



Munich Personal RePEc Archive

**The Problem of Global Turmoil in The
Dilemma of
Globalization-Multilateralism:
Long-Term Interactions Between
Democracy and Economy within The
Framework of Political Regimes**

Kaplan, Emin Ahmet and Erul, Rana Dayioğlu

Karamanoglu Mehmetbey University, University of Exeter, Exeter
Business School, Tax Administration Research Centre

2019

Online at <https://mpra.ub.uni-muenchen.de/98280/>

MPRA Paper No. 98280, posted 23 Jan 2020 17:27 UTC

**The Problem of Global Turmoil in The Dilemma of Globalization-Multilateralism:
Long-Term Interactions Between Democracy and Economy within The Framework of
Political Regimes**

Emin Ahmet KAPLAN^a and Rana Dayiođlu ERUL^b

^a; Dr., Departments of Econometrics, Karamanoglu Mehmetbey University, Karaman, Turkey,
eminahmet@kmu.edu.tr

^b; Dr., University of Exeter, Exeter Business School, Tax Administration Research Centre,
Exeter, United Kingdom, m.r.erul@exeter.ac.uk

Abstract

Recent inabilities to find an escape point from the global crisis has demonstrated that multilateral institutions cannot fulfill the functions expected from them anymore. In this respect, the policies to be adopted by democratic countries are thought to be essential in the escape from global turmoil and crisis. Therefore, the objective of this study is to measure the effects of institutional and socioeconomic variables on economic growth with regard to the significance of political regime types or democracy, within a government. Thus, 85 countries in four types of political regimes were included in the analysis by the period of 1984-2015. As a result, it has been acknowledged that multilateral institutions, which have been ineffective in producing a solution, should be reassessed within the context of recent global developments, these assessments should be performed by countries within the framework of their tendencies towards democratization and developing their sociocultural infrastructures.

Key Words: Globalization, global turmoil, multilateralism, democracy and economic growth, political regimes.

Jel Code: O43, C33.

1. Introduction

The role of multilateral agreements and organizations in world politics has been changing and developing rapidly in the context of globalization.¹ A surge of nationalist sentiment, uncovered in recent political processes in parts of the world, has laid bare deep cracks in the very foundations of the international systems and its two major pillars - globalization and multilateralism.² At the root of this destabilization of the global institutional system have been several trends ranging from economic crises to deep-rooted imbalances that require solutions at global, regional and national levels.³

New global systems resulting from national and international changes and developments brought along by globalization and policies adopted by countries to preserve their powers within the global system push the solutions that can be produced by multilateral institutions for regional and global problems of health, environment, security, economy, and culture into the background. This causes multilateral institutions to be ineffective in meeting the requirements of globalization, fail to fulfill the basic functions expected from them and have lower success levels, and thus, leads the aspects about multilateral institutions to be re-debated within the context of globalization.

In the study, after analyzing the importance of multilateral institutions and global cooperation in solving the problems caused by globalization, the role of democracy in escaping global turmoil formed within the scope of global changes will be analyzed in terms of classifications under the regime of democracy, and the role of the social and economic determinants of economic growth in policymaking within economic globalization will be put forward with regards to political orders.

¹ Hellsten 2006, 422.

² ECOSOC 2016.

³ Ibid, 1.

2. The Concept of Multilateralism within the Framework of Its Relations with Globalization, Its Significance and Its Functions

2.1. The Concept of Multilateralism and Cases Threatening Multilateralism

While several concepts in contrast to multilateralism are debated in parallel with social, economic, and cultural national/international changes brought by globalization such as unilateralism and bilateralism, multilateralism is generally defined as an institutional form which coordinates relations among three or more states on the basis of "generalized" principles of conduct – that is, principles which specify appropriate conduct for a class of actions, without regard to the particularistic interests of the parties or the strategic exigencies that may exist in any specific occurrence.⁴

The values and institutions of multilateralism are not ahistorical phenomena; as they are created and maintained in the context of specific demands and challenges, and through specific forms of leadership, norms, and international power configurations, all of these factors evolve and change and multilateralism is destined to evolve as a function of changing environmental dynamics and demands.⁵ As a result of this, the relationship between the distribution of power, the nature of challenges and problems, and the international institutions that emerge to deal with collective challenges is constantly in flux.⁶

Even though it is regarded to be natural that the values related to multilateralism make progress parallel to the economic and social national/international order and globalization in constant flux and development, multilateralism bears a meaning beyond being an international order especially for European countries. As a matter of fact, multilateralism is seen as a way of life rather than as a question of power, international order or structural change because it is the

⁴ Ruggie 1992.

⁵ Newman, Thakur, and Tirman 2006, 1.

⁶ Ibid, 1.

means by which Europeans have tried, with a considerable degree of success, to reconcile togetherness and diversity.⁷

Several factors affect the efficiency of and expectations from the contemporary forms of multilateralism:⁸

- The relationship between the distribution of power at the international level -in all its dimensions, hard and soft- and the nature of multilateralism is fundamental.
- Many of the challenges confronting multilateral institutions have been associated with US military and economic preeminence in a unipolar world, and an attendant pattern of US unilateralism. Multilateral institutions are inherently vulnerable to hegemonic/unilateralist power, demonstrated vividly during the UN Security Council's failure to constrain the US misadventure in Iraq.
- In some other cases, factors confronting multilateralism stem from not the distribution of power within inter-state relations or policies adopted by a country/countries, but challenges caused by structural and normative changes since the forming of multilateral institutions following the Second World War (to illustrate, security problems having increasingly become a non-state issue).
- Although international organizations emerged from the need to regulate and give predictability to a narrow range of inter-state relations, in their decision-making procedures and their representation, many international organizations do not meet contemporary standards and expectations of legitimacy based upon accountability and democracy.
- Existing multilateral arrangements are unable to guide states to a workable framework of how to deal with egregious and widespread abuses of human rights and civil war.

⁷ Groom 460, 2006.

⁸ Newman, Thakur and Tirman 2006, 2-4.

- The state-centric nature of multilateralism and states' ways of making and adopting decisions are inefficient in addressing many of these challenges.
- There are policy (and knowledge) failures, such as the World Bank's imposition of structural adjustment policies which have been associated with negative social consequences.

2.2. Multilateralism and Globalization

Changes and developments having come to life within the scope of globalization in the development process of multilateralism shook the belief for multilateralism especially during the early 21st century, which continues to dwindle to this day due to the current global turmoil. Therefore, this inter-state structure which defines multilateralism fails to solve today's problems.

While globalization is regarded to be a threat for the future of multilateralism, it should not be ignored that multilateral institutions can play a vital role in producing solutions to the global problems brought about by global developments such as migration, drought, terrorism incidents, epidemics, and poverty. Accordingly, multilateral organizations are the best tool we have to transform globalization into prosperity.⁹

The importance of multilateralism and multilateral organizations in solving the problems caused by globalization is seen in Figure 1. In the figure, the functionality of organizations with regard to qualities such as efficiency, transparency, and encouragement are presented in terms of USA global fund, average bilateral, average multilateral, and average overall. It can be clearly seen here that the multilateral organizations have significantly higher performance levels on average especially compared to bilateral organizations and, in terms of almost every criterion, all the organizations found in the figure.

⁹ The Wilson Center 2007.

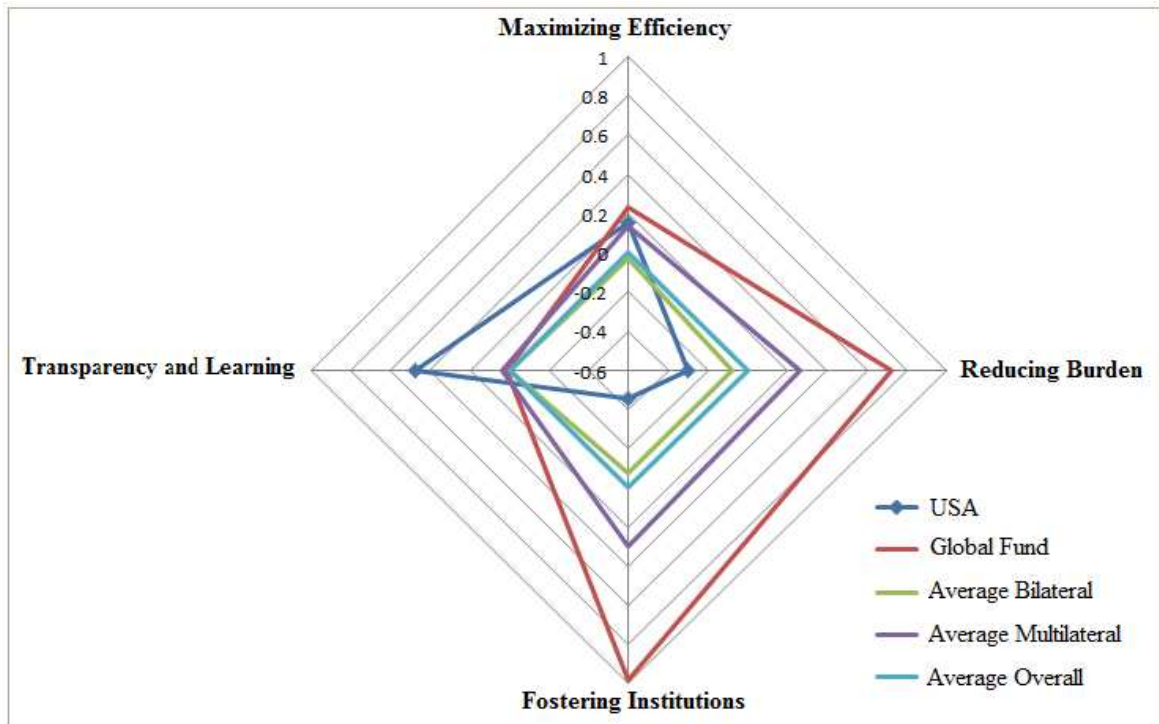


Figure 1. The Importance of Multilateral Institutions

Source: A. Glassman, 2012. ‘GHI 2013 and the Rise of Multilateralism’. Retrieved 05.12.2018, <https://www.cgdev.org/blog/ghi-2013-and-rise-multilateralism>.

Although multilateral organizations have recently focused themselves on finding solutions especially for global health problems, there are a number of multilateral organizations that function in terms of various other issues. The most commonly known among these are institutions like the European Union, the OECD, the World Bank and the UNESCO, while there are also several multilateral organizations found within the global organizations,¹⁰ Americas, Asia, and Middle East/Africa categorizations.¹¹ Although the number of such organizations is extremely high in our day, how much they succeed in fulfilling their purposes is debatable.

On the grounds that the inability of multilateralism to function as desired causes global turmoil to gradually increase, multilateralism should be readdressed in terms of its different aspects for

¹⁰ Global organizations: European Bank for Reconstruction and Development (EBRD), European Union, Greenpeace International, International Finance Corporation (IFC), International Renewable Energy Agency (IRENA), Organization for Economic Cooperation and Development (OECD), Organization of the Petroleum Exporting Countries, OPEC Fund for International Development, Southern African Renewable Energy Information Network (SAREIN), United Nations Educational, Scientific and Cultural organization (UNESCO).

¹¹ For detailed information, see Saenz, 2016.

such functions to be fulfilled. In order for multilateralism to have a future and to be a useful force in guiding the world economy towards social justice, there is a need to take account of our global rights and responsibilities seriously and equally.¹² States need to take control over the various trends of globalization by adding a social dimension to economic trends and this entails that regionalism is used for balancing the interests of different regions and bringing in the different concerns on the international negotiating table.¹³ If we can bring ethical debate on values back on the agenda of international politics, multilateral arrangements can play an important role in controlling the negative effects of globalization and also to take into account the social dimensions of globalization.¹⁴ In addition to these, the process of innovative multilateralism cannot succeed without addressing the issues of security both at the regional and global level.¹⁵

On the other hand, as in the areas of social and economic welfare and humanitarianism, non-state actors are an essential component of multilateralism which must be embraced fully, multilateral institutions must recognize and involve non-state actors on the basis of criteria which ensure their legitimacy and effectiveness.¹⁶ In this sense, the multilateralism of the twenty-first century must not be confined to relationship amongst states; it must reflect the plurality of international relations and the key role of non-state actors.¹⁷

3. The Importance of Economy and Democracy in the Cycle of Globalization and Global Turmoil

3.1. The Link between Globalization and Global Turmoil

Interactions between the momentum of historical events, the limit of the capabilities we use to shape the world, the ever-increasing financial needs, and moral ambiguities produce new

¹² Hellsten 2006, 438.

¹³ Hellsten 2006, 438.

¹⁴ Hellsten 2006, 438.

¹⁵ Telò 2013, 7.

¹⁶ Newman and Thakur 2006, 539.

¹⁷ Newman and Thakur 2006, 539.

developments that we cannot control, and are the momentum of the changes that shape the future and gradually increase on the basis of societies' needs and in addition to this, since the humankind wants to organize itself as a global society, the world politics go out of control, and mass political confusions and philosophical complexities appear on the basis of both international relations and national social needs as a result of these tendencies.¹⁸

Countries heavily dependent on the global economy are likely to experience higher economic growth, greater affluence, more democracy and increasingly peaceful conditions at home and abroad¹⁹ but globalization may sometimes be a threat, not an opportunity. Thusly, the most distinct characteristic of contemporary history has been its instability due to the changes caused by globalization.²⁰ One of the most basic indicators supporting this is that the United States of America appears to be the single global power but does not have the infrastructure to maintain this. However, in spite of the globalization upheaval, a key independent variable of international relations remains constant – power and this case demonstrates that power remains the key independent variable shaping modern international relations.²¹

In this atmosphere in which the USA has the power, traditional politics turn into international politics and the differences between national and international politics disappear as a result of modern communication and mutual economic dependencies; however, the inability of the USA to provide an efficient global authority within these politics due to its shortcomings caused by global factors, in spite of its economic power and managing a global process of political procedures, can lead to intensified instability in global terms.²²

Within the framework of the developments caused by the aforementioned reasons, trying to dominate the world and be the leader in policy determination on the part of the USA, changes occurring throughout the world following the September 11 attacks, the relationships of

¹⁸ Z. Brzezinski, *Out of control: global turmoil on the eve of the 21st century* (New York: Touchstone, 1995) xiii-xiv.

¹⁹ Gissinger and Gleditsch 1999.

²⁰ Brzezinski, x.

²¹ Kay 2004.

²² Brzezinski, xiii.

countries with the USA in parallel with their domestic politics and dynamics, wars of power waged among nations and their all kinds of efforts to have a part in the world economy in order to obtain resources with the aim of enriching their economies all leave traces of differentiation observed in the balances of power with each passing day and thus, leads to global turmoil.

On the other hand, expectations and desires of today's societies and people also strengthen the atmosphere of global turmoil. Since the main purpose of people of our day, apart from the wealthy western countries, is not significant consumption but survival, these unusual tendencies hinder a global reconciliation and enhance the dangers of global segregation.²³

Social and individual demands, including multilateralism, should be reassessed on a conceptual basis due to several factors caused by global turmoil. Firstly, there is a need for a new definition of political existence that is more extensive and globally relatable, which is actually mutual solidarity among people, for which it is necessary to create a constant balance between social needs and individual satisfaction, global poverty and national wealth, natural heritages that have to be preserved by humans, and creating a safe environment for people.²⁴ At this very juncture, the importance of reassessing multilateralism within the framework of new impressions and demands resulting from these factors and global turmoil becomes clear.

Unlike previous eras, the contemporary international system contains no major contests of territory or ideology among the major powers; but at the same time, new threats such as terrorism, disease, climate change and the spread of weapons of mass destruction gives all the major powers a stake in maintaining stability and spreading peace and security.²⁵ This both causes the countries that have a say or want to have a say in the world economy and politics to adopt policies accordingly and reveals the importance of international institutions and

²³ Brzezinski, xii.

²⁴ Brzezinski, xiv.

²⁵ Lennon and Kozlowski 2008, vii.

organizations in policymaking. Global cooperation under these conditions is both a unique opportunity and an imperative.²⁶

3.2. The Effects of Economy and Democracy on Global Turmoil

The shortcomings of international organizations in terms of governance and accountability, the speed of economic globalization surpassing the developmental speed of political institutions needed to manage the process properly, political responses needing to be produced on a global scale but instead given on a national scale, and the inefficiency of the current international organizations and institutional regulations in taking precautions to prevent global crisis provide a unique opportunity to make a reform in the field of global economy management with a view to revealing the inefficiencies of current regulations in financial and economic crisis and proving the need for cooperation and coordination to fight the crisis.²⁷

Since the problems related to issues such as health, terror, environment, natural resources etc. created by globalization cause global turmoil in humane and geopolitical terms, the solutions for these problems should be global. In this regard, powerful joint movements and cooperation should be performed on a global scale to fulfill mutual purposes, determine the conditions of use of especially regional and global public goods properly, and attain the great goals agreed in the United Nations summits and conferences in the last twenty years.²⁸

In parallel with this view, Brzezinski sees the way out of the global turmoil and crisis in providing global cooperation among countries in an intercontinental system.²⁹ However, what kind of criteria should be held in forming such an intercontinental system is ambiguous; this actually goes to show that powerful countries want to form all the systems planned in our day

²⁶ Ibid, vii.

²⁷ J. E. Stiglitz, *The Stiglitz Report: Reforming The International Monetary and Financial Systems In The Wake of The Global Crisis* (New York-London: The New Press, 2010) 121-122-194-196.

²⁸ Ibid, 122-123.

²⁹ Newtimes.az, 24 April 2013, Global Chaos Threat.

to seek after methods that can provide their own strategic interests, gives the impression that these countries do not have a model regarding a just solution for regional disputes.³⁰

Since people live in a highly globalized world economy in our day, there is a mainstream thought that a greater international economy and financial connections can improve democracy.³¹ Indeed, in spite of the thought that the current democracy regimes have been unable to solve the problems created by globalization, the inverse idea that globalization can help consolidate democracy supports this assessment.³² This idea stems from the thought that the international trade increasing due to globalism will decrease balance taxes, the decreased taxes will make it more possible for democracy to be adopted, and class conflicts between elites and citizens will be less intense in more globalized countries.³³

The concept of globalization is a dialectical one by its very nature, politico-economic and socio-cultural counter-tendencies.³⁴ There are views that democracy increases GDP by encouraging investment, increasing schooling, inducing economic reforms, improving the provision of public goods, and reducing social unrest.³⁵ Indeed, wealthy nations tend to be more democratic.³⁶

Based on these views and assessments, the objective of the study has been determined as investigating what kind of effects democracy has on long-term economic growth within the context of social and economic factors affecting GDP. At this juncture, the study will be performed by classifying countries according to their democracy status (political regimes), and a course will be set regarding democracy-economic growth- socioeconomic variables-globalization with regard to these country groups.

³⁰ Ibid.

³¹ D. Acemoglu and J. A. Robinson, *Economic origins of dictatorship and democracy* (USA: Cambridge University Press, 2006) 358.

³² Ibid, 334.

³³ Ibid, 334.

³⁴ Gill 1997, 5.

³⁵ Acemoglu, Naidu, Restrepo and Robinson 2016.

³⁶ Acemoglu and Robinson, 2006:334.

3.3. Literature Review on the Relation between Democracy/Political Regimes and Economic Growth

Numerous studies have up to now tried to put forward the effects of democracy on economic growth with regard to political regimes. The literature on the regime type and economic performance is presented in Table 1 in terms of samples, time periods and results.

Table 1. Literature on Political Regimes and Economic Growth

Author	Sample	Time Frame	Finding
Przeworski (1966) ³⁷	57 Countries	1949-1963	Dictatorship at medium development level grew fastest
Dick (1974) ³⁸	59 Underdeveloped Countries	1959-1968	Democracies develop slightly faster
Huntington and Dominguez (1975) ³⁹	35 Underdeveloped Countries	the 1950s	Authoritarian grew faster
Berg-Schlosser (1984) ⁴⁰	36 African Countries	1960-1975	There are real differences among regime types, the pattern of these differences depends on the particular measure of economic progress examined
Landau (1986) ⁴¹	65 Countries	1960-1980	Authoritarian grew faster
Sloan and Tedin (1987) ⁴²	20 Latin American Countries	1960-1979	Bureaucratic-authoritarian regimes do better than democracy; traditional dictatorships do worse
Barro (1989) ⁴³	72 Countries	1960-1985	Democracies grew faster
Grier and Tullock (1989) ⁴⁴	59 Countries	1961-1980	Democracy in Africa and Latin America better, no regime difference in Asia country
Remmer (1990) ⁴⁵	11 Latin American Countries	1982-1988	Democracies grew faster
Helliwell (1992) ⁴⁶	125 Countries	1960-1985	The effects of democracy on growth are found positive
Mulligan, Gil and Sala-I-Martin (2004) ⁴⁷	102 Countries	1960-1990	A number of policies and redistribution policies, such as state social security expenditures,

³⁷ A. Przeworski, *Party system and economic development* (Evanston, Ill: Northwestern University, 1966).

³⁸ Dick, 1974.

³⁹ Huntington and Dominguez 1975, 98-114.

⁴⁰ Berg-Schlosser 1984.

⁴¹ Landau 1986.

⁴² Sloan and Tedin 1987.

⁴³ Barro 1989.

⁴⁴ Grier and Tullock 1989.

⁴⁵ Remmer 1990.

⁴⁶ J. F. Helliwell, 'Empirical Linkages Between Democracy and Economic Growth', *National Bureau of Economic Research Working Paper Series* (1992), No. 4066. <https://doi.org/10.3386/w4066>.

⁴⁷ Mulligan, Gil and X. Sala-i-Martin 2004.

			do not differ between democracies and dictatorship.
Persson and Tabellini (2007) ⁴⁸	123 Democratic Countries 70 Autocratic Countries	1960-2000	The positive effect of transitions to democracy appears larger in absolute value (and in one case statistically significant) than the negative effect of transitions to autocracy.
Jamali et al. (2007) ⁴⁹	92 and 58 countries	1990-1999	Democracies and bureaucracies significantly outperform autocracies.

4. Estimation Methods

4.1. Cross Section Dependency Tests

The methods used to test cross-section dependency on panel data sets are the Breusch-Pagan (1980)⁵⁰ CDLM1 test, the Pesaran (2004)⁵¹ CDLM2 test, and the Pesaran et al. (2008)⁵² Bias Adjusted CD test.

H₀: No cross section dependency

H₁: Cross section dependency

When the probability values are lower than 0.05 in the results to be obtained from the Breusch-Pagan (1980) CDLM1 test, the Pesaran (2004) CDLM2 test, and the Pesaran et al. (2008) Bias Adjusted CD test, H₀ is rejected with a 5% significance level, and cross-section dependency is determined to exist among the units constituting the panel.

$$1) \quad CD_{LM1} = T \sum_{i=1}^{N-1} \sum_{j=i+1}^N \hat{\rho}_{ij}^2$$

$$2) \quad CD_{LM2} = \left(\frac{1}{N(N-1)} \right)^{1/2} \sum_{i=1}^{N-1} \sum_{j=i+1}^N (T \hat{\rho}_{ij}^2 - 1)$$

⁴⁸ Persson and Tabellini 2007.

⁴⁹ Jamali, Wandschneider and Wunnava 2007.

⁵⁰ Breusch and Pagan 1980.

⁵¹ Pesaran 2004..

⁵² Pesaran, Ullah and Yamagata 2008.

$$3) \quad CD_{Bias\ Adjusted} = \left(\frac{2}{N(N-1)} \right)^{1/2} \sum_{i=1}^{N-1} \sum_{j=i+1}^N \hat{\rho}_{ij}^2 \frac{(T-K-1)\hat{\rho}_{ij} - \hat{\mu}_{Tij}}{v_{Tij}} \sim N(0,1)$$

$\hat{\rho}_{ij}$, $\hat{\mu}_{Tij}$, and v_{Tij} represent the estimates of cross section dependencies among the residuals, the mean, and the variance respectively. The CD_{LM1} and CD_{LM2} tests are used when $T > N$, and the $CD_{Bias\ Adjusted}$ test is used when $N > T$.

4.2. Testing the Homogeneity of Cointegration Coefficients

In this test;

$$4) \quad Y_{it} = \alpha + \beta_i X_{it} + \varepsilon_{it}$$

Whether the β_i slope coefficients are different among the cross sections in a general cointegration equation as shown in D4 is tested. The hypotheses of the test are:

H_0 : $\beta_i = \beta$ slope coefficients are homogeneous.

H_1 : $\beta_i \neq \beta$ slope coefficients are not homogeneous.

Pesaran and Yamagata (2008)⁵³ developed two different test statistics to test the hypotheses.

$$5) \quad \text{For large samples: } \hat{\Delta} = \sqrt{N} \frac{N^{-1}\tilde{S} - k}{\sqrt{2k}}$$

$$6) \quad \text{For small samples: } \hat{\Delta}_{adj} = \sqrt{N} \frac{N^{-1}\tilde{S} - k}{\sqrt{Var(t,k)}}$$

Here, N , S , k , and $Var(t,k)$ represent the cross section number, Swamy test statistics, the explanatory variable number, and standard error respectively. The H_0 hypothesis is rejected on a related significance level when the probability value is lower than 0.05, and the H_1 hypothesis is accepted. Thus, the cointegration coefficients are acknowledged to be non-homogeneous.⁵⁴

⁵³ Pesaran and Yamagata 2008.

⁵⁴ Ibid.

4.3. Hadri-Kruzomi Unit Root Test

The Hadri-Kruzomi (2012)⁵⁵ test is the result of adapting the KPSS test in a time series as a second generation panel unit root test regarding cross-section dependency. Firstly, the following model is estimated:

$$7) \quad Y_{it} = z_t' \delta_i + f_t \gamma_i + \varepsilon_{it}, \quad \varepsilon_{it} = \phi_{i1} \varepsilon_{it-1} + \dots + \phi_{it} \varepsilon_{it-p} + v_{it}$$

Based on these equations, the Hadri-Kruzomi test statistics are calculated as follows;

$$8) \quad Z_A^{SPC} = \frac{1}{\hat{\sigma}_{iSPC}^2 T^2} \sum_{t=1}^T (S_{it}^W)^2$$

$$9) \quad Z_A^{LA} = \frac{1}{\hat{\sigma}_{iLA}^2 T^2} \sum_{t=1}^T (S_{it}^W)^2$$

The null and alternative hypotheses of the Hadri-Kruzomi test are as follows;

$H_0: \phi_i \neq 0$; the series are non-stationary

$H_0: \phi_i = 0$; the series are stationary

4.4. Durbin-Hausman Panel Cointegration Test

The cointegration relationship between the series in this study was analyzed with the Durbin-Hausman panel cointegration test developed by Westerlund (2008).⁵⁶ The Durbin-Hausman panel cointegration test provides an opportunity to perform a cointegration analysis when the independent variables are I(1) or I(0) and the dependent variables are I(1) and takes into account mutual factors.⁵⁷ In the Durbin-Hausman method, Westerlund (2008) examined the existence of the cointegration relationship with two different tests, the first of which is the Durbin-Hausman panel test and the second of which is the Durbin-Hausman group test. Westerlund (2008) enables the autoregressive parameters to differentiate among the sections in the Durbin-Hausman group test. The hypotheses of this test are as follows; H_0 : No cointegration; H_1 :

⁵⁵ Hadri and Kurozomi 2012.

⁵⁶ Westerlund 2008.

⁵⁷ Ibid.

Cointegration relationship among at least a few sections. In the Westerlund (2008) Durbin-Hausman panel test, autoregressive parameters are acknowledged to be the same for all the sections. The hypotheses are H_0 : No cointegration, H_1 : Cointegration relationship throughout the whole panel. The Durbin-Hausman test statistics are calculated with;

$$10) \quad DH_g = \sum_{i=1}^N \hat{S}_i (\tilde{\vartheta}_i - \hat{\vartheta}_i)^2 \sum_{t=2}^T e_{it-1}^2;$$

$$11) \quad DH_p = \hat{S}_n (\tilde{\vartheta}_i - \hat{\vartheta}_i)^2 \sum_{i=1}^n \sum_{t=2}^T e_{it-1}^2;$$

4.5. Panel Autoregressive Distributed Lag (ARDL) Model

For the estimations of short and long-term coefficients following the cointegration relationship, Pesaran, Shin and Smith (1999)⁵⁸ developed the panel autoregressive distributed lag (ARDL) model, i.e., two different estimators, namely the Mean Group Estimator (MGE) and the Pooled Mean Group Estimator (PMGE). The mean group estimator (MGE) does not limit the parameters of the ARDL specification in any way and obtains long-term parameters from the mean of long-term parameters calculated from individual ARDL estimations. The main shortcoming of this estimator is that it allows specific parameters to be the same among the units constituting the panel. This shortcoming observed in MGE is compensated for in the pooled mean group estimator (PMGE). PMGE limits the long-term parameters to be the same among the countries constituting the panel but allows the constant, the error variance, and the short-term parameters to vary depending on the country. Therefore, PMGE allows the variables to be heterogeneous in short-term in relation to allowing them to be homogeneous in long-term. Pesaran, Shin and Smith (1999) stated that whether the long-term parameters are homogeneous could be determined by performing the Hausman test (1978)⁵⁹, and accordingly recommended

⁵⁸ Pesaran, Shin and Smith 1999.

⁵⁹ Hausman 1978.

the test. In the Hausman test, while the null hypothesis is that “the parameters are homogeneous in long-term”, while in the alternative hypothesis, the proposition that “the parameters are heterogeneous in long-term” is tested. At this juncture, PMGE is preferred if the null hypothesis is accepted, and MGE is preferred if the null hypothesis is rejected. In terms of the long-term homogeneity assumption, MGE is a consistent estimator, while PMGE is both consistent and effective.

5. The Dataset and Models

5.1. The Dataset

Within the framework of the Economist Intelligence Unit’s Democracy Index⁶⁰, four regime types were taken into consideration, namely authoritarian regime, hybrid regime, flawed democracy, and full democracy. 85 countries in total were included in the analysis, 12⁶¹ for authoritarian regime, 14⁶² for hybrid regime, 40⁶³ for flawed democracy, and 19⁶⁴ for full democracy, while time dimension spans the 32-year period between the years 1984 and 2015. The characteristics of four country groups formed according to the democracy index are as follows.⁶⁵

- Authoritarian regimes: In these states, state political pluralism is absent or heavily circumscribed. Many countries in this category are outright dictatorships. Elections, if they do occur, are not free and fair. There is disregard for abuses and infringements of

⁶⁰ Democracy Index, on a 0 to 10 scale, is based on the ratings for 60 indicators, grouped into five categories: electoral process and pluralism; civil liberties; the functioning of government; political participation; and political culture (The Economist Intelligence Unit, 2018.)

⁶¹ Countries that we can find data for the authoritarian regime (the cross-sectional dimension) are Congo Dem. Rep., Algeria, Egypt, Ethiopia, Gambia, Iran, Kazakhstan, Kuwait, Oman, Russian Federation, Syria Arab Republic and Vietnam.

⁶² Countries that we can find data for the hybrid regime (the cross-sectional dimension) are Bolivia, Guatemala, Honduras, Lebanon, Morocco, Madagascar, Nicaragua, Pakistan, Singapore, Sierra Leone, Thailand, Turkey, Ukraine and Zambia.

⁶³ Countries that we can find data for the flawed democracy regime (the cross-sectional dimension) are Brazil, Botswana, Chile, Colombia, Costa Rica, Cyprus, Dominican Republic, Estonia, France, Greece, Croatia, Hungary, Indonesia, India, Israel, Italy, Jamaica, Japan, Sri Lanka, Lithuania, Moldova, Mexico, Mongolia, Malaysia, Namibia, Peru, Philippines, Papua New Guinea, Poland, Portugal, Romania, Senegal, El Salvador, Suriname, Slovak Republic, Slovenia, Trinidad and Tobago, Tunisia, The United States and South Africa.

⁶⁴ Countries that we can find data for the full democracy regime (the cross-sectional dimension) are Australia, Austria, Canada, Switzerland, Czech Republic, Germany, Denmark, Spain, Finland, United Kingdom, Ireland, Iceland, Luxembourg, Malta, Netherlands, Norway, New Zealand, Sweden and Uruguay.

⁶⁵ Economist Intelligence Unit, 64.

civil liberties. Media are typically state-owned or controlled by groups connected to the ruling regime. There is repression of criticism of the government and pervasive censorship. There is no independent judiciary.

- Hybrid regimes: Elections have substantial irregularities that often prevent them from being both free and fair. Government pressure is usually observed on opposition parties. Serious weaknesses are more prevalent than in flawed democracies-in political culture, functioning of government and political participation. Corruption activities are common and the rule of law is not strong. Typically, there is harassment of and pressure on journalists and the judiciary is not independent.
- Flawed democracies: These countries also have free and fair elections and even if there are problems (such as infringements on media freedom), basic civil liberties are respected. However, there are significant weaknesses in other aspects of democracy, including problems in governance, an underdeveloped political culture and low levels of political participation.
- Full democracies: Countries in which not only basic political freedoms and civil liberties are respected, but which also tend to be underpinned by a political culture conducive to the flourishing of democracy. The functioning of government is satisfactory. Media and the judiciary are independent. There are only limited problems in the functioning of democracies.

Since the variable of gross domestic product per capita growth rate is the most significant indicator of economic performance, it was regarded as a dependent variable. The gross domestic product per capita growth rate data (%), abbreviated as PDGP, was obtained from the World Bank for the time period of 1984-2015. The investment profile (*IP*) index represents the factors affecting the investment risk; the internal conflict index (*IC*) represents the political violence occurring within the country and the effects it has on the government; the index of external

conflict (*EC*) represents the status of being exposed to interventions from foreign countries and the varying degrees of non-violent external pressures (canceling diplomatic aid, trade limitations, regional disputes, legal sanctions etc.); the index of socioeconomic class (*SC*) represents the evaluation of socioeconomic pressures observed in the society resulting from limitations or dissatisfaction caused by governmental operations and the components of unemployment, consumer trust, and welfare; the index of corruption (*CO*) represents the level of corruption within the political structure; the index of law and order (*LO*) represents the objectivity and power of the legal system while its sub-components of regulations represent the effects of the legal system on the society; the index of democratic accountability (*DA*) represents a measurement of the government's level of sensitivity for its people; lastly, the index of military impact on politics (*MIP*) represents is measurement of the intervention levels of military power having come to power by assignment on political will. Data related to these variables were obtained from the consulting firm Political Risk Services-International Country Risk Guide.⁶⁶

5.2. The Models

In order to reassess global turmoil and multilateralism within the scope of security, economy, and democracy, 85 countries in total were taken into account and the institutional determinants of economic growth were intended to be determined under four different regime types. Within this framework, four models, developed by Rodrik, Subramanian and Trebbi (2004)⁶⁷ and Acemoglu, Johnson and Robinson (2001)^{68, 69} and derived from production function, are estimated. The matches are as follows:

⁶⁶ Political Risk Services-International Country Risk Guide Methodology (PRS-ICRG). 2014. Available at <https://www.prsgroup.com/wp-content/uploads/2014/08/prsmethodology.pdf>.

⁶⁷ Rodrik, Subramanian and Trebbi 2004.

⁶⁸ Acemoglu, Johnson and Robinson 2001.

⁶⁹ $\log y_i = \mu + \alpha R_i + X_i' + \varepsilon_i$, whereas y_i is income per capita in country i , the coefficient of R_i (α) shows the effect of institutions on income per capita (Acemoglu et al., 2001, 1378). The linear model has been preferred for simplicity.

a) The first model for authoritarian regimes;

(Model 1)

$$PGDP_{it} = \alpha_0 + \alpha_1 IP_{it} + \alpha_2 IC_{it} + \alpha_3 EC_{it} + \alpha_4 SC_{it} + \alpha_5 CO_{it} + \alpha_6 LO_{it} + \alpha_7 DA_{it} + \alpha_8 MIP_{it} + \varepsilon_{it}$$

b) The second model for hybrid regimes;

(Model 2)

$$PGDP_{it} = \delta_0 + \delta_1 IP_{it} + \delta_2 IC_{it} + \delta_3 EC_{it} + \delta_4 SC_{it} + \delta_5 CO_{it} + \delta_6 LO_{it} + \delta_7 DA_{it} + \delta_8 MIP_{it} + \varepsilon_{it}$$

c) The third model for flawed democracies;

(Model 3)

$$PGDP_{it} = \phi_0 + \phi_1 IP_{it} + \phi_2 IC_{it} + \phi_3 EC_{it} + \phi_4 SC_{it} + \phi_5 CO_{it} + \phi_6 LO_{it} + \phi_7 DA_{it} + \phi_8 MIP_{it} + \varepsilon_{it}$$

d) The fourth model for full democracies;

(Model 4)

$$PGDP_{it} = \eta_0 + \eta_1 IP_{it} + \eta_2 IC_{it} + \eta_3 EC_{it} + \eta_4 SC_{it} + \eta_5 CO_{it} + \eta_6 LO_{it} + \eta_7 DA_{it} + \eta_8 MIP_{it} + \varepsilon_{it}$$

Here; $PDGP$, IP , IC , EC , SC , CO , LO , DA , MIP , $i=1,2,3,\dots,N$, and $t=1984,1985,1986,\dots,2015$ represent gross domestic product per capita growth rate, the index of investment profile, the index of internal conflict, the index of external conflict, the index of socioeconomic class, the index of corruption, the index of law and order, the index of democratic accountability, the index of military impact on politics, the dimensions of cross section i.e. countries, and time dimension respectively.

5.3. Empirical Findings

Descriptive statistics regarding the variables on four models constituted to determine the long-term institutional determinants of economic performance in terms of regime type are given in Table 2.

Table 2. Descriptive Statistics

Authoritarian Regime Descriptive Statistics									
	PGDP	IP	IC	EC	SC	CO	LO	DA	MIP
Mean	1.37	6.80	8.51	9.08	5.49	2.47	3.65	2.57	2.93
Median	1.74	6.92	8.75	9.92	5.50	2.48	3.95	2.93	3.00
Maximum	22.72	11.50	12.00	12.00	11.00	4.00	6.00	5.00	5.00
Minimum	-14.57	1.00	0.25	0.00	2.00	1.00	0.00	0.00	0.00
Std. Dev.	4.94	2.06	2.24	2.26	1.85	0.70	1.09	1.06	1.63
Jarque-Bera	50.73	0.00	70.77	231.54	5.79	16.67	18.87	14.76	24.54
Probability	0.00	1.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Observations	384	384	384	384	384	384	384	384	384
Hybrid Regime Descriptive Statistics									
Mean	1.53	6.57	8.11	8.89	4.88	2.62	3.24	3.51	2.97
Median	1.94	6.50	8.50	9.50	4.81	2.33	3.00	3.79	3.00
Maximum	35.72	12.00	12.00	12.00	10.92	6.00	6.00	6.00	6.00
Minimum	-42.62	0.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00
Std. Dev.	5.51	2.14	2.43	2.40	1.93	1.02	1.25	1.24	1.52
Jarque-Bera	4047.15	1.62	75.65	283.40	21.79	47.24	7.14	7.39	10.83
Probability	0.00	0.45	0.00	0.00	0.00	0.00	0.03	0.02	0.00
Observations	448	448	448	448	448	448	448	448	448
Flawed Democracy Regime Descriptive Statistics									
Mean	2.29	7.89	9.14	10.19	5.91	3.12	3.72	4.52	4.33
Median	2.54	8.00	9.67	10.42	6.00	3.00	4.00	4.92	5.00
Maximum	15.83	12.00	12.00	12.00	11.00	6.00	6.00	6.00	6.00
Minimum	-30.71	2.67	0.00	3.00	1.00	0.00	0.00	1.00	0.00
Std. Dev.	3.85	2.21	2.30	1.66	1.62	1.02	1.30	1.12	1.43
Jarque-Bera	5289.13	32.21	631.49	1392.16	6.46	28.83	54.49	76.37	117.57
Probability	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Observations	1280	1280	1280	1280	1280	1280	1280	1280	1280
Full Democracy Regime Descriptive Statistics									
Mean	1.99	9.25	11.03	11.24	8.18	4.93	5.52	5.74	5.79
Median	2.08	9.50	11.50	11.50	8.17	5.00	6.00	6.00	6.00
Maximum	25.64	12.00	12.00	12.00	11.00	6.00	6.00	6.00	6.00
Minimum	-11.40	4.00	6.00	6.50	4.00	2.00	2.00	3.08	2.08
Std. Dev.	2.83	2.12	1.26	0.96	1.52	1.00	0.89	0.51	0.60
Jarque-Bera	2187.74	33.13	539.40	572.67	14.58	60.89	1006.37	987.34	4464.29
Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Observations	608	608	608	608	608	608	608	608	608

The cross-section dependency test results are shown in Table 3. All the variables in four models through which we tried to determine the long-term institutional determinants of economic performance in terms of four regime types are dependent on each other in cross-sectional terms, i.e. there is a cross-section dependency. The optimal methods taking this into account will be utilized in the other parts of the analysis.

Table 3. Cross Section Dependency Test Results

	Authoritarian Regime		Hybrid Regime		Flawed Democracy Regime		Full Democracy Regime		
	First Model		Second Model		Third Model		Fourth Model		
CD Tests	Stat.	prob.	Stat.	prob.	Stat.	prob.	Stat.	prob.	
gdp	cd Lm1 (Breusch,Pagan 1980)	106.29***	0.00	148.31***	0.00	1166.12***	0.00	345.05***	0.00
	cd LM2 (Pesaran 2004 CDIm)	3.51***	0.00	4.25***	0.00	9.78***	0.00	9.41***	0.00
	cd LM (Pesaran 2004 CD)	-2.81***	0.00	-1.28*	0.10	-2.08***	0.02	-1.90**	0.03
	Bias-adjusted CD test	1.46*	0.07	1.65**	0.05	6.92***	0.00	-0.62	0.73
ip	cd Lm1 (Breusch,Pagan 1980)	133.22***	0.00	236.23***	0.00	1819.88***	0.00	447.59***	0.00
	cd LM2 (Pesaran 2004 CDIm)	5.85***	0.00	10.77***	0.00	26.33***	0.00	14.96***	0.00
	cd LM (Pesaran 2004 CD)	-2.99***	0.00	-3.51***	0.00	-3.43***	0.00	-3.59***	0.00
	Bias-adjusted CD test	11.23***	0.00	2.92***	0.00	27.85***	0.00	1.26*	0.10
ic	cd Lm1 (Breusch,Pagan 1980)	133.03***	0.00	200.92***	0.00	1758.20***	0.00	487.31***	0.00
	cd LM2 (Pesaran 2004 CDIm)	5.83***	0.00	8.15***	0.00	24.77***	0.00	17.10***	0.00
	cd LM (Pesaran 2004 CD)	-3.56***	0.00	-3.32***	0.00	-1.44*	0.08	-0.88	0.19
	Bias-adjusted CD test	13.63***	0.00	2.57***	0.01	50.69***	0.00	0.62	0.27
ec	cd Lm1 (Breusch,Pagan 1980)	133.03***	0.00	157.72***	0.00	1639.98***	0.00	349.67***	0.00
	cd LM2 (Pesaran 2004 CDIm)	5.83***	0.00	4.95***	0.00	21.77***	0.00	9.66***	0.00
	cd LM (Pesaran 2004 CD)	-3.56***	0.00	-2.39***	0.01	-1.78***	0.04	-1.96**	0.03
	Bias-adjusted CD test	13.63***	0.00	12.00***	0.00	17.49***	0.00	3.97***	0.00
sc	cd Lm1 (Breusch,Pagan 1980)	155.99***	0.00	163.62***	0.00	1341.36***	0.00	233.72***	0.00
	cd LM2 (Pesaran 2004 CDIm)	7.83***	0.00	5.38***	0.00	14.21***	0.00	3.39***	0.00
	cd LM (Pesaran 2004 CD)	-2.90***	0.00	-2.80***	0.00	-3.05***	0.00	-3.19***	0.00
	Bias-adjusted CD test	21.17***	0.00	5.08***	0.00	32.93***	0.00	2.86***	0.00
co	cd Lm1 (Breusch,Pagan 1980)	184.98***	0.00	193.98***	0.00	1521.55***	0.00	537.17***	0.00
	cd LM2 (Pesaran 2004 CDIm)	10.36***	0.00	7.63***	0.00	18.78***	0.00	19.80***	0.00
	cd LM (Pesaran 2004 CD)	-3.25***	0.00	-3.50***	0.00	-2.60***	0.01	-1.71**	0.04
	Bias-adjusted CD test	7.56***	0.00	6.51***	0.00	33.13***	0.00	11.60***	0.00
lo	cd Lm1 (Breusch,Pagan 1980)	146.83***	0.00	191.41***	0.00	1958.70***	0.00	321.50***	0.00
	cd LM2 (Pesaran 2004 CDIm)	7.04***	0.00	7.44***	0.00	29.84***	0.00	8.14***	0.00
	cd LM (Pesaran 2004 CD)	-3.55***	0.00	-2.92***	0.00	-2.79***	0.00	-1.70**	0.04
	Bias-adjusted CD test	20.77***	0.00	3.07***	0.00	55.99***	0.00	2.07**	0.02
da	cd Lm1 (Breusch,Pagan 1980)	161.83***	0.00	152.59***	0.00	1452.90***	0.00	272.87***	0.00
	cd LM2 (Pesaran 2004 CDIm)	8.34***	0.00	4.57***	0.00	17.04***	0.00	5.51***	0.00
	cd LM (Pesaran 2004 CD)	-2.84***	0.00	-3.43***	0.00	-3.06***	0.00	-1.99**	0.02
	Bias-adjusted CD test	15.52***	0.00	6.59***	0.00	24.62***	0.00	1.40*	0.08
mip	cd Lm1 (Breusch,Pagan 1980)	260.06***	0.00	175.24***	0.00	1202.46***	0.00	208.54**	0.03
	cd LM2 (Pesaran 2004 CDIm)	16.89***	0.00	6.24***	0.00	10.70***	0.00	2.03**	0.02
	cd LM (Pesaran 2004 CD)	-2.69***	0.00	-2.93***	0.00	-2.46***	0.01	-1.09	0.14
	Bias-adjusted CD test	47.57***	0.00	6.36***	0.00	52.99***	0.00	-1.00	0.84

***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

Whether the long-term parameters were homogeneous was analyzed through the Delta Test developed by Pesaran and Yamagata (2008), the results of which are given in Table 4. In the results obtained regarding four models in terms of four different regime types, the null hypothesis was rejected while the alternative hypothesis was accepted. Thus, it was concluded that the slope coefficients were heterogeneous.

Table 4. Delta Test Statistics

	Authoritarian Regime		Hybrid Regime		Flawed Democracy Regime		Full Democracy Regime	
	First Model		Second Model		Third Model		Fourth Model	
	Stat.	prob.	Stat.	prob.	Stat.	prob.	Stat.	prob.
Delta_tilde:	2.01**	0.02	2.66***	0.00	7.38***	0.00	1.54*	0.06
Delta_tilde_adj:	2.41***	0.01	3.19***	0.00	8.83***	0.00	1.86**	0.03
	N=12		N=14		N=40		N=19	

***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

The Hadri-Kruzomi unit root test results are shown in Table 5a. The null hypothesis could not be rejected according to the ZA_{la} statistics in the first three models and ZA_{spac} statistics in the fourth model for the GDP variable. Consequently, the GDP variable which is a dependent variable of all four models includes unit root. The condition for the dependent variable to include first-order unit root (I (1)) was met for the Durbin-Hausman cointegration test and the panel ARDL used to determine the long-term cointegration coefficients. Appendix 2 (A2) presents the results of first-order differences.

Table 5a. Hadri-Kruzomi Unit Root Test Results

Authoritarian Regime Hadri-Kruzomi (2012) Unit Root Test Results						Hybrid Regime Hadri-Kruzomi (2012) Unit Root Test Results					
First Model						Second Model					
		Level, Constant		Level, Constant +trend				Level, Constant		Level, Constant +trend	
		Test Stat.	Prob.	Test Stat.	Prob.			Test Stat.	Prob.	Test Stat.	Prob.
GDP	ZA_spac	3.15***	0.00	-0.10	0.54	GDP	ZA_spac	3.94***	0.00	27.67***	0.00
	ZA_la	0.55	0.29	1.02	0.15		ZA_la	-0.09	0.54	5.98***	0.00
IP	ZA_spac	-1.19	0.88	0.01	0.50	IP	ZA_spac	-3.16	1.00	-3.11	1.00
	ZA_la	-1.34	0.91	1.11	0.13		ZA_la	-3.53	1.00	-3.92	1.00
IC	ZA_spac	0.24	0.40	-1.07	0.86	IC	ZA_spac	-1.35	0.91	-2.24	0.99
	ZA_la	0.02	0.49	-1.49	0.93		ZA_la	-2.45	0.99	-4.16	1.00
EC	ZA_spac	0.24	0.40	-1.07	0.86	EC	ZA_spac	0.10	0.46	-0.74	0.77
	ZA_la	0.02	0.49	-1.49	0.93		ZA_la	-1.99	0.98	-3.87	1.00
SC	ZA_spac	0.00	0.50	-1.08	0.86	SC	ZA_spac	-0.33	0.63	-0.83	0.80
	ZA_la	-0.12	0.55	-2.03	0.98		ZA_la	-2.22	0.99	-3.37	1.00
CO	ZA_spac	-0.59	0.72	-1.31	0.91	CO	ZA_spac	-1.07	0.86	-0.48	0.69
	ZA_la	-0.17	0.57	-0.63	0.74		ZA_la	-1.46	0.93	-0.62	0.73
LO	ZA_spac	-1.20	0.88	-2.14	0.98	LO	ZA_spac	0.12	0.45	-0.58	0.72
	ZA_la	-1.17	0.88	-0.52	0.70		ZA_la	2.57***	0.01	-0.55	0.71
DA	ZA_spac	-0.09	0.54	-1.02	0.85	DA	ZA_spac	-2.70	1.00	-1.72	0.96
	ZA_la	2.20***	0.01	0.10	0.46		ZA_la	-3.30	1.00	-3.70	1.00
MIP	ZA_spac	-0.12	0.55	0.51	0.30	MIP	ZA_spac	0.19	0.42	1.18	0.12
	ZA_la	-0.41	0.66	0.31	0.38		ZA_la	-2.55	0.99	-3.02	1.00

Table 5a. Hadri-Kruzomi Unit Root Test Results

Flawed Democracy Regime Hadri-Kruzomi (2012) Unit Root Test Results						Full Democracy Regime Hadri-Kruzomi (2012) Unit Root Test Results					
Third Model						Fourth Model					
		Level, Constant		Level, Constant +trend				Level, Constant		Level, Constant +trend	
		Test Stat.	Prob.	Test Stat.	Prob.			Test Stat.	Prob.	Test Stat.	Prob.
GDP	ZA_spac	2.51***	0.01	3.90***	0.00	GDP	ZA_spac	-0.72	0.76	-2.20	0.99
	ZA_la	1.15	0.14	1.08	0.16		ZA_la	1.44*	0.08	71.28***	0.00
IP	ZA_spac	-4.23	1.00	8.30***	0.00	IP	ZA_spac	-1.87	0.97	-0.24	0.59
	ZA_la	-4.86	1.00	4.74***	0.00		ZA_la	-2.44	0.99	-0.46	0.68
IC	ZA_spac	-1.05	0.85	-2.20	0.99	IC	ZA_spac	0.38	0.35	-1.34	0.91
	ZA_la	-1.32	0.91	-3.14	1.00		ZA_la	1.14	0.13	-1.55	0.94
EC	ZA_spac	-0.86	0.81	-1.66	0.95	EC	ZA_spac	-2.57	0.99	-2.69	1.00
	ZA_la	2.50***	0.01	-1.64	0.95		ZA_la	-3.40	1.00	-3.93	1.00
SC	ZA_spac	-1.01	0.84	11.60***	0.00	SC	ZA_spac	-2.38	0.99	-3.30	1.00
	ZA_la	-1.08	0.86	11.30***	0.00		ZA_la	-3.06	1.00	-4.61	1.00
CO	ZA_spac	-2.84	1.00	25.19***	0.00	CO	ZA_spac	-0.74	0.77	-0.40	0.66
	ZA_la	-2.09	0.98	32.85***	0.00		ZA_la	-0.35	0.64	0.84	0.20
LO	ZA_spac	2.83***	0.00	-3.04	1.00	LO	ZA_spac	4.17***	0.00	-1.57	0.94
	ZA_la	4.03***	0.00	-4.62	1.00		ZA_la	-1.23	0.89	-2.70	1.00
DA	ZA_spac	-5.03	1.00	-2.91	1.00	DA	ZA_spac	-2.54	0.99	0.96	0.17
	ZA_la	-5.85	1.00	-6.37	1.00		ZA_la	-2.94	1.00	-0.80	0.79
MIP	ZA_spac	-2.37	0.99	-1.22	0.89	MIP	ZA_spac	-1.30	0.90	2.14**	0.02
	ZA_la	-2.78	1.00	-0.02	0.51		ZA_la	-0.61	0.73	4.43***	0.00

ZA_spac: the augmented panel KPSS test statistic with long-run variance corrected by the SPC method

ZA_la: the augmented panel KPSS test statistic with long-run variance corrected by the LA method

***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

Table 6. Durbin-Hausman Test Statistics

	Authoritarian Regime		Hybrid Regime		Flawed Democracy Regime		Full Democracy Regime	
	First Model		Second Model		Third Model		Fourth Model	
	Stat.	prob.	Stat.	prob.	Stat.	prob.	Stat.	prob.
dh_g	5.38***	0.00	6.74***	0.00	175.99***	0.00	66.37***	0.00
dh_p	5.61***	0.00	16.01***	0.00	52.02***	0.00	60.39***	0.00

***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

The Durbin-Hausman cointegration test results are given in Table 6. According to dh_g and dh_p statistical results for all four models to determine the long-term institutional determinants of economic performance in terms of four regime types, the null hypothesis was rejected and the alternative hypothesis was accepted. Accordingly, the existence of a relationship between GDP per capita growth rate and the variables of investment profile, internal conflict, external conflict, socioeconomic class, corruption, law and order, democratic accountability, and military impact on politics was tested. The results indicate a long-term relationship between the addressed variables.

5.3.1. Authoritarian Regime Results⁷⁰

Table 7a. Authoritarian Regime Results

	Pooled MGE Estimates			MGE Estimates				
	Coef.	St. Er.	t-ratio	Coef.	St. Er.	t-ratio	h-test	p-val
Long-Run Coefficients								
ip	-0.46***	0.09	-5.32	0.11	1.99	0.05	0.08	0.77
ic	1.10***	0.13	8.33	-0.23	1.53	-0.15	0.76	0.38
ec	0.09	0.11	0.83	-0.25	1.00	-0.25	0.11	0.73
sc	-1.24***	0.17	-7.38	-2.90	1.84	-1.57	0.82	0.37
co	0.67***	0.11	6.27	-2.07	3.61	-0.57	0.58	0.45
lo	0.55***	0.10	5.45	-1.28	2.50	-0.51	0.54	0.46
da	-0.13	0.09	-1.39	0.98	0.94	1.04	1.39	0.24
mip	0.33**	0.14	2.36	-2.84	1.65	-1.72	3.71	0.05
							Joint Hausman test:	10.60
								0.23

⁷⁰ There are 8 stochastic regressors (X) and 1 deterministic regressors (Z). The maximum number of time periods and groups are: 32 12. The maximum number of iterations for the pooled maximum likelihood estimation is set to: 1000. The value for the missing observations is set to:8934567. If there is a common factor problem, use demeaned data. The fixed lag specification (2) has been selected. All the long-run parameters have been restricted to be the same across groups. The dynamic fixed effects OLS have been used as initial estimate(s) of the long-run parameter(s) for the pooled maximum likelihood estimation. The Back-Substitution method has been chosen to use which uses only the first derivative of the log-likelihood function. Computations converged after 56 iterations. The number of groups is N=12. Restricted log likelihood:-214.2068. Unrestricted log likelihood:166.4106. LR statistic testing for equal long-run parameters:761.2348. LR statistic is distributed as Chi-Squared with 88 degrees of freedom, and its p-value is 0.00. According to the results of the diagnostic tests, there is no problem of autocorrelation and heteroscedasticity in the model.

Table 7a. Authoritarian Regime Results

Error Correction Coefficients						
Phi	-0.56 ^{***}	0.17	-3.27	-0.85	0.25	-3.43

h-test is the Hausman test statistic with its associated p-value. ^{***}, ^{**} and ^{*} are statistically significant at 1%, 5% and 10%, respectively.

As a result of the Hausman test performed to test whether the variables were homogeneous in long term, long-term homogeneity was concluded to exist, and the effective and consistent Pooled Mean Group Estimator (PMG) was determined to be the optimal estimator in our first model under the null hypothesis. The negative coefficient of statistically significant error correction (phi) demonstrates that there is a long-term relationship between economic growth and the institutional variables and that the balance is re-converged even when it is deviated from.

The pooled mean group estimator results regarding the group of countries governed by an authoritarian regime are shown in Table 7a. According to the related results, the variables except for investment profile, socioeconomic class, and democratic accountability are observed to have a long-term effect on economic growth. The variables that have the greatest effect in order are internal conflict, corruption, law and order, military impact on politics, and external conflict (statistically insignificant). Especially the fact that the increase in the variable of law and order brings along an increase in economic growth is an expected result for this country group under which the underdeveloped or developing countries fall. However, the effects of corruption and internal conflict on economic growth is thought to result from the impact of factors like political violence on the government and its policies regarding the governance of the country and consequently the increase in economic activities through illegal methods such as corruption and usury due to degradation of the economic and financial environment.

Among the variables affecting economic growth negatively in long term, the effects of the socioeconomic class variable are observed to be extremely higher than those of the other variables. This goes to show that even the improvements to occur within the socioeconomic structure of countries cannot increase economic growth, and it is thought to be caused by the

inability of such improvements to provide economic growth due to structural characteristics such as unimproved and disarrayed employment opportunities and limitations resulting from government policies. The short-term coefficients, which are observed to bear similarities to the long-term coefficients when analyzed, are presented in the attached Table 7b.

5.3.2. Hybrid Regime Results⁷¹

Table 8a. Hybrid Regime Results

	Pooled MGE Estimates			MGE Estimates			h-test	p-val
	Coef.	St. Er.	t-ratio	Coef.	St. Er.	t-ratio		
Long-Run Coefficients								
ip	-0.73	0.07	-10.84	0.08	0.81	0.10	1.03	0.31
ic	0.05	0.08	0.65	1.30*	0.79	1.65	2.53	0.11
ec	0.00	0.06	0.03	-0.18	0.40	-0.44	0.20	0.65
sc	0.19	0.12	1.59	0.67	0.65	1.03	0.57	0.45
co	1.08	0.12	9.04	-0.68	0.91	-0.75	3.79	0.05
lo	0.00	0.10	0.03	-2.56	2.42	-1.06	1.12	0.29
da	0.02	0.08	0.23	-0.58	0.76	-0.77	0.64	0.42
mip	-0.03	0.02	-1.42	-0.29	0.20	-1.45	1.66	0.20
Joint Hausman test:							59.40***	0.00
Error Correction Coefficients								
Phi	-0.95	0.15	-6.45	-1.85***	0.20	-9.45		

h-test is the Hausman test statistic with its associated p-value. ***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

As a result of the Hausman test performed to test whether the variables were homogeneous in long term, long-term heterogeneity was concluded to exist, and the consistent Mean Group Estimator (MG) was determined to be the optimal estimator for the second model by accepting the alternative hypothesis under the null hypothesis. The negative coefficient of statistically significant error correction (phi) indicates that there is a long-term relationship between economic growth and the institutional variables while demonstrating that economic growth converges the balance in the face of a shock.

⁷¹ There are 8 stochastic regressors (X) and 1 deterministic regressors (Z). The maximum number of time periods and groups are: 32 14. The maximum number of iterations for the pooled maximum likelihood estimation is set to: 1000. The value for the missing observations is set to: 8934567. AIC (Akaike) has been used to select the lag orders for each group. All the long-run parameters have been restricted to be the same across groups. The static fixed effects OLS estimates have been used as initial estimate(s) of the long-run parameter(s) for the pooled maximum likelihood estimation. The Newton-Raphson method has been chosen to use which uses both the first and the second derivative of the log-likelihood function. Computations converged after 17 iterations. The number of groups is N=14. Restricted log likelihood: -689.4383. Unrestricted log likelihood: -341.7952. LR statistic testing for equal long-run parameters: 695.2861. LR statistic is distributed as Chi-Squared with 104 degrees of freedom, and its p-value is 0.00. According to the results of the diagnostic tests, there is no problem of autocorrelation and heteroscedasticity in the model.

The mean group estimator results regarding the group of countries governed by a hybrid regime are presented in Table 8a. According to the related results regarding the hybrid regime group, the variables of investment profile, internal conflict, and socioeconomic class have a positive effect on economic growth while the other variables have a negative effect. Among the variables having a positive effect, only the variable of internal conflict is observed to be statistically significant. The significant level of impact of this variable may be associated with the high levels of civil chaos, political violence, and due to the weak structure of civil society in these countries, and a weak perception of superiority of law and high corruption levels increasing economic activities as opposed to what would normally be expected from them.

Among the variables having a long-term negative effect on economic growth, the variable of law and order is observed to have a striking impact. This stems from issues like the lack of an independent judiciary, an unjust system of law, and high levels of pressure from the government in these countries. The results regarding the variable of corruption having the most significant long-term negative effect following the variable of law and order may be stated to result from the shortcomings within the political structure and operation in these countries. The short-term coefficients, which are observed to bear similarities to the long-term coefficients when analyzed, are presented in the attached Table 8b.

5.3.3. Flawed Democracy Regime Results⁷²

Table 9a. Flawed Democracy Regime Results

	Pooled MGE Estimates			MGE Estimates			h-test	p-val
	Coef.	St. Er.	t-ratio	Coef.	St. Er.	t-ratio		
Long-Run Coefficients								
ip	0.23	0.03	7.70	0.47	0.34	1.38	0.51	0.48

⁷² There are 8 stochastic regressors (X) and 1 deterministic regressors (Z). The maximum number of time periods and groups are: 32 40. The maximum number of iterations for the pooled maximum likelihood estimation is set to: 1000. The value for the missing observations is set to: 8934567. AIC (Akaike) has been used to select the lag orders for each group. The mean group estimates have been used as initial estimate(s) of the long-run parameter(s) for the pooled maximum likelihood estimation. The Back-Substitution method has been chosen to use which uses only the first derivative of the log-likelihood function. Computations converged after 26 iterations. The number of groups is N=40. Restricted log likelihood:-1802.6731. Unrestricted log likelihood:-323.5267. LR statistic testing for equal long-run parameters:2958.2930. LR statistic is distributed as Chi-Squared with 312 degrees of freedom, and its p-value is 0.00. According to the results of the diagnostic tests, there is no problem of autocorrelation and heteroscedasticity in the model.

Table 9a. Flawed Democracy Regime Results

ic	0.68	0.04	16.81	-0.06	0.92	-0.06	0.64	0.42
ec	-0.27	0.05	-5.91	0.68	1.15	0.59	0.68	0.41
sc	0.01	0.02	0.49	-0.24	0.18	-1.35	1.99	0.16
co	-0.36	0.04	-9.21	-0.03	0.74	-0.04	0.21	0.65
lo	0.27	0.04	7.63	0.97	0.67	1.44	1.07	0.30
da	-0.08	0.04	-2.18	0.49	0.66	0.73	0.73	0.39
mip	0.25	0.04	6.67	-0.37	0.48	-0.77	1.68	0.20
					Joint Hausman test:		23.66	0.00
Error Correction Coefficients								
Phi	-0.60	0.07	-8.99	-1.49***	0.14	-11.08		

h-test is the Hausman test statistic with its associated p-value. ***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

As a result of the Hausman test performed to test whether the variables were homogeneous in long term, long-term heterogeneity was concluded to exist, and the consistent Mean Group Estimator (MG) was determined to be the optimal estimator for our third model by accepting the alternative hypothesis under the null hypothesis. The negative coefficient of statistically significant error correction (phi) indicates that there is a long-term relationship between economic growth and the institutional variables while demonstrating that economic growth converges the balance in the face of a shock.

The mean group estimator results regarding the group of countries governed a flawed democracy regime are shown Table 9a. According to the related results, in the countries governed by a flawed democracy regime, the variables having the greatest long-term effects on economic growth were determined, in order, to be law and order (positive), external conflict (positive), democratic accountability (positive), investment profile (positive), military impact on politics (negative), and socioeconomic class (negative). The variables like corruption and internal conflict having extremely low effects may be associated with higher development levels of the countries in this group in terms of socioeconomic status compared to the countries in the authoritarian and hybrid regime groups. The variables like law and order and democratic accountability being among the variables that have a significant long-term effect on economic growth result from the idea that since these countries have such shortcomings as problems

concerning governance, an underdeveloped political culture, and low participation levels in politics, the increases in these variables will improve these shortcomings and in turn strengthen democracy and economic growth. The short-term coefficients, which are observed to bear similarities to the long-term coefficients when analyzed, are presented in Table 9a.

5.3.4. Full Democracy Regime Results⁷³

Table 10a. Full Democracy Regime Results

	Pooled MGE Estimates			MGE Estimates			h-test	p-val
	Coef.	St. Er.	t-ratio	Coef.	St. Er.	t-ratio		
Long-Run Coefficients								
ip	0.24***	0.06	3.79	-2.19	1.04	-2.11	5.48	0.02
ic	0.20**	0.08	2.38	-0.50	2.14	-0.24	0.11	0.74
ec	0.55***	0.07	7.55	-1.62	1.71	-0.95	1.61	0.20
sc	-0.31***	0.07	-4.50	-0.66	1.05	-0.63	0.12	0.73
co	-0.89***	0.12	-7.35	1.85	2.07	0.90	1.76	0.18
lo	0.69***	0.13	5.34	2.41	4.15	0.58	0.17	0.68
da	1.24***	0.13	9.72	0.67	1.94	0.35	0.09	0.77
mip	-0.03	0.04	-0.89	0.03	1.08	0.03	0.00	0.95
Joint Hausman test:							12.45	0.13
Error Correction Coefficients								
Phi	-0.52***	0.11	-4.57	-0.93	0.30	-3.16		

h-test is the Hausman test statistic with its associated p-value. ***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

As a result of the Hausman test performed to test whether the variables were homogeneous in long term, long-term homogeneity was concluded to exist, and the effective and consistent Pooled Mean Group Estimator (PMG) was determined to be the optimal estimator in our fourth model under the null hypothesis. The negative coefficient of statistically significant error correction (phi) demonstrates that there is a long-term relationship between economic growth

⁷³ There are 8 stochastic regressors (X) and 1 deterministic regressors (Z). The maximum number of time periods and groups are: 32 19. The maximum number of iterations for the pooled maximum likelihood estimation is set to: 1000. The value for the missing observations is set to: 8934567. AIC (Akaike) has been used to select the lag orders for each group. All the long-run parameters have been restricted to be the same across groups. The static fixed effects OLS estimates have been used as initial estimate(s) of the long-run parameter(s) for the pooled maximum likelihood estimation. The Newton-Raphson method has been chosen to use which uses both the first and the second derivative of the log-likelihood function. Computations converged after 35 iterations. The number of groups is N=19. Restricted log likelihood: -754.5851. Unrestricted log likelihood: -119.9025. LR statistic testing for equal long-run parameters: 1269.3654. LR statistic is distributed as Chi-Squared with 144 degrees of freedom, and its p-value is 0.00. According to the results of the diagnostic tests, there is no problem of autocorrelation and heteroscedasticity in the model.

and the institutional variables and that the balance is re-converged even when it is deviated from.

The pooled mean group estimator results regarding the group of countries governed by a full democracy regime are presented in Table 10a. According to the results related to the full democracy countries, statistically significant results are observed to have been found for all the variables except for military impact on politics. These results demonstrate that the other regime types including the flawed democracy regime have problems regarding democratic governance while the full democracy regime have very limited problems about democracy, social and economic variables encourage economic growth in long term in the countries that have a political culture supporting democracy, and these variables have high levels of practicability as political tools.

The most significant positive effects are produced by the variables of democratic accountability and law and order while the most significant negative effects are produced by the variable of corruption, which is thought to stem from the facts that the countries in this group are developed in terms of democratic governance and their government operation levels are satisfactory, and that these countries are from Europe or countries like Australia, Canada, and New Zealand where the social, cultural, and economic development levels are extremely high. The short-term coefficients, which are observed to bear similarities to the long-term coefficients when analyzed, are presented in Table 10b.

6. Conclusion and Recommendations

In spite of the view that multilateralism should play an active role in escaping global turmoil caused by changes and developments resulting from globalization, multilateral institutions cannot fulfill their basic functions due to the policies of the countries trying to be a global power

and in turn their inability to perceive the instability and global developments occurring within the global system. This necessitates that the aspects of multilateralism be reassessed within the framework of globalization with a view to escaping global turmoil.

Even though the policies adopted by the USA, which is regarded as the single global power, have an international impact, the reason why global instability cannot be eliminated is that the nations wanting to become a global power do not have the necessary social and cultural infrastructure in addition to a strong economic and political structure. This brings along the idea that the policies pursued by the countries that have a strong sociocultural infrastructure and consequently a strong democracy will be effective in escaping global crisis and eliminating the instability created by global turmoil.

Based on this idea, the long-term institutional determinants of economic growth was analyzed with regard to political regime types in the study, and according to the results of this analysis, the socioeconomic variables in the full democracy regime group comprising of developed countries encourage economic growth. These results stem from the fact that the countries in this group have a developed social, cultural, and economic infrastructure. Indeed, in these countries which include some of the European ones, multilateral institutions and multilateralism, which are thought to play an important role in solving global problems in the future, are regarded as an effort to get together and a lifestyle rather than an issue of power or an international order, and this view endorses democratization and simplifies the solutions for problems.

The most effective way in escaping global crisis and turmoil is acknowledged to be the fact that countries should develop their socioeconomic infrastructures within the framework of their tendencies towards democratization due to the aforementioned reasons, and regulations should be performed to make the perception of multilateral institutions the same as that of the developed European countries which have the most democratic regime types. Indeed,

reassessing multilateral institutions which are unable to find a solution for today's global issues by introducing a social dimension to economic tendencies within the framework of recent global changes, bringing ethic assessments and world democracy into the forefront, adopting policies that can eliminate regional inequalities, and also multilateral institutions' performing meetings open to developing or underdeveloped countries' participation are all estimated to be effective in eliminating the shortcomings of multilateral institutions and putting an end to the instability created by global turmoil in the future.

References

- Acemoglu, Daron and James A. Robinson. 2006. *Economic Origins of Dictatorship And Democracy* (USA: Cambridge University Press).
- Acemoglu, Daron, Simon Johnson and James A. Robinson. 2001. The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review* 91(5): 1369-1401.
- Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. 2018. Democracy Does Cause Growth. *Journal of Political Economy* 127 (1). The University of Chicago Press: 47-100.
- Barro, Robert J. 1989. A Cross-Country Study of Growth, Saving, and Government. National Bureau of Economic Research Working Paper Series No. 2855.
- Berg-Schlosser, Dirk. 1984. African Political Systems: Typology and Performance. *Comparative Political Studies* 17 (1): 121–151.
- Breusch, T. S. and A. R. Pagan. 1980. The Lagrange Multiplier Test and its Applications to Model Specification in Econometrics. *The Review of Economic Studies* 47 (1). [Oxford University Press, Review of Economic Studies, Ltd.]: 239-253.
- Brzezinski, Zbigniew. 1995. *Out of Control: Global Turmoil on the Eve of the 21st Century*. New York: Touchstone.

- Dick, G William. 1974. Authoritarian versus Nonauthoritarian Approaches to Economic Development. *Journal of Political Economy* 82 (4). University of Chicago Press: 817-827.
- ECOSOC. 2016. The Changing Political Economy of Globalization: Multilateral Institutions and the 2030 Agenda. New York: Joint Meeting of ECOSOC and The GA'S Second Committee, United Nations Headquarters, 1. Available at <https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/2016doc/2016-globalization-mtg-bcknote.pdf>. Accessed 20 February 2019.
- Gill, Stephen. 1997. Global Structural Change and Multilateralism. In *Globalization, Democratization and Multilateralism*, edited by Stephen Gill, 1-17. Tokyo-New York-Paris: United Nations University Press.
- Gissinger, Ranveig, and Nels Petter Gleditsch. 1999. Globalization and Conflict: Welfare, Distribution, and Political Unrest. *Journal of World-Systems Research* 5(2): 327-365.
- Glassman, Amanda. 2012. GHI 2013 and the Rise of Multilateralism | Center For Global Development. Available at <<https://www.cgdev.org/blog/ghi-2013-and-rise-multilateralism>>. Accessed 5 December 2018.
- Grier, Kevin B, and Gordon Tullock. 1989. An Empirical Analysis of Cross-National Economic Growth, 1951-1980. *Journal of Monetary Economics* 24 (2): 259-276.
- Groom, A. John R. 2006. Multilateralism as a Way of Life in Europe. In *Multilateralism Under Challenge? Power, International Order and Structurel Change*, edited by Edward Newman, Ramesh Chandra Thakur, John Tirman, 460-80. Tokyo-New York-Paris: United Nations University Press.
- Hadri, Kaddour and Eiji Kurozumi. 2012. A Simple Panel Stationarity Test in the Presence of Serial Correlation and a Common Factor. *Economics Letters* 115 (1). North-Holland: 31-34.

- Hausman, Jerry A. 1978. Specification Tests in Econometrics. *Econometrica* 46 (6). [Wiley, Econometric Society]: 1251-1271.
- Hellsten, Sirkku K. 2006. Multilateralism and Economic Justice. In *Multilateralism Under Challenge? Power, International Order and Structure*, edited by Edward Newman, Ramesh Thakur and John Tirman, 422-440. Tokyo-New York-Paris: United Nations University Press.
- Huntington, Samuel. P. and Jorge I. Domínguez. 1975. Political Development. In *Handbook of Political Science III*, edited by Fred I. Greenstein and Nelson W. Polsby, 98-114. Reading, Mass.: Addison-Wesley.
- Landau, Daniel. 1986. Government and Economic Growth in the Less Developed Countries: An Empirical Study for 1960-1980. *Economic Development and Cultural Change* 35 (1). University of Chicago Press: 35-75.
- Lennon, Alexander T. J. and Amanda Kozłowski. 2008. Introduction: Concert or Clash of Global Powers in the 21st Century?. In *Global Powers in the 21st Century: Strategies and Relations*, edited by Alexander T. J. Lennon and Amanda Kozłowski, vii-xiii. Cambridge: MIT Press.
- Jamali, Khurram, Kirsten Wandschneider, and Phanindra V Wunnava. 2007. The Effect of Political Regimes and Technology on Economic Growth. *Applied Economics* 39 (11). Routledge: 1425-1432.
- Kay, Sean. 2004. Globalization, Power, and Security. *Security Dialogue* 35 (1): 9-25.
- Mulligan, Casey B., Ricard Gil and Xavier Sala-i-Martin. 2004. Do Democracies Have Different Public Policies than Nondemocracies?. *The Journal of Economic Perspectives* 18(1): 51-74.
- Newman, Edward and Ramesh Thakur. 2006. Conclusions: Multilateralism Under Challenge or in Crisis?. In *Multilateralism Under Challenge? Power, International Order and*

- Structural Change*, edited by Edward Newman, Ramesh Chandra Thakur, John Tirman, 531-540. Tokyo-New York-Paris: United Nations University Press.
- Newman, Edward, Ramesh Thakur and John Tirman. 2006. Introduction. In *Multilateralism Under Challenge? Power, International Order and Structural Change*, edited by Edward Newman, Ramesh Chandra Thakur, John Tirman, 1-17. Tokyo-New York-Paris: United Nations University Press.
- Persson, Torsten and Guido Tabellini. 2007. The Growth Effect of Democracy: Is It Heterogenous and How Can It Be Estimated?. National Bureau of Economic Research Working Paper Series, No. 13150.
- Pesaran, M. Hashem, Yongcheol Shin, and Ron P. Smith. 1999. Pooled Mean Group Estimation of Dynamic Heterogeneous Panels. *Journal of the American Statistical Association* 94 (446). [American Statistical Association, Taylor & Francis, Ltd.]: 621-634.
- Pesaran, M. Hashem. 2004. General Diagnostic Tests for Cross Section Dependence in Panels. Cambridge Working Papers in Economics 0435, Faculty of Economics, University of Cambridge.
- Pesaran, M. H. and Takashi Yamagata. 2008. Testing Slope Homogeneity in Large Panels. *Journal of Econometrics* 142 (1): 50-93.
- Pesaran, M H, Aman Ullah, and Takashi Yamagata. 2008. A bias-adjusted LM test of error cross-section independence. *The Econometrics Journal* 11 (1). John Wiley & Sons, Ltd (10.1111): 105-127.
- Political Risk Services-International Country Risk Guide Methodology (PRS-ICRG). 2014. Available at <https://www.prsgroup.com/wp-content/uploads/2014/08/prsmethodology.pdf>.
- Przeworski, Adam. 1966. *Party System and Economic Development* (Evanston, Ill: Northwestern University, 1966).

- Remmer, Karen L. 1990. Democracy and Economic Crisis: The Latin American Experience. *World Politics* 42 (3). Cambridge University Press: 315-335.
- Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi. 2004. Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development. *Journal of Economic Growth* 9 (2): 131-165.
- Ruggie, John Gerard. 1992. Multilateralism: the Anatomy of an Institution. *International Organization* 46 (3). [MIT Press, University of Wisconsin Press, Cambridge University Press, International Organization Foundation]: 561-598.
- Saenz, Tanya. 2016. Multilateral Institutions. Available at <http://www.geni.org/globalenergy/library/organizations/index.shtml#asia>. Accessed 25 February 2019.
- Stiglitz, Joseph Eugene. 2010. *The Stiglitz Report: Reforming The International Monetary and Financial Systems in the Wake of the Global Crisis* (New York-London: The New Press, 2010).
- Sloan, John, and Kent L Tedin. 1987. The Consequences of Regime Type for Public-Policy Outputs. *Comparative Political Studies* 20 (1): 98-124.
- Telò, Mario. 2013. Introduction. In *Globalisation, Multilateralism, Europe: Towards A Better Global Governance?*, edited by Mario Telò. Taylor & Francis Ltd., Burlington, VT : Ashgate Publishing, London.
- The Economist Intelligence Unit, 2018. Democracy Index 2017: Free Speech Under Attack. Available at https://cisp.cachefly.net/assets/articles/attachments/72810_democracy_index_2017.pdf. Accessed 20 December 2018.

The Wilson Center. 2007. Globalisation: A New Challenge for Multilateralism. Available at <https://www.wilsoncenter.org/article/globalisation-new-challenge-for-multilateralism>.

Accessed 12 October 2018.

Westerlund, Joakim. 2008. Panel Cointegration Tests of The Fisher Effect. *Journal of Applied Econometrics* 23 (2): 193-233.

Appendix

A1. Short-Run Coefficients

Table 7b. Authoritarian Regime Short-Run Coefficients Results (PMGE)				Table 8b. Hybrid Regime Short-Run Coefficients Results (MGE)				Table 9b. Flawed Democracy Regime Short-Run Coefficients Results (MGE)				Table 10b. Full Democracy Regime Short-Run Coefficients Results (PMGE)			
	coef.	st. er.	t-ratio		coef.	st. er.	t-ratio		coef.	st. er.	t-ratio		coef.	st. er.	t-ratio
ip	-0.26 ***	0.08	-3.27	ip	0.94	1.64	0.57	ip	0.74 **	0.30	2.45	ip	0.12 ***	0.03	4.57
ic	0.61 ***	0.19	3.27	ic	2.13	1.38	1.54	ic	0.80 ***	0.31	2.62	ic	0.10 ***	0.02	4.57
ec	0.05 ***	0.02	3.27	ec	-0.10	0.52	-0.18	ec	-0.32	0.33	-0.98	ec	0.29 ***	0.06	4.57
sc	-0.69 ***	0.21	-3.27	sc	0.84	1.00	0.84	sc	-0.28	0.23	-1.21	sc	-0.16 ***	0.03	-4.57
co	0.37 ***	0.11	3.27	co	-1.66	1.53	-1.08	co	0.71	0.48	1.49	co	-0.46 ***	0.10	-4.57
lo	0.31 ***	0.10	3.27	lo	-5.94	5.57	-1.07	lo	1.79 ***	0.61	2.93	lo	0.36 ***	0.08	4.57
da	-0.07 ***	0.02	-3.27	da	-0.99	1.53	-0.65	da	0.26	0.34	0.76	da	0.64 ***	0.14	4.57
mip	0.19 ***	0.06	3.27	mip	-0.31	0.26	-1.17	mip	-0.31	0.46	-0.69	mip	-0.02 ***	0.00	-4.57
dgdg(-1)	0.14	0.09	1.62	dgdg(-1)	0.28 **	0.13	2.06	dgdg(-1)	0.38 ***	0.08	4.99	dgdg(-1)	-0.01	0.06	-0.11
dip	-0.17	0.25	-0.67	dip	-1.29	1.64	-0.79	dip	-0.24	0.26	-0.95	dip	-0.03	0.11	-0.26
dip(1)	0.42 ***	0.13	3.12	dip(-1)	-0.11	0.37	-0.31	dip(-1)	-0.11	0.19	-0.60	dip(-1)	0.01	0.09	0.11
dic	-0.23	0.37	-0.62	dic	-1.22 **	0.58	-2.12	dic	-0.24	0.23	-1.04	dic	0.15	0.39	0.37
dic(1)	0.04	0.38	0.11	dic(-1)	-1.56	1.22	-1.27	dic(-1)	-0.34 ***	0.11	-3.13	dic(-1)	-0.22	0.15	-1.40
dec	0.07	0.39	0.18	dec	-0.02	0.47	-0.03	dec	0.52	0.27	1.90	dec	0.12	0.13	0.97
dec(1)	-0.54	0.50	-1.08	dec(-1)	-0.16	0.43	-0.39	dec(-1)	0.05	0.26	0.21	dec(-1)	-0.07	0.13	-0.55
dsc	0.87	0.54	1.62	dsc	0.75	1.49	0.50	dsc	0.15	0.20	0.77	dsc	0.58 **	0.24	2.42
dsc(1)	0.64 **	0.25	2.53	dsc(-1)	0.56	1.08	0.52	dsc(-1)	0.30	0.25	1.20	dsc(-1)	-0.23	0.17	-1.33
dco	-0.58 *	0.33	-1.76	dco	1.61	1.50	1.08	dco	-0.66 *	0.35	-1.90	dco	-0.18	0.29	-0.60
dco(1)	1.90	2.03	0.93	dco(-1)	-0.09	0.95	-0.10	dco(-1)	-0.17	0.23	-0.73	dco(-1)	-0.42 *	0.24	-1.78
dlo	-2.73 *	1.48	-1.84	dlo	4.17	3.44	1.21	dlo	-1.04	0.66	-1.57	dlo	-0.07	0.37	-0.20
dlo(1)	0.21	0.33	0.62	dlo(-1)	1.18	1.22	0.96	dlo(-1)	-0.88 *	0.52	-1.68	dlo(-1)	0.62	0.64	0.98
dda	-0.05	0.57	-0.08	dda	-0.02	1.14	-0.02	dda	-0.18	0.19	-0.93	dda	-0.70	0.53	-1.32
dda(1)	-0.44	0.58	-0.76	dda(-1)	-0.09	0.50	-0.18	dda(-1)	-0.22	0.18	-1.18	dda(-1)	0.27 **	0.12	2.23
dmip	2.23	1.94	1.15	dmip	0.06	0.21	0.30	dmip	0.04	0.40	0.10	dmip	-0.14	0.15	-0.94
dmip(-1)	-2.62	2.47	-1.06	dmip(-1)	-0.07	0.25	-0.27	dmip(-1)	0.06	0.27	0.22	dmip(-1)	0.16	0.15	1.08
inpt	-0.90	0.86	-1.05	inpt	7.14	5.49	1.30	inpt	2.81	2.66	1.05	inpt	-0.32	0.60	-0.54

***, ** and * are statistically significant at 1%, 5% and 10%, respectively.

A2. Unit Root Test Results

Table 5b. Hadri-Kruzomi Unit Root Test Results (First Difference)									
		First Model		Second Model		Third Model		Fourth Model	
		Cons.	Cons.+trend	Cons.	Cons.+trend	Cons.	Cons.+trend	Cons.	Cons.+trend
		Test Stat.		Test Stat.		Test Stat.		Test Stat.	
GDP	ZA_spac	3.67***	11.75***	4.54***	7.34***	1.37*	10.99***	0.91	0.73
	ZA_la	7.02***	20.78***	6.35***	10.53***	2.76***	14.08***	0.87	0.84
IP	ZA_spac	5.41***	18.45***	6.48***	3.97***	59.90***	189.22***	3.07***	10.22***
	ZA_la	5.80***	20.36***	14.69***	10.81***	69.83***	215.82***	3.45***	12.48***
IC	ZA_spac	6.39***	13.54***	9.89***	13.96***	17.54***	71.06***	4.57***	16.30***
	ZA_la	8.42***	16.68***	18.89***	27.26***	20.58***	82.78***	3.91***	13.93***
EC	ZA_spac	6.39***	13.54***	9.89***	13.96***	17.54***	71.06***	4.57***	16.30***
	ZA_la	8.42***	16.68***	18.89***	27.26***	20.58***	82.78***	3.91***	13.93***
SC	ZA_spac	-0.18	4.61***	1.86**	6.48***	63.37***	183.96***	0.28	7.19***
	ZA_la	0.37	6.12***	7.96***	16.73***	59.00***	180.40***	-0.01	6.79***
CO	ZA_spac	5.23***	24.38***	9.00***	22.98***	17.82***	60.36***	0.10	3.37***
	ZA_la	7.60***	34.69***	12.48***	31.85***	25.21***	76.32***	-0.33	2.38***
LO	ZA_spac	-0.75	2.84***	6.58***	2.98***	50.71***	184.42***	6.31***	24.14***
	ZA_la	-0.11	4.69***	14.24***	7.03***	51.11***	193.06***	5.12***	21.28***
DA	ZA_spac	7.95***	32.73***	4.00***	7.84***	14.74***	51.59***	0.42	7.39***
	ZA_la	7.49***	34.74***	8.59***	19.49***	21.50***	71.42***	-0.50	4.56***
MIP	ZA_spac	-2.18	-0.08	8.93***	19.78***	92.44***	299.67***	0.27	8.69***
	ZA_la	-2.00	0.42	16.07***	36.63***	98.05***	301.45***	-0.69	5.73***