent one. An interesting difference is that the Model 4’s ELF threshold (ELF = 0.6, Figure 3) over which the coefficient of TRADE turns negative is much higher than that of Model 3(Figure 2) in which I set a binary variable as dependent. This suggests that during globalization strong political competition which makes it possible to achieve government alternation becomes more credible threat for the DTEG than just institutional arrangements for political competitiveness. And also in Model 5, the almost same result was confirmed as the Model 4.

[Figure 3 here]

In contrast with trade liberalization, the interaction effect between FDI and ethnic diversity was not underpinned in all three models. Although the reason why the interaction effect between FDI and ethnic diversity cannot be confirmed is needed to be explored, one of reasons can be found in that the amount of FDI is more “endogenously” determined by political regime. In the future research, I will deal with this endogeneity in order to estimate its effects more robustly.

Directing our eyes to the control variables, we can point out that WORLD_DEM has strong positive causal effect on democratization in all of models. Economic development is mixed blessing for democracy: while in binary models it has negative
impacts on democracy, positive effects has been found in continuous models. Economic growth, inflation, and the rate of agriculture to GDP do not have the predicted effects.

**Robust Check: DTEG’s initiative?**

[Table 2 here]

As we can confirm in the previous analysis, trade liberalization has negative impact on democratization in certain level of multi-ethnic societies. We cannot confidently assert, however, that the analysis can also specify the causal mechanisms which I logically identified in my theory. In other words, previous analysis cannot exclude the other causal paths leading to the same result as my theoretical prediction: the negative interactive effect of globalization and ethnic diversity can be caused in the case *where certain dominated ethnic groups which enjoy trading some goods like natural resources unilaterally with other nations may impede democratization by resorting to violence*. Therefore, further analysis will be needed to identify whether the causal effects was result from *the initiative by the dominant ethnic group* or not.

In order to more specify the causal mechanisms, I have conducted another statistical analysis. I estimate interactive effects of TRADE and a variable of the proportion of dominant ethnic group (DTEG)\(^3\) instead of ELF, controlling for the same independent variables as previous models and ELF. I controlled ELF because it enables to purely examine how the direction of trade coefficient changes according to the ratio of dominant ethnic group regardless of the size and fractionalization of the dominated ethnic groups. Since the DTEG variable covers only 55 countries of the North Africa and Eurasian Regions, the sample is more limited than the previous analysis. Table 2 shows the results (Model 6, 7, 8). All of these models demonstrate that in the countries which have smaller size of dominant ethnic groups trade liberalization is more likely to undermine democracy. The threshold of the size of the DTEG, over which free trade begin to undermine democracy is fairly different between binary and continuous models: the former’s turning point is around 80% while the latter’s about 60% (Figure 4, 5). This contrast coincides with that of the analysis in which I set ELF as a constitutive term. That is, for the DTEG, high possibility of governmental alternation is so more fatal than just formal and limited recognition of opposition forces that the threshold of authoritarian regime shift in Model 6 is much lower than that of Model 7.

\(^3\) I used Cederman & Girardin (2007)’s dataset.
Conclusion

This article aimed at unveiling the relationship among democracy, globalization and ethnic diversity. Statistical investigation of the 120 developing countries supports the claim that although globalization and ethnic diversity per se have neither positive nor negative impacts on democracy, market integration, especially free trade, will adversely affect democratization if it is carried on in multi-ethnic countries. In plural societies, democracy will be at risk only when distorted distribution caused by free trade impedes concessions from a relatively small dominant ethnic group (DTEG) to circumvent challenges to their positions. On the other hand, facing the DTEG’s repression, other dominated ethnic groups (DDEGs) cannot challenge because the multi-ethnic setting complicates their collective action, which will result in consolidating authoritarianism.

There are two theoretical implications and contributions obtained in my research. First, my study contributed to our understanding of “second-image reversed” argument in the literature on democratization theory. Except for a provocative study by Rudra (2005), as far as I know, we have little theoretical development regarding the interactive effects of inter-national and intra-national factors in this field of comparative politics. Today, global surroundings, however, increasingly go hand in hand with national socio-economic settings, coincidently influencing the outcome of political regime. Intra-national actors will devise rational strategies under the constraint of these two dimensions. Second, my analysis suggests that in multiethnic societies global market integration can become a double-edged sword: although in terms of economic development globalization can boost national wealth, at the same time it can threaten political development if the wealth is exclusively monopolized by one ethnic group. To make economic and political development compatible in the developing world, international organizations should implement policy packages which are arranged to equally distribute economic wealth to each of ethnic groups.

