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A multinational analysis of democratic deficit by components with application in Albania

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"Democracy means the rule of all. The unique characteristic of democracy is the source of power for a government by the people and for the people"

Aristoteles

"Democratic deficit is a multidimensional phenomenon"

David Easton

"Many things may be desirable from citizens, but not all of them are essential characteristics of democracy"

Pippa Norris

Abstract

In the present study we develop a multidimensional model for democratic deficit, depending on 39 components. Our analysis focused on responsiveness and congruence for each policy – responsiveness, and congruence for each policy – specific opinion.

By responsiveness mean the existence of a positive correlation between public opinion and state policy.

By congruence mean that the state policy actually matches majority preferences.

Democratic deficit occurs when core democratic institutions, such government, parliament, and political parties, in fact fall short of fulfilling the principles of democracy in their performance. Democratic deficit is an insufficient level of democracy in political institutions and procedures, in comparison with a theoretical ideal of democratic government. Democratic deficit encompasses distortions in random dynamical flows of influence from citizens to government, parliament, and political parties. Democratic deficit denotes the mean of the difference between satisfaction and aspiration of all citizens in a given democratic state during a specified period. Democratic deficit around the world is a random field in the sense of Modern Probability Theory.

Any democratic state may potentially suffer from democratic deficit.

Trust in political institutions (government, parliament, political parties) displays fluctuations over time and persistent contrasts among different branches of government within each specified democratic state.

The voter preferences had a moderate impact to the state policy. The democratic state governments are on average 50% - 60% effective in translating majority opinion into state policy. The democratic state policy is more polarized than voter preferences. To estimate the state – level public opinion we apply Multilevel Regression and Post stratification method.

Theoretical results are applied in Albania during the period 2005 – 2014.

Keywords: democratic deficit, issue, responsiveness ,congruence, MRP method, application.

1. Introduction

The word "democracy" comes from the Greek word "demokratia", which was formed by demos – people and kratos – rule.

The fundamental democratic principle for a liberal democracy is the right to vote, the right to be elected for a public office, the rights of political leaders to compete for support and votes, free and fear elections, freedom of association, freedom of expression, alternative sources of information, institutions that make government policies actually depend on votes and other forms of voter preferences, see Dahl (2001), p40.

Does the people around the world lack trust in their governments, parliaments, political parties, juridical system, and confidence in democratization process?

Many citizens think so. The data collected highlights this argument: In many democratic countries today, satisfaction with performance of democracy continues to diverge from public aspirations and expectations.

The concept "democratic deficit" represents the gap between the public satisfactions and aspirations.

<u>Democratic deficit</u> is an insufficient level of democracy in political institutions and procedures in comparison with a theoretical ideal of a democratic government, see Encyclopedia Britannica (2014). According to this approach, democratic deficit has been defined as the gap or discrepancy between "what is" in terms of existing order and "what ought to be" in theoretical sense of an ideal democratic government and parliament.

The notion "democratic deficit" may be used to denote the absence of underdevelopment of key democratic institutions such as government, parliament, political parties, juridical system, etc. But "democratic deficit" may also be used to describe (and reflect) the various ways in which these institutions may shortfall to function properly (e.g. lack of transparency and accountability, technocratic decision – making process, inadequate or insufficient participation of citizens in policy making). The notion of "democratic deficit" encompasses distortions in the random dynamic flows of influence from citizens to governments, parliaments, political parties. Any democratic state may potentially suffer from democratic deficit.

According to the Collins English Dictionary (October 15, 2014), democratic deficit is any situation in which there is believed to be a lack situation in which there is believed to be a lack of democratic accountability and control over the decision – making process. In this context, we interpret "democratic deficit" as "too little democracy".

A democratic deficit occurs when ostensibly democratic institutions (particularly governments or parliaments) in fact fall short of fulfilling the principles of democracy in their practices or operations, see Levinson (2007).

The phrase "democratic deficit" in a historical context is cited as first being used in Manifesto of Young European Federalists (1977) by Richard Corbett. The phrase "democratic deficit" was also used by David Marquand in 1979, referring to the European Economic Community, the forerunner of the European Union, see Marquand (1979).

