Economic Structure and Political Development

MSME and Democracy, a Panel Data Model

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Abstract

This paper starts with the hypothesis that if big enterprises own predominant political and economic power, it will adversely impact the country's democratic development. In contrast, if the industrial structure is dispersed, the nation's democratic development will proceed smoothly. With cross-sectional and time-series (panel) analysis, this paper intends to prove that the emergence of a micro, small, and medium-sized enterprises (MSMEs) will foster and strengthen a country's democratic development. However, the empirical results demonstrate that there actually exists a significant and negative relation between MSMEs and democratic development. The relation is more pronounced for lower-medium income countries. At the end, the paper will explain the results from a theoretical stand point with its policy implications.

Introduction:

The relation between MSMEs and democratic development remained largely unexplored by academia. The closest subject and a central question in political and academic debates about international political development is the relation between democracy and income inequality. Rising income inequality among countries over the past two decades forms one of the most formidable challenges to economic policymakers in both developed and developing countries. However, as will be demonstrated later in this paper that income inequality and the strength of a country's MSME are two different things. The researches and data on MSMEs are not only rich but also extensive; however, they mostly concentrate on the linkage between the power of MSMEs and economic development. For instance, many literature have explored the relationship between the relative size of the MSME sector, economic growth, and poverty alleviation. Most of them discover a positive association between the importance of MSMEs and GDP per capita

growth. However, they find no evidence that MSMEs alleviate poverty or decrease income inequality (Beck, Demirguc-Kunt and Levine). The main point of this paper is that the relationship between economic development and democratic development may be influenced by a country's economic structure. It argues that if the concentrated capital owns predominant political and economic power, it will adversely impact the nation‘s democratic development. This paper argues that the more micro, small and medium enterprises (MSMEs) a country has as its main economic development force, the more likely and smoothly its democratic development, *ceteris paribus*. It will also resolve many of the collective actions problems (Olson, 1971). Conversely, the more state owned enterprises and giant private corporations a country, especially a LDC—less developed countries, has the more the chances that those big businesses will collaborate with the ruling government to suppress its spontaneous social and political movements. . On the other hand, once the democratization begins, the opposition forces can use the ideology, the relationship between relatives and friends, from the small and medium enterprises to easily find the political mobilization of economic and human resources. It is also because of the profits of these MSMEs need not rely on the government's privileges, their economic interests and political ideals will not conflict with each other and the people. To summarize, due to the large number of MSMEs with their overall economic influence, they become the object of various political forces, and thus increase the diversity of democratic competition.

Conversely, from the 1980s’ "developmental state theorists" became the center of debates in academia (Huntington and Nelson, 1976). Moreover, the wave of democratic development of the "third wave" (Huntington, 1991) since the mid-1970s has forced social scientists to once again think about the relationship between democracy and economic development.[1] Fukuyama argues that most authoritarian regimes in the past have fulfilled their historic tasks and lay a good economic base for later democratization. For developing countries, Fukuyama stresses the importance of the establishment of stability, government capacity, and nation building to lay the foundation for an economic take-off. Once those three foundations are in place, a country with a stronger economic base will subsequently demand more democracy. Furthermore, no democracy can sustain itself with a serious income inequality. It is through this long route that a stable and

[1] According to Wolfgang Sachs, a post-developmental theorist, a leading member of the post-development school, "the idea of development stands like a ruin in the intellectual landscape" and "it is time to dismantle this mental structure."

prosperous democracy will eventually subject to median voter theorem and reach income equality equilibrium. One can thus argue that before a country's take-off stage, MSMEs are often its main economic driving force. These nascent businesses need a strong and centralized government for support, protection, sponsorship, and even favorable treatment and less demand on political rights. Muller (1995) argues that that democratic development is not appropriate in the early stages of a country's economic development, and it may even aggravate not only its economic development but also income distribution process. This research trend, in fact, combines modern theory and strategic interaction theory, and supports the development of state theory on the "first development, and then democratic development" argument. This paper aims to resolve these debates with a panel data model, and offer some new insights on them.

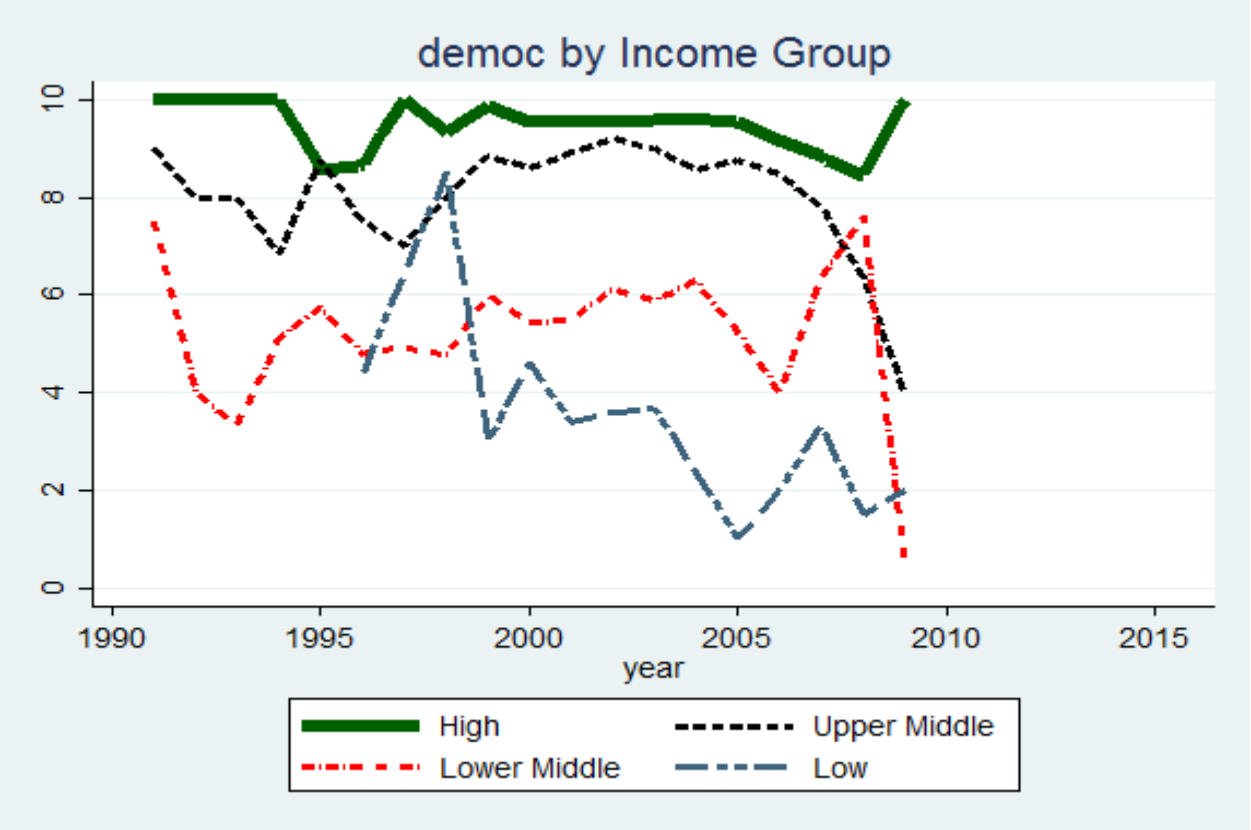
Theoretic Framework:

This paper adopts the panel data analysis to include as many countries and annual data as available. Panel data, by blending the inter-individual differences and intra-individual dynamics have several advantages over cross-sectional or time-series data: Panel data usually contain more degrees of freedom and more sample variability than cross-sectional, hence improving the efficiency of econometric. Panel data contain information on both the inter-variable and temporal dynamics and the individuality of the entities and thus allow one to control the aforementioned effects of omitted variables (Hsiao, 2014). Finally, compared to aggregated data, panel data is ideal for investigating the "homogeneity" versus "heterogeneity" issue (Granger, 1990).

However, there are a few cautions against panel data. Since panel data involve at least two dimensions, a cross-sectional dimension and a time series dimension. Many time-invariant variables may severely skew the results (Beck and Katz). For example, the democratic levels of some OECD countries have not changed since any data of dependent or independent variables were available. Figure 1 demonstrates this point vividly. The high income group with time-series data reveals that almost all observations concentrate on level 10 of the democratic index; therefore, this paper addresses this problem by conducting panel data analysis not only on the combined observations but also with data of subsets based on income level. Other time-invariant variables such as geographic (African country or not), cultural (Confucian or not), and religion (Muslim or not) should be treated with extreme caution. For this reason, this paper avoids using dummy variables that are related to those categories. Also, any panel data study has a limited

predictive power as opposed to a time-series model which often concentrates on one single unit such as a country and its history. For instance, just because the panel model is valid for a set of countries for a certain range of periods, one should not extrapolate the correlations to countries that were excluded in the sample or periods that are outside of the range. At best, it serves as a good inference point for predicting other countries' future.

Figure 1 and 1a: The Democratic Level in Countries with Different Income Levels (Source: Polity IV)



This paper proposes the following the following hypothesis:

- Hypothesis: The more micro, small and medium enterprises (MSME) a country has as its main economic development force, the more likely and smoothly its democratic development, *ceteris paribus*.

This paper, for the sake of comparison, will apply three models. First model is using mean values for all variables to conduct a simple OLS analysis. The second model, after investigating the result of Hausman test, will apply the *fixed effects*. To provide robustness checks and overcome the possible biased and inconsistent results in the presence of endogeneity in the fixed effects model, this paper chooses Arellano-Bond general-method-of-moment (GMM). This paper will select, at the end, the most appropriate model to analyze subset's data based on income level. The general equation of this study is as follow:

$$democ_{it} = \alpha_{it} + \beta\, msme\_1000_{it} + \gamma\, Z_{it} + \varepsilon_{it}$$

where the subscript *i* indexes individual country; the subscript *t* indexes years; $democ_{it}$ is our measure of democratic level; $msme\_1000_{it}$ is our measures of MSMEs level; the vector Z_{it} includes dichotomous indicators for each year and, in many specifications, the control independent variables; α, β, and γ are parameters to be estimated; and ε_{it} is an additive error term. The coefficient estimates of β in the equation indicate whether and to what extent individual country's *democ* index are correlated with the theoretic variable *msme_1000*, and this paper expects this to be positively correlated with the dependent variable *democ*—the central hypothesis of our empirical analysis. Thus, our null hypothesis is that $\beta = 0$, with the alternative hypothesis that β is greater than zero.

Data Description and Empirical Specification

The values for the dependent variable *democ* are from Polity IV—Institutionalized Democracy (Range: 0 to 10). The values for the theoretical variable *msme_1000* are from World Bank's MSME Country Indicators - Historical Data.[2] The observations for the control independent variable GINI index are from World Bank 2017 Estimate. [3] There are five other control variables. From Penn World Table 7.0, this paper collects rgdpch (PPP Converted GDP Per Capita based on Chain Series, at 2005 constant prices, *Investment (ci), and Trade (openc*). The *growrate* variable is calculated by the difference between the *rgdpch* of targeted year and its previous year' *rgdpch* divided by last year's *rgdpch*. [4] From Cross National and Time Series data set, this paper uses *domestic4*—government crisis—as a measurement of political stability. This paper also uses *human development index* (HDI) from the UN Human Development Report as a combined indicator for education, life span, and gross national income. It further conducts statistical test on issues related to multicollinearity, autocorrelation, endogeneity, and heteroscedasticity as will be demonstrated in the later sections. For each variable, Table 1 provides summary statistics.

[2] https://data.worldbank.org/data-catalog/xajb-umcc. It includes 131 countries from 1990 to 2010. The data is imbalanced with missing data for some years' data for some countries.
[3] https://data.worldbank.org/indicator/SI.POV.GINI. The range is from 13.59 to 65.8
[4] growthrate=Δrgdpch/rgdpch (lag 1)

Table 1: Summary of Statics for Variables

Variable	Observation	Mean	Std. Dev.	Minimum	Maximum
democ	7,981	4.3046	4.19	0	10
MSME_1000	742	31.51	28.055	0.122	206.31
openc	8,392	76	49.12	2.635	453.44
domestic4	8,635	0.156	50.23	0	7
gni_per_cap	724	12,839	14,586	150	81,600
hdi	4,130	0.654	0.165	0.194	0.949
growthrate	8,188	0.024	0.07	-0.646	1.222
ci	8,392	23.78	11.65	-15.82	117.35
gini	1,657	38.57	9.932	13.59	65.8

As a reference, Graph 1 also shows the general distribution of the average values by country of *democ* and *msme_1000*. The italic and unlined numbers are values of *msme_1000*, and the numbers below them are values for *democ*. The color for each country is determined by its *msme_1000's* value. Figure 2 reveals the preliminary investigation of the correlation between *democ* and *msme_1000* by income level. I can see no obvious pattern of relation between *democ* (DV) and *msme_1000* (theoretical IV), even the fitted lines change for each income group; therefore, it warrants some further statistical analysis. This paper analyzes the following three models:

1. Simple OLS regression model using mean values for variables.
2. Panel data, fix effects regression model based on Hausman Test's result.
3. Arellano-Bond general-method-of-moment (GMM) .

Figure 1: msme_1000 and Institutionalized Democracy Index by mean values *(in italic and underlined):*

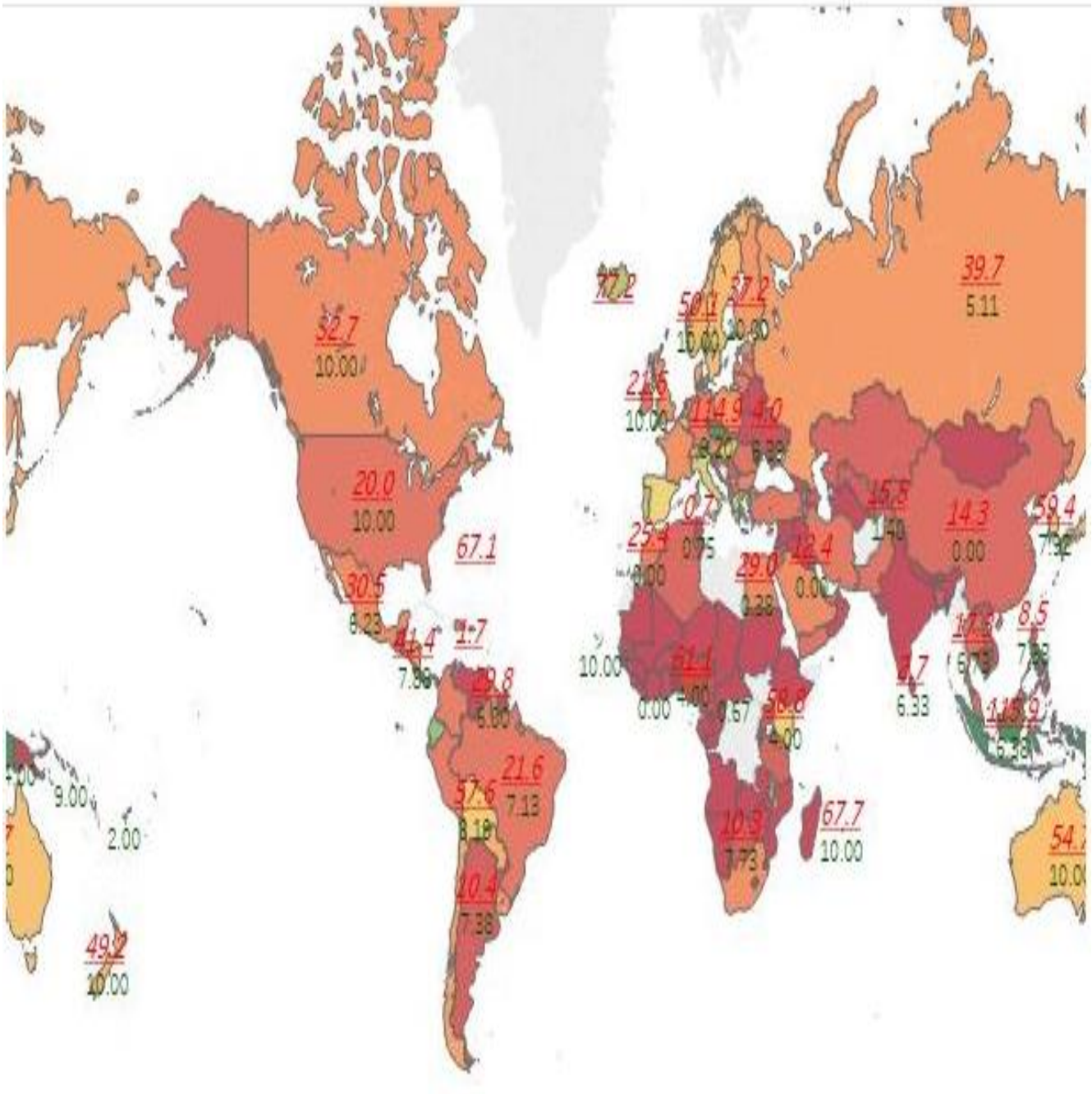
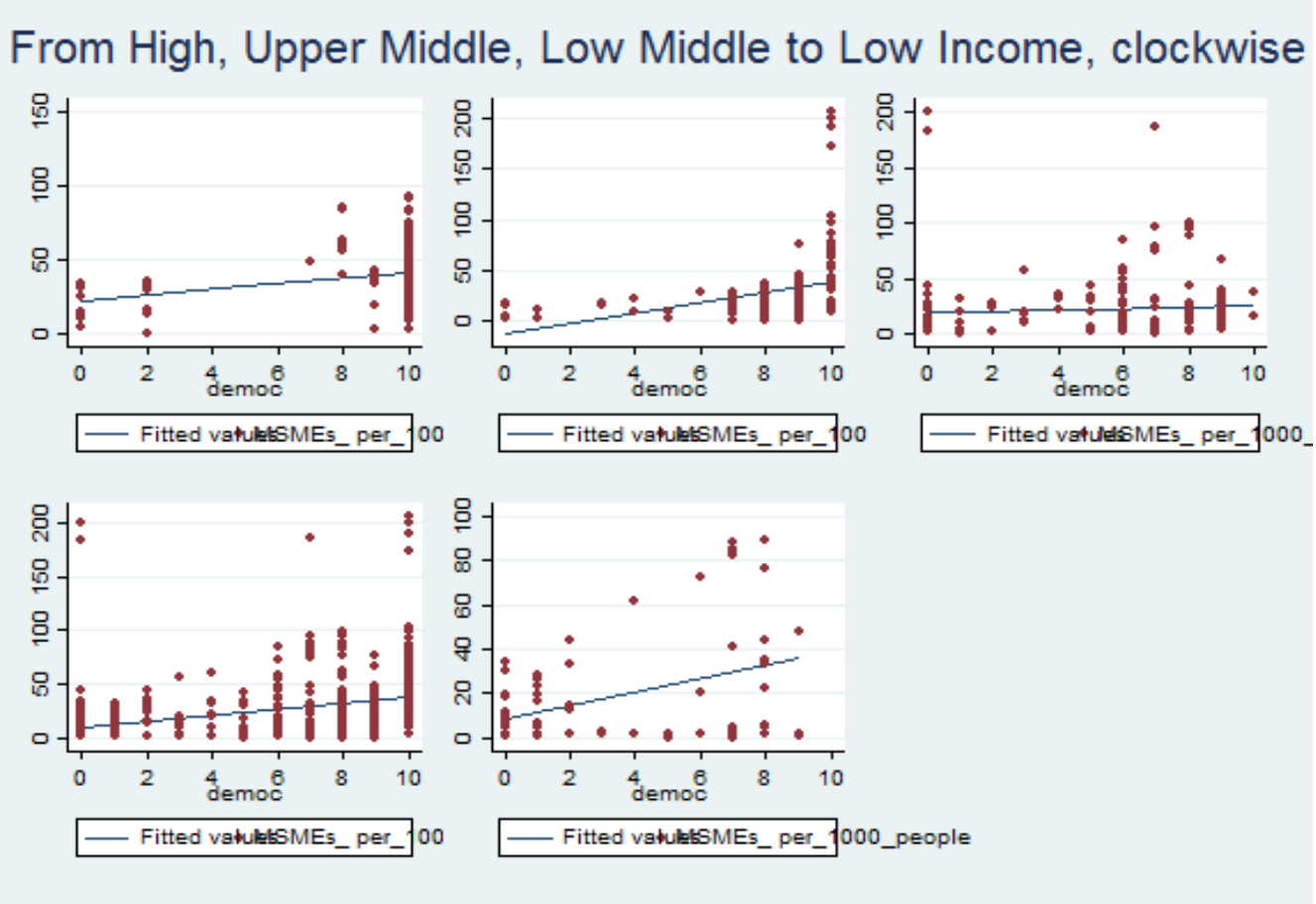


Figure 2: The relation between *democ* and *msme_1000* by income level.



Empirical Results and Analysis

As we can see from Table 2, three models reveal distinctly different results. Not only the coefficients are different for the same variable among three models; furthermore, the negative or positive sign also changes. The "mean model" is not much more than a refined pooled regression model against cross-sectional with time-series data. Pooling countries across years has some advantages but generates a number of estimation issues regarding individual heterogeneity. It is likely that observations over time for the same country will be more similar than observations across different countries. It also masks considerable variation in how regions and countries respond to external stimuli like globalization (Pesaran, Shin, 1999). By selecting averaged values by country, it inevitable ignores many time-sensitive factors such as civil and international military conflicts, unpredicted but major domestic or world events, volatility of cyclical or noncyclical changes in international economy.

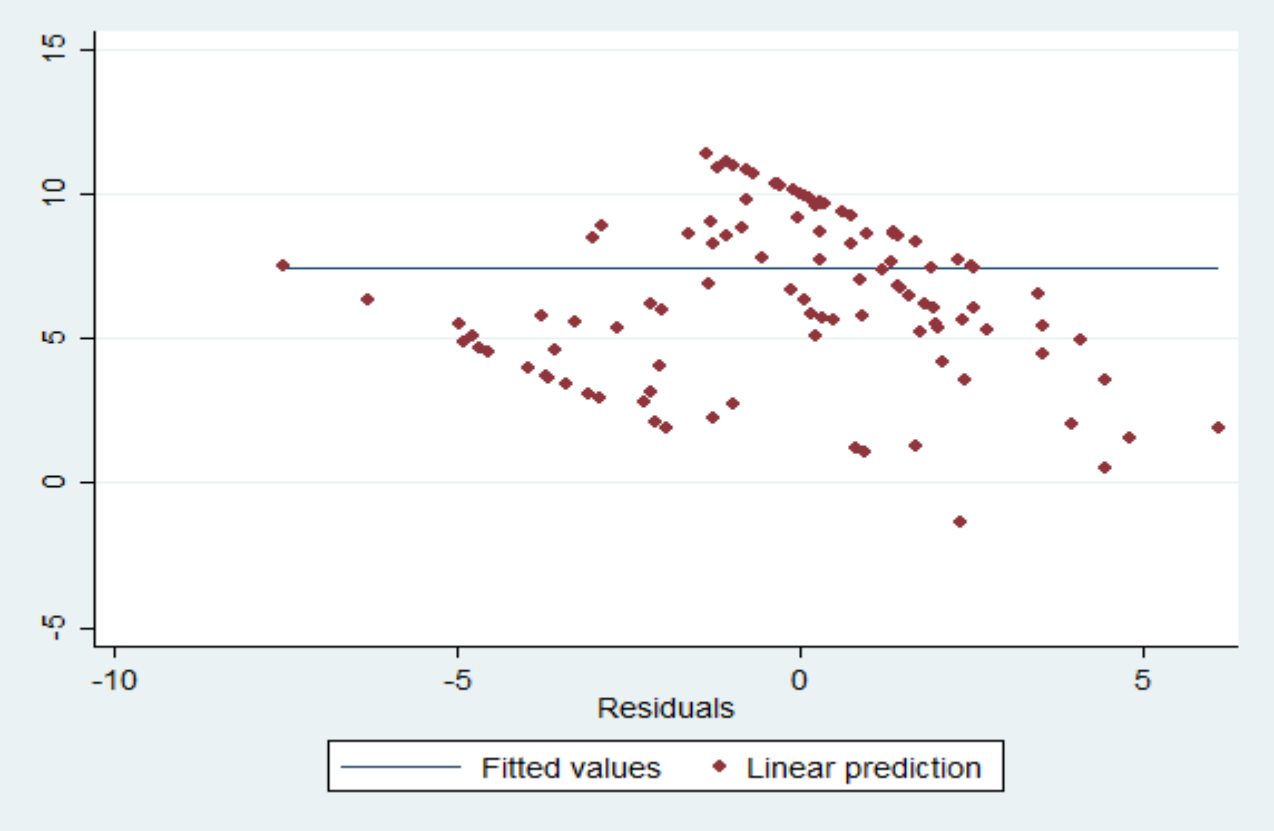
Table 2 reports the results of all three models:

Table 2: Panel Analysis of democ and msme_1000									
	OLS--Mean Variables			Panel Fixed Effects			Arellano-Bond with Instruments and 2SLS for democ		
Regressor	**Coef.**	**S.E.**	**p-value**	**Coef.**	**S.E.**	**p-value**	**Coef.**	**S.E.**	**p-value**
MSME_1000	0.0343	0.0034	**0.0000**	-0.00118	0.0024	0.626	-0.000741	0.00005	**0.007**
openc	-0.0035	0.002	0.11	0.00418	0.003	0.181	0.00222	0.00005	**0.0000**
domestic4	-0.138	0.461	**0.765**	0.0324	0.082	0.691	-0.005	0.0005	**0.0000**
GNIperCapita	-0.000009	0.000010	**0.37**	-0.00002	0.000007	**0.027**	-0.00002	-0.000002	**0.0000**
hdi	18.5	1.486900	**0.0000**	8.004	1.644	**0.0000**	3.8	0.053	**0.0000**
growthrate	-20.61	4.445	**0.0000**	-1.576	0.926	**0.089**	-0.8453	0.01	**0.0000**
ci	-0.1138	0.0156	**0.0000**	0.201	0.009	**0.026**	0.0019	0.00008	**0.0000**
gini	0.0759	0.0119	**0.0000**	0.003	0.011	0.796	0.0048	0.0002	**0.0000**
democ (L1)	n/a	n/a	n/a	n/a	n/a	n/a	0.229	0.0018	**0.0000**
democ (L2)	n/a	n/a	n/a	n/a	n/a	n/a	0.0089	0.0004	**0.0000**
Constant	-6.253	1.304	**0.0000**	0.735	1.162	0.528	2.55	0.096	**0.0000**
	Mean VIF= 1.2, Max VIF = 2.75			*Hausman Test: Prog>chi2 = 0.0000*					
Observations	680			661			456		
Groups (Countries)	n/a			108			73		
R-Square	0.599			0.2512			n/a		
Prob > F	0.0000			0.0000			0.0000		

Figure 3, with the Mean Model, shows the residual of average *democ* (vertical axis) against the residual of IVs. Each dot is a country/year observation, and there are a total of 680 observations. The chart indicates a heteroscedasticity problem for this model. By conducting a Breusch-Pagan/Cook-Weisberg test and White test for heteroscedasticity, I conclude that for this model such a problem does exist. [5] However, I do not intend to rectify this problem since alternative models like panel data analysis are more appropriate.

[5] Breusch-Pagan / Cook-Weisberg test: chi2(1) = 219.03. It is so high that we need to reject the null hypothesis that this model has constant variances.

Figure 3: Residual of Ys vs. Xs—Mean Model.



By reviewing the "mean model", I find that all but *domestic4* (political instability) and GNIperCapita are significant against *democ*. The mean value of the theoretic variable *msme_1000* has a positive effect on mean value of *democ*—one unit of increase of average *msme_1000* predicts 0.0343 units of increase of average *democ*. There is no VIF (variable inflation factor) for any variable that is over 3.25 which indicates that there exists no multicollinearity between any variables.

In contrast, panel data set possess many advantages over conventional cross-sectional or time-series data set. Panel data usually give us a large number of data points (as opposed to the "mean model" which offers us many repeated averaged values through periods), easing the degree of freedom and reducing the collinearity among dependent variables; consequently, improving the efficiency of econometric estimates (Hsiao, 2014). As mentioned before, The

White Test: chi2(27) = 451.94. It is so high that we need to reject the null hypothesis that this model has homoscedasticity.

Fixed Effects (FE) estimator address the issue of the coefficients of variables that are time-invariant (Neyman and Scott), in our case, one of them is the democracy index of OECD countries. The table 2 demonstrates that for the FE model, *msme_1000* does not possess a significant impact on *democ*, only ci (Investment), *hdi*, and GNIperCapita are significant against *democ*.

Since our final model is Arellano-Bond general-method-of-moment (GMM) which includes instrumental variables, I must inspect the data before running it or apply VIF after I run the normal regression with differenced variables. The differenced variables model will look like this: $\Delta Y = f(\Delta X)$, where ΔY and ΔX is to difference DV and IVs. [6] Even though this methods does not take the instrumental variables into account but it is a good approximate of multicollinearity problems.

All in all, this paper believes that the pre-analysis procedure for multicollinearity should be enough to diagnose the problem. Keep in mind that multicollinearity is not a serious problem. With multicollinearity, our estimation is still unbiased, but the S.E. will be bigger and it may encounter a problem with finding statistical significance of coefficients if the model has a small data. In our case, this paper has 680 observations; however, it still conducts a VIF test and presents the cross-correlation table to ensure the validity of the model. The VIF results of differencing variables reveal a maximum value of VIF of 3.17 and the Table 3 reveals no sign of multicollinearity of among variables. Note that it also reveals that there is no multicollinearity between *msme_1000* and *democ*.

Table 3: Cross correlation table of differenced variables.

	D. democ	D. MSMEs_~e	openc	domest~4	GNIper~d	hdi	growth~e	ci	gini
democ									
D1.	1.0000								
MSMEs_per_~e									
D1.	0.0004	1.0000							
openc	-0.0376	0.0439	1.0000						
domestic4	0.0912	-0.0291	-0.1080	1.0000					
GNIperCapi~d	-0.0429	-0.0072	0.0947	-0.1230	1.0000				
hdi	-0.0287	0.0118	0.0179	-0.0917	0.7969	1.0000			
growthrate	-0.0305	0.0006	0.1467	-0.2125	-0.2424	-0.2048	1.0000		
ci	-0.0743	0.0249	0.1889	-0.1264	-0.0287	-0.0564	-0.0017	1.0000	
gini	-0.0425	-0.0146	-0.1774	0.0846	-0.2310	-0.3762	-0.0381	0.2360	1.0000

[6] Differencing variables means using (Yt) - (Yt-1) and (Xt) - (Xt-1).

Next, this paper evaluates the sensitivity of our results to alternative approaches to accounting for persistence in panel data. In general, a lagged dependent variable is obviously correlated with the individual-specific effects; consequently, this specification cannot be estimated via random effects as supported by Hausman Test. Moreover, the fixed-effects estimator is also biased and inconsistent in the presence of a lagged dependent variable when, as in our dataset, the number of periods is small. There are a number of alternative estimators for this situation, some of which use first and second-difference data to deal with individual-specific effects and then use instrumental variables to address the correlation between the error term and lagged dependent variable generated by differencing (Wawro, 2002). The best alternative is the Arellano-Bond generalized method-of-moments estimator (GMM). Referring to Table 2, the last three columns report results for this estimator, which adds two lags of the dependent variable (Xt-1 and Xt-2) to the Arellano-Bond model. In comparing these results with those earlier, note that the number of groups (countries) and total observations has declined. First differencing and the use of lagged instruments results in the loss of many observations altogether. It also means that individuals must be retained in the panel for three years to be included in the analysis. The observations "sacrificed" are often less developed countries which unfortunately have more variations than the developed ones. One can argue that developed countries' have reached a "steady state" of their socio-economic and political development; whereas, most developing countries are still in the process of socio-economic and political transformation; and thus should be the focus of this study.

To assess the validity of these results, I conducted four diagnostic tests recommended by Arellano and Bond. To test for autocorrelation, I assume first differenced residuals should display first-order serial correlation but not second-order or the third-order serial correlation. The z-value for the hypothesis test under the null hypothesis of no first-order autocorrelation is -1.622 (probability > z = 0.1048), suggesting rejection of this null. The z-value for the hypothesis test under the null hypothesis of no second-order autocorrelation is -0.51086 (probability > z = 0.6094); and for the third-order autocorrelation is -0.21252 (probability > z = 0.8317), suggesting retention of this null—no autocorrelation issue exists with this model. These three test results are consistent with the assumptions of the Arellano-Bond estimator. Arellano and Bond also create a Sargan test that helps further assess whether the assumptions about serial correlation hold. The null hypothesis of this test is that the model's over-identifying restrictions are valid; rejection of

the null suggests the need to re-specify the model. The test statistic of Arellano-Bond model equals 64.09898 (Probability > chi2 = 0.9996), indicating that I do not have evidence to reject the null hypothesis, and thus the over-identifying restrictions are valid.

Another vital robustness issue is the possibility of estimation bias due to endogeneity. On endogeneity, one can argue that there may be a feedback mechanism from democ to *msme_1000*. To address this issue, I conduct the Arellano-Bond regression with the parameters of 2SLS (two stage least square) and endogeneity. Overall, none of the diagnostic tests raises significant concerns about the basic assumptions required for valid implementation of the Arellano-Bond estimator as in Table 2. However, the Arellano-Bond model on Table 2 presents a too optimistic picture. All variables are significant. The *msme_1000* has a negative relation with *democ*—The more MSMEs per 1000 people a country has, the less democratic it is. Can I trust and thus reject the first hypothesis? I would argue that Arellano-Bond model onlyserves as a tool to provide robustness to the panel data analysis; therefore, further analysis is warranted.

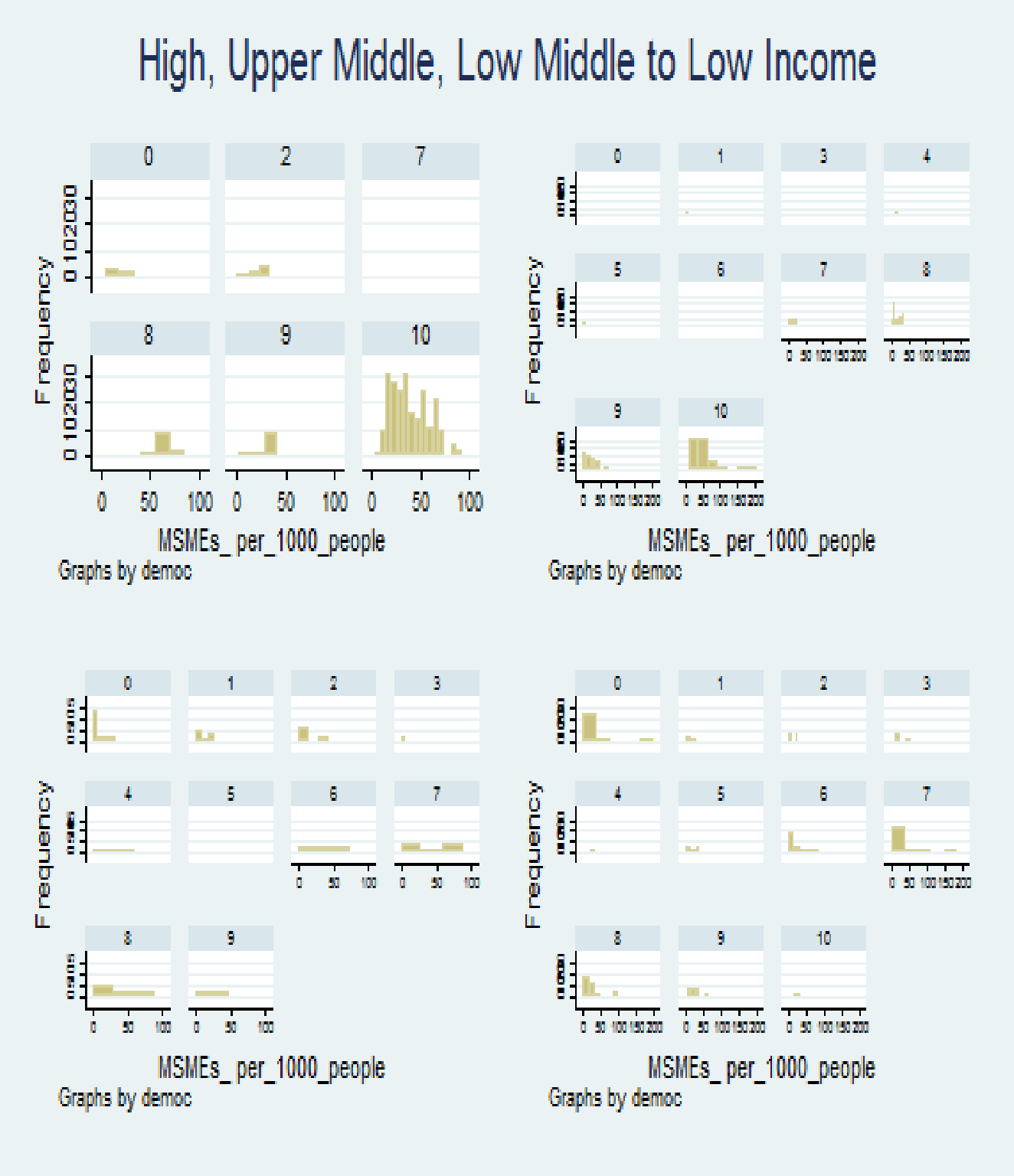
To summarize, this paper anticipated the difference in mean OLS model and any panel data model. There are two different assumptions or underlying theoretical framework between mean OLS and Panel model. For mean OLS, I try to find the average effect of Xs to Y based on the average of every unit (every country). On the other hand, the panel model is used to find the average effect of Xs to Y by controlling the country effect. Those two models might share the same goal but one should implement and interpret them differently, and the results can be different. In case of the different results as I have, the data and the analysis tell us that the problematic Xs, which flip from positive to negative and vice versa, are influenced by *either* our data is abnormally distributed, or the mean values are influenced by outlier which is often the case of cross country data. Moreover, these Xs have different effect to different countries and periods *or* both. So, this problem or situation urge us an opportunity to expand or deeply investigate the analysis. As it is mentioned in previous section, it may be a good practice to divide the data based on certain criteria (such as level of development or economy) and run the same data specification with fixed effects panel model on the divided datasets. This paper conducts those analyses in the next section and expects to find that these Xs may have positive/negative effects on rich countries but opposite effects on poor countries.

Models Based on Income Level

There are many justifications for breaking the panel data into separate income level groups. For instance, the strength in one country MSMEs may have a different impact on its democratic development in a low income economy than a medium or high one. Table 4 shows fixed effects panel models on four different income levels. It shows that there are significant differences almost for all variables' indicators among these four subgroups. In the lower-middle income groups, the dependent variable *democ* is more responsive to our theoretic independent variable *msme_1000*. They reveal a negative relation, which means the higher the msme_1000 index the lower *democ* index. It reveals that one unit of increase in *msme_1000* causes a decrease of *democ* by 0.162 units. Considering the *democ's* range of values is from 0 to 10, this reveal a strong causal significance. In contrast, other income groups reveal different results which further justify the approach of separating the data into groups based on income level. Figure 4 presents a visualization of the relation of *democ* and *msme_1000* based on income level.

Table 4: Panel Analysis GINI Index--Fixed Effects (by Income Level--GNI Per Capita)												
	High Income (11,670--89,814)--Fixed Effects			Upper Middle (4,530--11,600)--Random Effects			Lower Middle (950--4,530)--Fixed Effects			Low (150--950)--Random Effects		
Regressor	**Coef.**	**S.E.**	**p-value**	**Coef.**	**S.E.**	**p-value**	**Coef.**	**S.E.**	**p-value**	**Coef.**	**S.E.**	**p-value**
MSMEs_1000	0.00122	0.0011	0.255	-0.0032	0.036	0.929	-0.162	0.00895	**0.073**	0.023	0.114	**0.043**
openc	-0.00315	0.0015	**0.039**	0.0012	0.005	0.825	0.003	0.01	0.8	0.224	0.01	**0.031**
domestic4	-0.1189	0.038	**0.002**	0.1096	0.144	0.446	0.122	0.205	0.554	0.6	0.433	0.166
GNIperCapita	-0.000002	0.000002	0.479	-0.0005	0.0005	0.328	0.002	0.0003	0.368	-0.001	0.002	**0.466**
hdi	1.254	1.009	0.215	18.199	4.143	**0.0000**	5.337	6.747	0.43	2.153	5.6181	**0.701**
growthrate	0.426	0.653	0.515	0.105	1.95	0.957	-1.262	1.897	0.507	-4.564	5.414	0.399
ci	-0.006	0.005	0.225	0.001	0.0226	0.963	0.0076	0.0246	0.759	0.032	0.041	0.421
gini	-0.1118	0.003	0.549	-0.0023	0.027	0.931	0.041	0.051	0.422	0.2	0.058	**0.0000**
Constant	8.919	0.806	**0.0000**	-5.607	3.069	0.068	-0.35	4.681	0.941	-8.08	3.342	0.016
	Hausman Test: Prog>chi2 = 0.0000			Hausman Test: Prog>chi2 = 0.1228			Hausman Test: Prog>chi2 = 0.0062					
Observations	253			159			182			65		
Groups (Countries)	35			32			38			26		
R-Square	0.4162			0.046			0.02			0.33		
Prob > F	**0.0253**			**0.0000**			**0.0000**			**0.0000**		

Figure 4: Histogram chart on *msme_1000* by *democ*. From the upper left of high income group go clockwise to the low income group.



Conclusion and Policy Implication

The pool data model in this paper supports the hypothesis that for a country's political and economic structure, if the concentration of economic power has political influence, the democratization of the country will suffer a major obstacle. On the other hand, if a country's economic power is scattered, democratization will proceed smoothly. However, based on deeper and extensive analysis, this paper concludes that by separating the data into four income groups and applying panel data analysis offers us a more robust, unbiased, valid, and reliable alterative model. In general, the relation between MSMEs and democracy is at most ambiguous. MSMEs actually have a significant and *negative* impact on democracy, especially in lower-middle economic group. A plausible explanation is that before a country's take-off stage, MSMEs often form its main economic driving force. These nascent businesses need and may even demand a strong and centralized government for support, protection, sponsorship, and special privilege. As Deng Xiaoping's slogan, "get rich first!" Consequently, political rights come later. Muller argues that democratic development is not appropriate in the early stages of a country's economic development. All these empirical results are tied to economic development stages.