37 Gourevitch 1978.
### Tables & Figures

**Figure 1. Correlation between the proportion of DTEG and ELF**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical Model</td>
<td>Binary</td>
<td>Continuous</td>
<td>Binary</td>
<td>Continuous</td>
<td>Continuous</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.9</td>
<td>-2.46(0.41)</td>
<td>-2.67(2.34)</td>
<td>-1.45(0.4)</td>
<td></td>
</tr>
<tr>
<td>ELF</td>
<td>-0.630(0.58)</td>
<td>35.13(12.37)**</td>
<td>0.490(0.86)</td>
<td>36.36(12.34)**</td>
<td>8.98(53.53)</td>
</tr>
<tr>
<td>TRADE(t-1)</td>
<td>0.020(0.005)</td>
<td>0.020(0.01)**</td>
<td>0.0430(0.014)**</td>
<td>0.050(0.02)**</td>
<td></td>
</tr>
<tr>
<td>ELF^TRADE(t-1)</td>
<td>-0.070(0.02)**</td>
<td>-0.0740(0.03)**</td>
<td>-0.0870(0.03)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI(t-1)</td>
<td>-0.005(0.01)</td>
<td>0.0150(0.005)</td>
<td>0.0050(0.009)</td>
<td>0.0200(0.02)</td>
<td>-0.0010(0.02)</td>
</tr>
<tr>
<td>ELP^FDI(t-1)</td>
<td>0.040(0.17)</td>
<td>-0.050(0.06)</td>
<td>-0.068(0.042)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN_GDP(t-1)</td>
<td>3.04(0.21)**</td>
<td>1.91(0.59)**</td>
<td>1.72(0.32)**</td>
<td>-2.11(0.9)**</td>
<td>-2.07(0.73)**</td>
</tr>
<tr>
<td>GROWTH(t-1)</td>
<td>-0.360(0.02)</td>
<td>0.0020(0.01)</td>
<td>0.0004(0.02)</td>
<td>0.0050(0.02)</td>
<td>0.10(0.08)</td>
</tr>
<tr>
<td>INFLATION(t-1)</td>
<td>0.0000(0.001)</td>
<td>0.0002(0.001)**</td>
<td>0.0000(1.0001)</td>
<td>0.0002(0.001)**</td>
<td>0.00004(0.00005)</td>
</tr>
<tr>
<td>AGR(t-1)</td>
<td>-0.320(0.01)**</td>
<td>0.0080(0.022)</td>
<td>-0.010(0.02)</td>
<td>0.0080(0.02)</td>
<td>0.030(0.02)</td>
</tr>
<tr>
<td>URBANIZATION(t-1)</td>
<td>-0.690(0.01)**</td>
<td>-0.040(0.033)</td>
<td>0.0650(0.012)**</td>
<td>-0.040(0.015)</td>
<td>0.030(0.05)</td>
</tr>
</tbody>
</table>
| WORLD DEM          | 29.12(2.27)** | 1.33(0.07)** | 22.917(0.75)** | 1.34(0.07)** | 1.20(0.1)**

**Table 1. Results (the 120 Developing Countries, 1961-2006)**

1) Statistical software is STATA 8.2. 2) Standard errors in parenthesis.

19
Figure 2: Conditional Effect of Trade Openness on Democracy Given Different Levels of Ethnic Diversity (ELF) [Dependent Variable: Binary]

*LCI: Lower Confidence Interval (90 %)  UCI: Upper Confidence Interval (90 %)

Figure 3: Conditional Effect of Trade Openness on Democracy Given Different Levels of
### Ethnic Diversity (ELF) [Dependent Variable: Continuous]