For a complete treatment and more details about democratic deficit see Fallesdal and Hix (2006), Chryssochoou (2007), Craig, Grainne and Craig (2007), Glossary: Democratic Deficit (2009), Azman (2011), Corbett, Jacobs and Shackleton (2011), Norris (2011), Kelemen (2012), Schütze (2012).

The critical citizens aspire to democracy as their ideal form of government. At the same time they remain deeply skeptical when evaluating how democracy works in their own country. The critical citizens in many countries had proved increasingly skeptical about the actual performances of the care institutions of democracy, notably parliaments, governments, political parties, justice systems, etc.

- We assume the rational behavior of the critical citizens, in the sense of A. Sen and R. B. Myerson.
- The public aspirations toward democratic ideals, values, and principles (that is, demand for democracy) proved almost universal around the world. The contradictions between unwavering support for democracy and skeptical evaluations about democratic practices was interpreted as the rise of critical citizens, see Norris (1999).

- The democratic deficit is the mean of the difference between satisfaction and aspiration of all citizens (critical citizens as well as noncritical citizens) in a given state during a specified period.
- Many fear that democratic states today are suffering from a "democratic deficit", representing how far the perceived democratic performance in any state diverges from public aspirations and expectations.

The democratic deficit could be explained by some combinations of

- i) Growing public expectations for democracy (with the analysis suggesting that public demands are fueled strongly by education),
- ii) The potential impact of negative news about government and (or) parliament performance, although the evidence for this performance remains limited,
- iii) Perceived shortfalls in government performance (supply side of democracy).

Demand side	Int	ermediary	Supply side	Democratic Deficit

Figure 1. General model of the democratic deficit

• The democratic deficit has important consequences, including for political activism, for allegiant political behavior and rule of law, and ultimately for process of democratization. Survey analysts focus upon public opinion. Policy analysts monitor government and parliament performance.

Communication scholars scrutinize the news media.

The rising public aspirations toward democracy emphasizes on the demand side long – term cultural development among citizens. Cultural Theories of Democracy emphasize that major changes in democratic system support are driven primarily by sociological changes. According to Cultural Theories, education level, self – expression values, social trust, and political activism, all help to generate higher democratic aspirations and expectations. However, only the negative effects of education widened the democratic deficit, see Norris (2008).

Trust in political institutions (such as government, parliament, political parties) is a random process, because displays fluctuations over time and persistent contrasts among different branches of government within each democratic country.

Therefore, the appropriate mathematical theory for evaluating democratic deficit is Mathematical Statistics with Applications. The rest of the study is organized as follows:

- Section 2 presents the main issues of democratic deficit.
- Section 3 provides investigation of the relationship between public opinion and state policy.
- Section 4 contains estimations of several components for democratic deficit in Republic of Albania during the specified periods.
- Section 5 concludes the study.

2. Main components of democratic deficit

Democratic deficit around the world is a random field, in the sense of Modern Probability Theory. In a specific democratic country, democratic deficit is a multidimensional random process, depending on several variables (issues, components).

The main components of democratic deficit are listed below.

- 1. Economic development, measured by "per capita GDP" and "quarterly GDP growth rate". Source: The World Bank. World development indicators.
- 2. Type of economy is classified as:
 - "High income" are those economies with a mean per capita $GDP \ge \$15000$,

"Medium income" are those economies with a mean per capita GDP between \$2000–14999,

"Low income" are those economies with a mean per capita GDP \leq \$1999. Source: The World Bank.

- 3. Historical democratization index (hdi) classified as:
 - a. restricted experience ($0 < hdi \le 29$),
 - b. moderate experience ($30 \le hdi \le 69$),
 - c. extensive experience $(70 \le hdi \le 100)$.

Source: www.fredomhouse.com (various years)

- 4. Type of regime is classified as:
 - a. older liberal democracy \rightarrow free,
 - b. electoral democracy \rightarrow partly free,
 - c. Autocracy \rightarrow not free.
- 5. Press freedom index (pfi).

This index is standardized to 100 points. Source: <u>www.freedomhouse.org</u> (various years), <u>www.rsf.org</u>

6. Corruption perception index (cpi), estimated by Transparency International Source: <u>www.transparency.org</u>

7. Good governance index (ggi)

This index is standardized to 100 points

Source: Kaufmann, D., Kraay, A., and Mastruzzi, M. (2007). Governance Matter VI: Aggregate and individual governance indicators 1996-2006, Washington DC : The World Bank.

8. Confidence in institutions

I am going to name a number of institutions. For each one, please could you tell me how much confidence you have in them: It is a great of confidence (100 points), Quite a lot of confidence (75 points), Not very much confidence (50 points), None at all confidence (0 points).

Read one and code your answer for each institution:

- The Government
- The Parliament
- The Ministry of Interior Affairs
- The Ministry of Justice
- The Ministry of Finance and Central Bank
- The Ministry of Education
- The police (General Directorate of Albania's Policy)
- The courts (Albanian Supreme Court)
- The health care system
- The public universities
- The private universities
- The political parties
- The civil service (in general)

Source: World Values Surveys 1981 -2014.

9. Regime institutions index (ri) includes:

Types of electoral systems, possible gerrymandering, possible vote buying, other possible manipulations of electoral results, low participation in parliamentary elections, types of executive institutions, and type of the state, see Dal B+ (2007), Morgan and Várdy (2006), Hardvigsen (2008), Dekel, Jackson and Wlinsky (2004), Balinsky (2008), Martis (2008), and Wasserman (2011).

The index is standardized to 100 points.

Sources: World Values Surveys, Norris (2008).

10. Human rights index (hr) includes:

The right not to be tortured, executed, disappeared, or imprisoned for political beliefs, freedom of religion, freedom of association, freedom of speech, political participation rights, right to vote, right to be elected for a public office, rights of political leaders are to compete for support and votes, free and fear parliamentary or local elections, alternative sources of information, institutions that make government policies depend strongly on voter preferences, how successfully women have achieved equality in the public sphere.

It examines the extent to which women and men are able to actively participate in Parliament, Government, in Political Parties, economic forums, and take part in decision making processes. The index (hr) measures the ration of women to men in parliamentary seats, Government, local Governments, administration, professional positions, women and men ration of earned incomes.

The index used a 10-point scale of measurements.

Source: The CIRI Human Rights Database Coder Manual.

- 11. Democratic aspirations index (da) How important it is for you to live in a country that is governed democratically? On this scale, 1 means it is not at all important, and 10 means it is absolutely important. The answer standardized to 100 points. Source: World Values Surveys 2007 – 2014.
- 12. Democratic satisfaction index (ds) How democratically is your country being governed today? Again, using a scale from 1 to 10, where 1 means it is not at all democratic, and 10 means it is completely democratic. The respondent's answer standardized to 100 points. Source: World Values Surveys 2007 – 20014.
- 13. Democratic deficit index (dd) denotes the mean difference between democratic aspirations and democratic satisfaction.
 - Source: World Values Surveys 2007 2014.
- 14. National pride index (np) How proud are you to be (Albanian)?
 - Very Proud (4) Quite Proud (3)
 - Not very proud (2)
 - Not at all proud (1)
 - Source: World Values Surveys 2007 2014.
- 15. Political interest index (pi)
 - How interested are you in politics?
 - Very interested (4)
 - Somewhat interested (3)
 - Not very interested (2)
 - Not at all interested (1)

Source: World Values Surveys 2007-2014.

- 16. Citizen interest in elections index (cie)
 - Did you have voted in recent parliamentary election?
 - Did you have voted in recent local election?

Source: World Values Surveys 2007-2014.

17. Subjective well-being index (swb)

The index combined: subjective life satisfaction, self-reported state of health, subjective happiness, and financial satisfaction. Standardized to 100 points.

Source: World Values Surveys 2007-2014.

18. Protest politics index (pp)

The index combines whether respondents reported that they had joined a protest, or signed a petition, or boycotted consumer products.

Source: World Values Surveys 2007-2014.

19. Employment status index (es)

Are you employed now or not?

Coded full-time, part-time, self-employed, and other. The index measured by the quarterly unemployment rate for respondent's country.

Source: World Values Surveys 2007-2014.

20. Educational scale index (eds)

What is the highest educational level that you have attained?

- 1. No formal education
- 2. Incomplete primary school
- 3. Complete primary school
- 4. Incomplete secondary school
- 5. Complete secondary school
- 6. University-level education
- 7. Master degree
- 8. PhD
- 9. Associate professor
- 10. Professor

Source: World Values Surveys 2007-2014.

21. Use of the media index (um)

The index is calculated by summing use of

- 1. Daily newspapers
- 2. New on TV or Radio
- 3. Printed magazines
- 4. In-depth reports on TV or Radio
- 5. Books, journals
- 6. Internet, e-mail

Source: World Values Surveys 2007-2014.

- 22. Inflation rate index (ir), estimated by CPI quarterly inflation rate. Source: World Bank.
- 23. Okun's misery index (Omi) This index denotes the sum of quarterly inflation rate and quarterly unemployment rate. Source: World Bank.
- 24. Gini index (Gi) measures income inequality.

Sources: World Bank UNDP World Values Surveys 2007-2014. 25. Human poverty index (hp), estimated by % of population living below a specified poverty line.

Sources: World Bank Word Voluce Sur

Word Values Surveys 2007-2014.

26. Central Government expenditure index (cge), expressed as % of GDP.

Sources:	World Bank
	World Values Surveys 2007-2014.

- 27. Government budget deficit (gdb), expressed as % of GDP. Sources: World Bank
- 28. Tax revenue index (tr), expressed as % of GDP. Sources: World Bank
- 29. Health spending index (hs), measured by % of GDP. Sources: World Bank
- 30. Educational spending index (es), expressed as % of GDP. Sources: World Bank
- 31. HIV index (HIV), denotes prevalence of HIV, total % population aged 15-49 years. Source: World Values Surveys 2007-2014.
- 32. Freedom of people index (fp).

According to 1998 Nobel Prize winner Amartya Sen, there are five types of freedom:

- I. Political freedoms, including functioning democracy, freedom to scrutinize and criticize actions and behave of authorities, freedom of expression and speech, presence of free press.
- II. Economic facilities, such as people's opportunity to have and use economic resources or entitlements.
- III. Social opportunities, including people's ability to access health care and education services, opportunities to participate in social processes and activities.
- IV. Transparency guarantees: This concerns transparency in the functioning of authorities so that people can trust the information they receive and the system of government.
- V. Protective security, including social protections of the vulnerable people so that they don't fall into object deprivation.

The answer standardized to 100 points.

Source: World Values Surveys 2007-2014.

33. Gay rights index (gr)

The index involves the following questions:

- Do you favor adoption rights for gay and lesbian couples so they can legally adopt children?
- Would you favor or oppose a law that would allow homosexual couples to legally form civil unions, giving them some of the legal rights of married couples?
- Do you favor or oppose laws to protect gays against job discrimination?
- Should there be health insurance and other employee benefits for gay spouses?
- Do you support laws to protect gays and lesbians form prejudice and discrimination in housing?

- Do you think there should or should not be legally sanctioned gay and lesbian marriages?
 - The answer standardized to 100 points.
 - Source: World Values Surveys 2007 2015.
- 34. Immigration rights index (ir)

The index includes:

- Do you think all public school classes should be taught in (Albanian) or do you think children of immigrants should be able to take some courses on their native language?
- Do you think Albanian Government should or should not issue driver's licenses to illegal immigrants?
- Do you think the children of illegal immigrants who graduate from high school in the Republic of Albania should be allowed to attend public universities at some reduced in Albania tuition rates as other Albanian residents, or should they pay higher tuition?

The answer standardized to 100 points.

Source: World Value Surveys 2007-2014.

World Bank.

35. Gaming rights index (gr)

The index includes:

- Legalize casino gambling.
- Legalize a state lottery.
- Please tell me whether you would approve or disapprove of legalizing:
- a. Casino gambling?
- b. A state lottery?

The answer standardized to 100 pints. Source: World Bank.

36. Interest groups index (ig)

The index includes the following questions:

All democratic states around the world have numerous interest groups with hundreds (or even thousands) of registered lobby sites, representing a wide array of economic or social concerns. The political power of interest groups varies randomly across states.

- Do you think all interest groups are purely counter democratic?
- Do you think some interest groups are partially counter democratic?
- Do you think the powerful interest groups may use their resources to block popular policies?
- Do you think the elected officials or ministers may be pressured to satisfy the interests of powerful interest groups, instead of their voters?
- Do you think there is a balance between powerful interest groups in your country?
- Do you favor or oppose the existence of a correlation between the powerful interest groups and political corruption?

The answer standardized to 100 points. Source: World Bank. 37. Excessive speculation index (es)

Excessive speculation is that which drives prices away from the competitive price consistent and with available market information. Excessive speculation distorts prices (Pirrong, 2010). Speculation becomes excessive when prices move in a politically inconvenient direction. Excessive speculation exists and excessive speculators are corrupted politicians (Collins, 2011).

- Do you think for your country the excessive speculation is present In agriculture? In extracting industry? In manufacturing industry? In counstruction? In trade? In transport? In post and communication? In other services? The answer standardized to 100 points. Source: World Bank.
- Commercial energy use index (ceu): Per capita electric energy use, and oil equivalent. Source: World Bank.
- 39. Infant mortality index (im): Rate (0-1 year) per 1,000 live births. Source World Bank.

3. Investigating the relationship between public opinion (voter preferences) and state policy

In this section we study how well contemporary democratic states convert public opinion (voter preferences) into the state policy.

To be clear, by responsiveness we mean the existence of a positive correlation between public opinion and state policy; by congruence we mean that the state policy actually matches majority opinion (will, preferences). When majority will is truly sovereign, we expect both strong responsiveness and a high level of congruence.

> • Gelfand's classification of responsiveness: r > 0.95 denotes a quite strong responsiveness, $0.80 < r \le 0.95$ denotes a strong responsiveness, $0.40 < r \le 0.80$ denotes a moderate responsiveness, $0.15 < r \le 0.40$ denotes a weak responsiveness, $0 < r \le 0.15$ denotes a quite weak responsiveness,

where r represents Pearson's coefficient of correlation between public opinion and state policy.

Policy adoption may increase with higher public support, suggesting a strong responsiveness.

How responsive is the democratic state policy to voter preferences?

Erikson, Wright and McIver (1993), Matsusaka (2005, 2010), Park, Gelman and Bafumi (2006), Lax and Phillips (2009) find out that the voter preferences had a moderate impact to the state policy: they established a moderate positive correlation between voter preferences and aggregate state policy.

Simply put, liberal states apply more liberal policy. By this test, the statehouse democracy (and democratic performance) receives simply a passing grade.

But policy may still often be inconsistent with majority will, suggesting a lack of congruence, perhaps because policymaking (Prime Minister) is biased in the liberal direction or conservative direction. In fact, there can be significant responsiveness associated without congruence, see Lax and Phillips (2012).

- A complete modelling of statehouse democracy requires studying and evaluating both responsiveness and congruence. Lax and Phillips (2012) discover a democratic deficit in USA policymaking: the state governments are on average 50% - 60% effective in translating opinion majority into state policy.
- Together, the presence of a clear responsiveness to public opinion (voter preferences) combined with evidence of policy incongruence creates complicated situation of statehouse democracy and democratic performance. We expect the existence of democratic deficit, if the policy specific opinion is irrelevant.
- We consider various variables of democratic deficit and constraints on democratic performance:

Which state institution enhances or distorts responsiveness or congruence, and whether the interest group activity induces or restrains congruence?

We indeed find that the impact of public opinion in the state policy is particularly strong under favorable institutional conditions and for specific policies of greater salience of transparence.

- The main result: the democratic state policy is more polarized than voter preferences.
- To estimate the state level voter preferences across 39 components for democratic deficit, we use Multilevel Regression and Post stratification (MRP) method, developed by Gelman and Little (1997), Park, Gelman, and Bafumi (2006), Kastellec, Lax, and Phillips (2010).