This paper, however, based on empirical evidence, does not contradict with Feng's conclusion that economic growth has a long-term or Granger's impact on political freedom and income inequality. In his 2003's book, he expects that an increase in economic freedom will expand the size of the economy. Subsequently, that a richer economy is likely to generate socioeconomic changes that favor the development of a stable democracy. Many literatures have explored the relationship between the relative size of the MSME sector, economic growth, and poverty alleviation. Most of them discover a positive association between the importance of MSMEs and GDP per capita growth even though they find no evidence that MSMEs alleviate poverty or decrease income inequality (Beck, Demirguc-Kunt and Levine). In conclusion, MSMEs are conducive to economic growth, especially at the early stage of a country's economic development, and the latter, according to Feng, has a Granger effect on democratic development. A healthy economic development contributes to the popularization of education, secularization, and the rise of the middle class, and thus promotes the awakening of political consciousness. These middle class, while satisfying with the distribution of material, began to demand the reallocation of political power. In other words, economic development leads to the expansion of

an independent "civil society" (Inglehart and Welzel). It is through this long route that a stable and prosperous economy will eventually lead to median voter theorem and reach income equality equilibrium.

However, it also agrees with Fukuyama's statement that most authoritarian regimes in the past have fulfilled their historic tasks and lay a good economic base for later democratization. For developing countries, Fukuyama stresses the importance of the establishment of stability, government capacity, and nation building to lay the foundation for an economic take-off. Once those three foundations are in place, a country with a stronger economic base will subsequently demand more democracy

In conclusion, panel data analysis model on subsets of income level, combined with Arellano-Bond with Instruments and 2SLS model which reinforces it with robustness, is most appropriate for this research that addresses not only autocorrelation but also endogeneity issues. Undeniably though, this paper applies three models—Mean Variables, Fixed Effects with Robust, and Arellano-Bond with Instruments and 2SLS for *democ*—resulted in distinctly different outcomes among them; therefore, I must underline reservations to the final conclusion.

Discussion

Is msme_1000 an appropriate explanatory variable for democratic development? Will income distribution serve as a better one? Unfortunately, most recent quantitative studies on the relation between income distribution and democratic development also result in ambiguous conclusions. Acemoglu, Naidu, Restrepo, and Robinson in 2015 conduct a panel data analysis on this topic and their results are broadly consistent with a view that is different from the traditional median voter model of democratic redistribution—democracy does not lead to a decline in inequality, but can "result in changes in fiscal redistribution and economic structure that have ambiguous effects on inequality." The reversed relation of income distribution and democratic development (the former impacts the latter) is also inconclusive. These diversified research results, in their opinions, suggest that the relation between income distribution and democracy may be more nuanced than often presumed and highly heterogeneous across societies. They suggest that further research on the topic, by exploiting within-country as well as cross-national variation. In general, a survey of the literature shows that the social science

literature on this topic is far from a consensus or a near-consensus on this topic. This paper however emphasizes that all the future studies of democratic development must pay attention to the stage of economic and political development of any country. As an old saying "Victory has a hundred fathers and defeat is an orphan." A mature and stable democracy has many causes; however, a less development country may have plethora of options to reach its unique national goal. One tested route to take, as demonstrated by many rising Asian countries, is to encourage, protect, and sponsor its MSME development as the first step to reach a stable economic growth. With a healthy and stable economy, social, cultural, and political development will eventually follow. At the end, this paper will offer two case studies to supplement it with qualitative analyses.

Case Study:

Taiwan—strong MSMS and democracy: Taiwan's current economic structure is much closer to the capital dispersion, export oriented, and market-oriented strategy. Since 1959 and thereafter the authoritarian government and most of the producers had switched from an import substituted model to a market-oriented and export-oriented economic development strategy. The reason is that Taiwan is not like the Latin American countries have a more large domestic market which can sustain a second import substitution experiment. Later, this capital dispersion, export-oriented strategy was adjusted (in the early 1970s and early 1980s) due to economic restructuring and world economic fluctuations, but the overall orientation was towards capital dispersion and liberalization of trade. [7] (Galenson, 1979).

In contrast to Japan, South Korea, and Singapore, Taiwan's export hero is not a big consortium (examples of Japan and South Korea), nor is it a multinational company (such as Singapore), but a large number of small and medium enterprises (Kuo, Cheng-Tian. 1994).

Based on empirical results, the paper argues that once the democratic development begins, the opposition forces can use the ideology, the relationship between relatives and friends, from the small and medium enterprises to easily find the political mobilization of economic and human resources. It is also because of the profits of these small and medium enterprises do not have to rely on the government's privileges, their economic interests and political ideals will not

[7] Taiwan was also under the pressure of the United States and had to apply for access to GATT / World Trade Organization

conflict with each other and the people. Due to the large number of small and medium-sized enterprises with their overall economic influence, they become the object of various political forces, and thus increase the diversity of democratic competition. The Democratic Progressive Party (DPP) and the New Party relied on the support of small and medium-sized enterprises and the general public in relation to the resources of the Kuomintang, which relied on local factions and party (state) monopolies.

However, Przeworski in 1993 argues that one of the major reasons the Taiwanese regime decided to hold elections because it needed to mobilize the support of democratic countries in its geopolitical conflict with China, a reason that has less to do with income or other socioeconomic development.[8] This again illustrates the complexity of any country's democratic development.

South Korea—strong large enterprises and democracy: From 1961 to 1979, when Park Chung-hee was assassinated, South Korean capitalist market-oriented structure had a positive impact on South Korea's economic development and had a negative impact on democratic development. The center of South Korea economic structure is the consortium (chaebols), which are groups that combine traditional aristocrats, businessmen, industrialists, and retired officials (Hahm and Plein).

Before 1990, Korean government is willing to cooperate with the consortium to consolidate the rule. On the one hand, the number of large capitalists is small and can be easily controlled by the government. By controlling the consortium's leaders, it also indirectly controls the employees of the small and medium-sized enterprises which are associated with the consortiums. On the other hand, the contribution of the consortium to the government's fiscal revenue and government needs is growing, making the authority of the government to run the machine, and more and more need consortium. Authoritarian government and the consortium then form a solid symbiotic structure. However, this not only forms a symbiotic relationship, but also makes the South Korean democratic development more violent and turbulent (Hahm and Plein).

[8] "For example, dictatorship fell in Taiwan not because it became wealthy, but because Taiwan needed the support of democracies in its geopolitical struggle with China."

However, as stressed by this paper, an economic development eventually brings the rise of the middle class, and thus promotes the awakening of political consciousness. The Korean class, while satisfying with the distribution of material, began to demand the reallocation of political power. There may be other reasons for this impressive political transformation. One might argue that the persistent threat of North Korea might have impelled South Korea to build a democratic regime as one of the counter measures.

These two case studies further suggest that the relation between MSMEs and democracy may be more nuanced and highly heterogeneous across countries.

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