* LCI: Lower Confidence Interval (90%) UCI: Upper Confidence Interval (90%)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>22.55(13.29)*</td>
<td>9.09(10.07)</td>
<td>11.64(32.14)</td>
</tr>
<tr>
<td><strong>ELF</strong></td>
<td>2.18(1.26)*</td>
<td>10.13(4.73)**</td>
<td>11.89(9.00)</td>
</tr>
<tr>
<td><strong>DTEG</strong></td>
<td>-15.10(6.30)**</td>
<td>11.99(7.83)</td>
<td>11.89(9.00)</td>
</tr>
<tr>
<td><strong>TRADE (t-1)</strong></td>
<td>-0.35(0.097)***</td>
<td>-0.089(0.038)***</td>
<td>-0.057(0.033)*</td>
</tr>
<tr>
<td><strong>DTEG*TRADE (t-1)</strong></td>
<td>0.42(0.13)***</td>
<td>0.15(0.48)***</td>
<td>0.112(0.05)**</td>
</tr>
<tr>
<td><strong>LN_GDP (t-1)</strong></td>
<td>2.48(1.33)*</td>
<td>-3.53(0.77)***</td>
<td>-2.66(0.99)***</td>
</tr>
<tr>
<td><strong>GROWTH (t-1)</strong></td>
<td>-0.23(0.08)***</td>
<td>-0.053(0.02)***</td>
<td>-0.01(0.017)</td>
</tr>
<tr>
<td><strong>INFLATION (t-1)</strong></td>
<td>-0.001(0.002)</td>
<td>0.0006(0.0004)</td>
<td>0.0002(0.00038)</td>
</tr>
<tr>
<td><strong>AGRI (t-1)</strong></td>
<td>-0.06(0.07)</td>
<td>-0.15(0.037)***</td>
<td>-0.05(0.03)</td>
</tr>
<tr>
<td><strong>URBANIZATION (t-1)</strong></td>
<td>0.001(0.05)</td>
<td>0.18(0.04)***</td>
<td>0.33(0.053)***</td>
</tr>
<tr>
<td><strong>WORLD_DEM</strong></td>
<td>49.07(8.12)***</td>
<td>0.74(0.09)***</td>
<td>0.05(0.15)***</td>
</tr>
</tbody>
</table>

| N                  | 698       | 694       | 694       |
| Country            | 55        | 54        | 54        |
| Log-Likelihood     | -110.86   |           |           |
| Wald Statistics    | 44.52***  | 273.2***  | 295354.32*** |

Table 2. Results (the 55 Developing Countries, 1961-2006)

1) Statistical software is STATA 8.2. 2) Standard errors in parenthesis.
Figure 4: Conditional Effect of Trade Openness on Democracy Given Different Levels of The Proportion of the DTEG [Dependent Variable: Binary]

*LCI: Lower Confidence Interval (90 %)   UCI: Upper Confidence Interval (90 %)

Figure 5: Conditional Effect of Trade Openness on Democracy Given Different Levels of the Proportion of the DTEG [Dependent Variable: Continuous]
References


Burkhart & Lewis-Beck 1994: Burkhart, E. Ross & Michael S. Lewis-Beck,


**Geddes 1999:** Geddes, Barbara, “What Do We Know about Democratization after Twenty Years?” Annual Review of Political Science, Vol.2., pp.115-144.


Press.


**Huntington 1991**: Huntington, Samuel P., *The Third Wave: Democratization in the Late Twentieth Century*, University of Oklahoma Press.


**Przeworski & Limongi 1997**: Przeworski, Adam & Fernando Limongi, “Modernization:


**Quinn 1999:** Quinn, Dennis, “Democracy and International Liberalization,” paper prepared for the 2000 annual convention of APSA, (http://faculty.msb.edu/quinnd/).


**Schneider eds. 2003:** Schneider, Gerald, Katherine Barbieri & Nils Petter Gleditsch eds., *Globalization and Armed Conflict*, Rowman & Littlefield Publishers, INC.


---

**Data Source**

**Pen World Table**: *Pen World Table 6.1*, Center for International Comparisons at the University of Pennsylvania, <http://pwt.econ.upenn.edu/>

**POLITY IV data set**  <http://www.cidcm.umd.edu/projects/project.asp?id=18>

**Przeworski’s data set**  <http://politics.as.nyu.edu/object/przeworskilinks.html>

**University of Texas, Inequality Project**  <http://utip.gov.utexas.edu/default.html>

**World Development Indicators Electronic Database**: