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URBANIZATION AND DEMOCRACY IN THE FRAMEWORK OF MODERNIZATION THEORY: RECENT EMPIRICAL EVIDENCES

The goal of this study is to provide empirical evidence for existence of positive relationship between urbanization and democracy. We involve a dataset of 56 developing countries covering a time span between 1982 and 2007. The research hypothesis is that developing countries tend to be more democratic at higher levels of urbanization. We test this hypothesis within GMM methodological framework and find some evidences.

Keywords: democracy; modernization; urbanization; Polity IV; GMM system.

JEL Classification: O10; R10; Z13.

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УРБАНИЗАЦІЯ ТА ДЕМОКРАТІЯ У КОНТЕКСТІ ТЕОРІЇ МОДЕРНІЗАЦІЇ: НОВІ ЕМПІРИЧНІ ДАНІ

Мета даної статті – надати емпіричні дані про існування позитивного зв'язку між урбанізацією та демократією. Використано дані щодо 56 країн, що розвиваються, для часового проміжку з 1982 по 2007 рік. Робоча гіпотеза: країни, що розвиваються, більш схильні до демократії за вищого рівня урбанізації. Гіпотезу перевірено за допомогою нормальних (гаусових) розподілів, надано докази.

Ключові слова: демократія; модернізація; урбанізація; Polity IV; гаусів розподіл.

Табл. 3. Форм. 2. Літ. 35.

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УРБАНИЗАЦИЯ И ДЕМОКРАТИЯ В КОНТЕКСТЕ ТЕОРИИ МОДЕРНИЗАЦИИ: НОВЫЕ ЭМПИРИЧЕСКИЕ ДАННЫЕ

Цель данной статьи – предоставить эмпирические данные о существовании позитивной связи между урбанизацией и демократией. Используются данные по 56 развивающимся странам и временному отрезку с 1982 по 2007 год. Рабочая гипотеза: развивающиеся страны более склонны к демократии при высоком уровне урбанизации. Гипотеза проверена при помощи нормальных (гаусовских) распределений, предоставлены доказательства.

Ключевые слова: демократия; модернизация; урбанизация; Polity IV; гаусово распределение.

Introduction. The issue of interlinks between socioeconomic development and democracy can be seen as a nexus of social and political sciences. Indeed, this topic incorporates a large set of gnoseological and methodological questions. These questions rise from the impact of development processes on social institutions, mechanisms and values and deal especially with causality between what is generally labeled as "modernization" and "democracy". However, the answers are far from being unanimous and range from postulating that causal relationship flows from modernization to democracy, to the idea that democratic countries are more conducive to modern-

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ization and economic development, but democracy itself occurs exogenously. Finally, other approaches either fail to find any connection or even sustain the existence of a negative relationship between key determinants of modernization, especially the economic growth, and democracy.

This study has its research grounds in Lipset (1959, 1960, and 1994) and deals with structural and societal conditions that can act as democratic stimulators. Its goal is to examine some recent empirical evidences regarding possible connections between a specific aspect of modernization – urbanization – and the democratic status for a set of developing countries.

The study is structured as follows: the next section reviews the literature, discussing its grounds and recent evolutions. The third section describes the international data and the involved variables. The empirical results are reported in the fourth section. Finally, the conclusions are drawn, some analytical limitations are highlighted and possible further research directions are suggested.

Modernization and democracy. The modern analysis of democracy, as an outcome of long-run driving forces of modernization, starts with the seminal work of Lipset (1959, 1960, and 1994). The key idea is that there is a relevant association between the level of development of a given country and its probability of being democratic: "the more well-to-do a nation, the greater the chances that it will sustain democracy" (Lipset, 1959:75). Regarding such association, the intended interpretation is a broad one "all the various aspects of economic development – industrialization, urbanization, wealth, and education – are so closely interrelated as to form one major factor which has the political correlation of democracy" (Lipset, 1960:41) and, thus, it cannot be reduced to the postulate of a simple connection between social incomes and democracy. Still, it should be noted that economic development features can be seen as factors of democracy, but not necessarily as causal determinants. Lipset's analysis was germinating a large body of literature which is accepting, amending or rejecting the involved assumptions (for a comprehensive synthesis of this literature, see Wucherpfennig and Deutsch, 2009; Lupu and Murali, 2009).

Several explanations have been advanced at theoretical level for sustaining the implied transmission channels (see, for a discussion, Uysal et al., 2010). Firstly, the emergence of middle class and increase in educational opportunities are viewed as determinants for both economic growth and democracy (Lipset, 1994). Secondly, modernization contributes to the rise of democratic demands from the working class (Landman, 1999, 2003). Thirdly, transformations in allocation of "land, income, and capital" associated with modernization (Boix and Stokes, 2003) can be seen as grounds for democracy. Various empirical evidences have been provided for such channels, suggesting that socioeconomic and political developments are positively correlated (Inglehart, 1997, Inglehart and Welzel, 2005; Muller, 1988, 1995; Barro, 1999; Vanhanen, 1997). However, there are other studies which fail to sustain such correlation (Arat, 1988; Hadenius, 1992). Glasure et al. (1999) argue that there is a certain trade-off between economic development and democracy according to the initial levels of economic development.

Among these recent developments in the field, perhaps, some of the most controversial ones are the critics of Przeworski and Limongi (1997) and Przeworski et al. (2000) which formulate a distinction between the *endogenous* and, respectively, *exoge-*

nous versions of democracy. In the first version, social and economic development leads to democratic evolution. In the second version, development merely helps to sustain democracy, once it is exogenously established. Postulating that democracy arises with equal chances regardless the economic development levels, these studies reject the endogenous version and emphasize that development is lowering the distributional inequalities and, thus, is attenuating the social tension by greater stability of the already established democratic regimes. However, Boix and Stokes (2003) point out a number of shortcomings and argue that even if initially the democratic architecture is initially exogenously settled, in the long run the countries are more likely to remain democratic at the increased levels of economic development. Thus, if such development is long enough, this is no more a transition process and the relationship between democracy and growth becomes stable. Supplementary, their study provides a more detailed argumentation according to which "democracy is caused not by income per se but by other changes that accompany development, in particular, income equality" (Boix and Stokes, 2003:540). Also, Inglehart and Welzel (2005) debate on the issue of political stability and estimate the ratio of regime shifts to democracy versus regime shifts to autocracy for different levels of per capita GDP. The outcome of their analysis strongly supports the thesis that modernization increases the probability of transition to democracy. In the mean time, they are advancing the idea that if a broader view on democracy is considered by taking into account a large set of political and civil rights and the extent to which these are respected by elites, the analysis can be enriched by considering the cultural determinants of social subjects' preferences for democratic institutions and mechanisms.

This study seeks to contribute to the empirical literature on the topic by focusing on a specific aspect of modernization: the urbanization process. 2 arguments are justifying this choice. Firstly, we consider that urban areas are providing an *agglomeration rent*, such as the existence of "thick" markets (both consumer and labor markets), ease of access to these markets, and the resulting, so-called forward and backward linkages with large local markets (Baldwin et al., 2003). As a consequence, urbanization can influence democracy through its impact on economic development. Secondly, we argue that urbanization stimulates the changes towards emancipative values due to its educational and occupational differences and to its contribution to individual autonomy (Inglehart and Welzel, 2005). In other words: "no bourgeoisie, no democracy" (Moore, 1966). Of course, "bourgeoisie" is used here not in classes' terms but rather as a modernization agent. Heavily drawing on this literature, our research hypothesis can be formulated as: *Developing countries tend to be more democratic at higher levels of urbanization seen both as an outcome as a well as driving force of modernization.*

International Data. In order to employ an operational measure of the democratic status, we are using the *Polity IV* data provided by the *Center for Systemic Peace – Polity IV Project* (<http://www.systemicpeace.org/>). The unit of analysis is the "polity." Eckstein and Gurr (1975, 26) provide a "simple, general definition of all "polities" (or "governments") as subsets of the class of "authority patterns" and further point out that "all authority patterns are "equivalents" of state-organizations". The underline conceptual framework of this measure examines concomitant qualities of democratic and autocratic authority in governing institutions, rather than discreet and mutually exclusive forms of governance. The institutionalized democracy elements con-

sidered are concerning: 1) the presence of institutions and procedures through which citizens can express their preferences on alternative policies and leaders; 2) the existence of institutionalized constraints on the exercise of power by an executive; 3) the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation. The *Polity IV Institutionalized Democracy* is an additive 11-point scale (0-10). The POLITY score is computed by subtracting the "autocracy" score from the "democracy" score; the resulting unified polity scale ranges from +10 (strongly democratic) to -10 (strongly autocratic). The *Revised Combined Polity Score* is a modified version of the POLITY variable. It modifies the annual POLITY score by applying a simple treatment, or "fix" to convert instances of "standardized authority scores" (i.e., -66, -77, and -88) to conventional polity scores (i.e., within the range of -10 to +10). This perspective envisions a spectrum of governing authority that spans from fully institutionalized autocracies through mixed, or incoherent, authority regimes (termed "anocracies") to fully institutionalized democracies. Due to its unique perspective, the Polity IV measure of democracy fits into our focus of democracy as a process rather than a societal configuration.

As for the degree of urbanization, we measure it in a typical manner as the population living in an area classified as "urban", by involving the World Bank (2010) data. Of course, this measure is rather rough; however it captures the nature of urban environments (the intrinsic characteristics of the urbanicity). Nonetheless, it can be seen as a broad enough proxy serving the limited analytical purposes of the present study.

The data are covering a time span between 1982 and 2007 for a sample of 56 countries classified as low and middle income ones. Such an observation period allows us to identify the dynamics of institutional changes and to reflect the adjustments in the implied transmission channels.

Table 1 displays the main statistic characteristics of the data. The corresponding values of the distributional parameters suggest that there is some cross-section heterogeneity of the sample. Thus, the estimation methodology should account for such heterogeneity as this is generated by the unequal levels of political and institutional development.

Table 1. Main statistic characteristics of the dataset

	Polity IV	Urbanization
Mean	-0.96	15.30
Median	-2.24	15.10
Maximum	10.00	19.61
Minimum	-10.00	11.55
Standard Deviation	5.65	1.57
Skewness	0.42	0.19
Kurtosis	1.94	2.91
Jarque-Bera	110.15	9.34
Probability	0.00	0.01
Observations	1456	1456

Methodology and empirical results. A formal description of our research hypothesis can be synthesized as:

$$Polity_{i,t} = \beta_0 + \beta_i X_{i,t} + \delta_t + \eta_i + \varepsilon_{i,t}. \tag{1}$$

Here, the dependent *Polity IV* variable is linked to a set X of the considered explanatory variables. η_i is the unobserved time-invariant specific effects; δ_t captures a common deterministic trend; ε_{it} is a random disturbance assumed to be normal, and identical distributed (IID) with $E(\varepsilon_{it}) = 0$; $Var(\varepsilon_{it}) = \sigma^2 > 0$.

As a first step in testing our research hypothesis, we are involving a static panel data model with pooled ordinary least squares (OLS), fixed effects (FE) and random effects (RE) estimators. The F-statistics tests the null hypothesis of the same specific effects for all countries. If we accept the null hypothesis, we could use the OLS estimator. The Hausman test can decide which model is better: random effects (RE) or fixed effects (FE). The FE model was selected because it avoids the inconsistency due to correlation between the explanatory variables and the country-specific effects.

The results are given in Table 2. The values of the Hausman tests confirm the viability of the inclusion of the fixed effects. It appears that the level of urban population is positive and statistic significant associated with the Polity IV measure of democratic societal stance.

Table 2. Democracy and urbanization: a static panel data model (dependent: Polity IV)

Explanatory	Fixed Effects	t-Statistics	Significance
<i>Polity</i> (t-1)	1.19	48.16	***
<i>Polity</i> (t-2)	-0.22	8.83	***
<i>Urban population</i> (natural logarithm)	0.03	2.07	**
Cross-section <i>F</i> -test	1.90 (p=0.00)		
Cross-section <i>chi-square</i>	99.34 (p=0.00)		
Period <i>F</i> -test	4.74(p=0.00)		
Period <i>chi-square</i>	120.50(p=0.00)		
Cross-section / Period <i>F</i>	2.72(p=0.00)		
Cross-section / Period <i>chi-square</i>	203.26(p=0.00)		
R ²	0.99		
Observations (balanced)	1352		

t-statistics (heteroskedasticity corrected) in round brackets.

***/**/* – statistically significant respectively at the 1%, 5%, and 10% levels.

For robustness assessment, we also apply the so-called GMM system estimation. The GMM system methodology – as proposed by Arellano and Bover (1995), Blundell and Bond (1998, 2000) and Windmeijer (2005) – is involved because estimators like fixed and random effects, IV or standard GMM may yield to biased results. Also, since a small panel sample may produce "downward bias of the estimated asymptotic standard errors" in the two-step procedure (Baltagi, 2008:154), we use the "Windmeijer correction" for the estimated standard errors. More exactly, Windmeijer (2000, 2005) observes that part of downward bias which can appear for standard errors in small samples is due to extra variation caused by the initial weight matrix estimation being based on consistent estimates of the equation parameters. In order to correct this bias, it is possible to calculate bias-corrected standard error estimates which take into account the variation of the initial parameter estimates. We employ a version of this correction applicable for GMM models estimated using the iterate-to-convergence procedure.

There are several advantages of the GMM over other static or dynamic panel estimation methods. Among these: static panel estimates, as the OLS models, are

subjected to the problem of dynamic panel bias (Bond, 2002); in our database, we have 56 countries (N) analyzed over the period of 26 years (T) and the literature includes several arguments for dynamic panel model being designed especially for a situation where "T" is smaller than "N" in order to control for dynamic panel bias (Bond, 2002; Baltagi, 2008); the problem of potential endogeneity can be easier addressed in dynamic panel models than in static and OLS models, since all variables from the regression which are not correlated with the error term (including lagged and differenced variables) can be potentially used as valid instrumental variables; the dynamic panel model is able to identify short and long-run involved effects (Baltagi, 2008). Also, the GMM system exploits the stationarity restrictions, while the first-differenced GMM estimator can behave poorly when the time series are persistent.

The GMM system tries to estimate the Equation 1 simultaneously with a re-specification designed to eliminate the country-specific effects by using first differences of the involved variables as:

$$\Delta Polity_{i,t} = \beta_i \Delta X_{i,t} + \delta_t + \eta_i + \Theta \Delta Z_{i,t} + \varepsilon_{i,t}. \quad (2)$$

Z is a set of instruments for the dependent and explanatory variables. The GMM system approach estimates equations (1) and (2) simultaneously by using lagged levels and lagged differences as instruments. The presence of both lagged levels and differences is justified by Arellano and Bover (1995) and Blundell and Bond (1998) which showed that lagged levels can be poor instruments for first-differenced variables, particularly if the variables are "persistent". For comparison purposes, we are reporting the results of a dynamic GMM (Arellano and Bond, 1991).

Furthermore, we are considering as control variables some proxies for political conditions of the democracy. The inclusion of such variables is for examining the arguments of Huntington (1968) who states that a level of political mobilization within a society which exceeds the level of institutional development (which can be the case of some developing countries) can jeopardize the social stability. 2 control variables are: *Political Rights* indices and *Political Globalization* index. The *Political Rights* and the *Civil Liberties* indices are reported by *Freedom House* (www.freedomhouse.org). The ratings process is based on the checklist of 10 political rights questions and 15 civil liberties questions. The political rights questions are grouped into 3 subcategories: *Electoral Process* (3 questions), *Political Pluralism and Participation* (4), and *Functioning of Government* (3). Raw points are awarded to each of these questions on the scale from 0 to 4, where 0 points is the lowest degree and 4 is the highest degree of rights or liberties present.

The political rights section contains as well 2 additional discretionary questions: question A ("For traditional monarchies that have no parties or electoral process, does the system provide genuine, meaningful consultation with people, encourage public discussion of policy choices, and allow the right to petition the ruler?") and question B ("Is the government or occupying power deliberately changing the ethnic composition of a country or territory so as to destroy a culture or tip the political balance in favor of another group?"). For additional discretionary question A, 1 to 4 points may be added, as applicable, while for discretionary question B, 1 to 4 points may be subtracted (the worse the situation is, the more points may be subtracted). The highest number of points that can be awarded to the political rights checklist is 40 (up to 4 points for each of 10 questions). *Political Globalization* index is a component of

the *KOF Index of Globalization* (Dreher, 2006). This index is the weighted score of the following variables: *Embassies in Country* (25%), *Membership in International Organizations* (28%), *Participation in U.N. Security Council Missions* (22%) and, respectively, *International Treaties* (25%).

Table 3 shows the results of the extended model. The first and the most important of them is that the urbanization variable remains positive and statistically significant, being robust both to changes in methodology as well as to the inclusion of control variables. However, the estimation of relative importance of urbanization seems to be sensitive to such changes and the statistical significance decline in the GMM system framework.

All the control variables are also statistically significant. For Political Rights index the negative sign indicates a normal positive correlation between higher levels of such right and democracy since each pair of political rights and civil liberties ratings is averaged to determine an overall status of "Free," "Partly Free," or "Not Free." Those whose ratings average 1.0 to 2.5 are considered Free, 3.0 to 5.0 Partly Free, and 5.5 to 7.0 Not Free.

Table 3. Democracy and urbanization: a GMM system and dynamic GMM estimation (dependent: Polity IV)

Explanatory	Dynamic GMM	GMM-System
<i>Polity</i> (t-1)	1.11*** (361.91)	1.12*** (17.50)
<i>Polity</i> (t-2)	-0.12*** (35.03)	-0.17*** (2.85)
<i>Urban population</i> (natural logarithm)	0.10*** (30.76)	0.21** (2.58)
<i>Political Globalization</i>	0.003*** (42.90)	0.005* (1.68)
<i>Political Rights</i>	-0.006*** (12.40)	-0.11*** (3.20)
M1		-1.81 (0.07)
M2		1.50 (0.13)
Sargan	1.00	1.00
Observations (balanced)	1300	1341

t-statistics (heteroskedasticity corrected) are in round brackets.

***/**/* – statistically significant respectively at the 1%, 5%, and 10% levels.

M1 and M2 are tests for first-order and second-order serial correlation in the first-differenced residuals, asymptotically distributed as $N(0, 1)$ under the null hypothesis of no serial correlation (based on robust 2-step GMM estimators). Sargan is a test of the over-identifying restrictions, asymptotically distributed as χ^2 , under the null of instruments' validity (2-step estimators). White period instrument weighting matrix and White period standard errors & covariance (no degree of freedom correction) are used for dynamic GMM.

Similarly, there is a positive correlation between democracy and political globalization for the considered dataset. It is also interesting to note that their relative importance is preserved regardless the dynamic or GMM system estimation method.

Conclusions, comments and further research. The purpose of this study was to examine the empirical evidences supporting the thesis that urbanization, as a modernization driving force, leads to superior levels of societies' democratic status. We found on a sample of 56 developing countries that such thesis can hold in the long run even when the political conditions of democratic processes are considered. However, there are some clear limitations of the present study. Firstly, the results appear to be

sensitive to the chosen estimation methodology. Secondly, the proxy used for estimating the degree of urbanization provides only a broad picture and does not reflect the conditions in which urbanization itself takes place. Thirdly, the study assumes an empirical approach and do not provide any insights about the underlying mechanisms. At least several questions can be raised such as: does urbanization contribute to the democratic improvements by stimulating the emergence of politically active social groups? Is such political activism necessarily oriented towards democratic goals? Is there any pay-off for urbanization in terms of democratic costs (such as an increase in social polarities)? Can the political conditions of democracy be seen as components of the modernization processes or they appear as outcomes of such processes? What are the aspects of democracy more susceptible to be influenced by urbanization and how are they reflected by the used indices? To answer these questions, several methodological tasks must be fulfilled: political participation proxies should be involved and their connections with urbanization should be analyzed; economic consequences of urbanization should be highlighted in terms of economic growth as well as in terms of social outcomes' distribution; the results should be checked against various methodologies of measuring democracy and a measure of democratic stability post urbanization should be involved as dependent and so on. Fourthly, urbanization is only a part of the story since modernization implies a whole spectrum of social, economic, politic and cultural evolutions that cannot be captured by simple dynamics of urban population. Even more, urbanization itself can contribute to such evolutions by the impact exercised on economic growth and human development. Thus, a more sound analysis should provide a methodology able to highlight the dominant causality.

But despite these caveats, we think such empirical studies can serve to the construction of a more robust explanatory framework for coping with complex issues raised by the analysis of the twin processes of modernization and democracy.

References:

- Arat, Z.F.* (1988). Democracy and Economic Development: Modernization Theory Revisited. *Comparative Politics*, 21: 21-36.
- Arellano, M., Bond, S.* (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58, 277-297.
- Arellano, M., Bover, O.* (1995). Another look at the instrumental variables estimation of error components models. *Journal of Econometrics*, 68:29-51.
- Baldwin, R., Forslid, R. Martin, P., Ottaviano, G., Robert-Nicoud, F.* (2003). *Economic Geography and Public Policy*. Princeton, NJ: Princeton University Press.
- Baltagi, B. H.* (2008). *Econometric Analysis of Panel Data*. Chichester: John Wiley & Sons Ltd.
- Barro, R. J.* (1999). Determinants of Democracy. *Journal of Political Economy*. 107:158-183
- Blundell, R., Bond, S.* (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, Elsevier, 87(1):115-143.
- Blundell, R., Bond, S.* (2000). GMM Estimation with Persistent Panel Data: An Application to Production Functions. *Econometrics Review*, 19: 321-340.
- Boix, C., Stokes, S.* (2003). Endogenous Democratization. *World Politics*, 55: 517-549.
- Bond, S.* (2002). *Dynamic panel models: a guide to micro data methods and practice*. Institute for Fiscal Studies, Department of Economics, UCL, CEMMAP (Centre for Microdata Methods and Practice), Working Paper CWPO9/02. Available online: <http://cemmap.ifs.org.uk/wps/cwp0209.pdf>.
- Dreher, A.* (2006). Does Globalization Affect Growth? Empirical Evidence from a New Index. *Applied Economics*, 38(10): 1091-1110.
- Eckstein, H., Gurr, T.R.* (1975). *Patterns of Authority: A Structural Basis for Political Inquiry*. New York: Wiley-Interscience.

- Hadenius, A.* (1992). *Democracy and Development*. Cambridge: Cambridge University Press.
- Hadenius, A., Teorell, J.* (2005). Cultural and Economic Prerequisites of Democracy: Reassessing Recent Evidence. *Studies in Comparative International Development*, 39:87-106
- Huntington, S. P.* (1968). *Political Order in Changing Societies*. New Haven: Yale University Press.
- Inglehart, R.* (1997). *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies*. Princeton: Princeton University Press.
- Inglehart, R., Welzel, C.* (2005). *Modernization, Cultural Change and Democracy: The Human Development Sequence*. Cambridge: Cambridge University Press.
- Glasure, Y.U., Aie-Rie, L., Norris, J.* (1999). Level of economic development and political democracy revisited. *International Advances in Economic Research*, 5(4): 466-477.
- Landman, T.* (1999). Economic Development and Democracy: The View from Latin America. *Political Studies*, 47 (4): 607-626.
- Landman, T.* (2003). *Issues and Methods in Comparative Politics: An Introduction*. 3rd Ed., Routledge.
- Lipset, S.M.* (1959). Some Social Requisites of Democracy: Economic Development and Political Legitimacy. *American Political Science Review*, 53 (March): 69-105.
- Lipset, S.M.* (1960). *Political Man. The Social Bases of Politics*. New York: Doubleday.
- Lipset, S.M.* (1994). The Social Requisites of Democracy Revisited: 1993 Presidential Address. *American Sociological Review*, 59:1-22.
- Lupu, N., Murali, K.* (2009). Development, Democratization, and Democratic Deepening. Paper presented at 2009 Annual Meeting of the Midwest Political Science Association. Available at: http://www.princeton.edu/~nlupu/democratic_deepening.pdf.
- Muller, E.N.* (1988). Democracy, Economic Development, and Income Inequality. *American Sociological Review*, 53:50-68.
- Muller, E.* (1995). Economic determinants of democracy. *American Sociological Review*, 60:966-982.
- Moore, B.* (1966). *Social origins of dictatorship and democracy: Lord and peasant in the making of the modern world*. Boston, MA: Beacon Press.
- Przeworski, A., Limongi, F.* (1997). Modernization: Theories and Facts. *World Politics*, 49:155-183.
- Przeworski, A., Cheibub, J.A., Alvarez, M.E., Limongi, F.* (2000). *Democracy and Development: Political Institutions and Material Well-being in the World, 1950-1990*. Cambridge: Cambridge University Press.
- Uysal, D., Özşahin, M.C., Özşahin, S.* (2010). Co-Integration Analysis of Economic Development and Democracy: The Case of Turkey. *Current Research Journal of Economic Theory*, 2(3): 102-111.
- Vanhanen, T.* (1997). *Prospects of Democracy. A Study of 172 Countries*. London: Routledge.
- Welzel, C.* (2006). Democratization as an Emancipative Process: The Neglected Role of Mass Motivations. *European Journal of Political Research*, 45:871-896.
- Windmeijer, F.* (2000). Moment conditions for fixed effects count data models with endogenous regressors. *Economics Letters*, Elsevier, 68(1):21-24.
- Windmeijer, F.* (2005). A finite sample correction for the variance of linear efficient two-step GMM estimators. *Journal of Econometrics*, Elsevier, 126(1):25-51.
- Wucherpfennig, J., Deutsch, F.* (2009). *Modernization and Democracy: Theories and Evidence Revisited*. Center for Comparative and International Studies, ETH Zurich and University of Zurich, *Living Reviews in Democracy*: 1-9. Available at: <http://democracy.livingreviews.org/index.php/lrd/article/viewArticle/lrd-2009-4/13>.

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