There are two stages of MRP method.

<u>First Stage.</u> The individual survey response is modeled as a function depending on a nuanced demographic and geographic topology, using multidimensional regression analysis.

For each demographic – geographic type of voters, the predicted state policy support is estimated.

Second Stage. (named post stratification)

The estimates obtained for each demographic – geographic type, are weighted by the percentages of each type in actual state population, using Census data.

• So that, we can estimate the percentage of responsiveness (Pearson's coefficient of correlation between voter preferences and state policy) within the state for each specific issue (across 39 issues for democratic deficit).

The demographic variables used here are: age, education, race, gender, and religion. For full details of MRP method see Lax and Phillips (2009).

- Elections are a crucial component of democracy. Elections create incentives for the incumbent to use policy instruments to get re-elected, see Alessina and Perroti (1995), Pearson and Tabellini (2003), Eslava (2011) for more discussions.
- There is a substantial evidence that voting process driven by the level of economy.

Hausking, Martin, and Plumper (2004), Drazen and Eslava (2006) de Haan (2013) find an evidence election – motivated increase in government spending categories that are visible and easily targeted, such as construction of roads, tunnels, bridges, schools, etc.

Potrafke (2010) reports an increase in public health expenditure in election years, while Klomp and de Haan (2012) find a positive significant effect of upcoming elections on financial government support to the agricultural sector.

4. Estimating the issues of democratic deficit with application in Albania

In this section we develop a statistical analysis for issues of democratic deficit, based on Kolmogorov's Central Limit Theorem and fair game hypothesis (in sense of J. Stein, E. Fama, and N. N. Vorobiev).

To fix the ideas, the statistical method applied in Republic of Albania during the period January 2005 – September 2014. We investigate two issues: quarterly GDP growth rate and quarterly unemployment rate. The sources of official data: Institute of Statistics of Albania (INSTAT) and Bank of Albania (BoA).

4.1. Statistical analysis of the quarterly GDP growth rate in Albania: January 2005 – September 2014.

The data set consists of quarterly GDP growth rate in Republic of Albania during the specified period, see table 1. Using SPSS, IBM version 21 (2013), we calculate the statistical parameters for the data.

Sample size	39		
Mean		0.9487	
	Lower	0.2707	
95% Confidence Interval for	Bound		
Mean	Upper	1.6268	
	Bound		
Median	1.09		
Variance		4.375	
Standard Deviation	2.09171		
Coefficient of variation	2.205		
Minimum	-2.61		
Maximum	6.38		
Range	8.99		
Interquartile Range	2.50		
Skewness	0.433		
Kurtosis	0.376		

Test the hypothesis

 H_0 : The quarterly GDP growth rate for Albania during the specified period follows a normal distribution.

 H_1 : The quarterly GDP growth rate for Albania during the specified period follows a non-normal distribution.

We use Kolmogorov – Smirnov – Lilliefors test as well as Shapiro – Wilk test for normality.

The observed value of KSL test = 0.092 and the associated significance level = 0.200^* . The observed value of SW test = 0.965 and the associated significance level = 0.251.

Decision Rule:

Reject the null hypothesis H_0 at the confidence level 74.9%.

Definition (according to J. L. Stein, E. Fama, and N. N. Vorobiev)

A discrete stochastic process is said to be a fair game if the successive differences of this process follow a normal distribution with mean zero.

Using SPSS, version 21, calculate the statistical parameters for successive differences of quarterly GDP growth rate for Albania during the period January 2005 – September 2014, see table 1.

We present the statistical parameter for successive differences of quarterly GDP growth rate.

Sample size	38		
Mean		0.197	
	Lower	-0.864	
95% Confidence Interval for	Bound		
Mean	Upper	1.248	
	Bound		
Median	0.685		
Variance	10.224		
Standard Deviation	3.1975		
Coefficient of variation	16.23		
Minimum	-6.4		
Maximum	7.9		
Range	14.3		
Interquartile Range	3.7		
Skewness	-0.015		
Kurtosis	-0.055		

Test the hypothesis

- H₀ : The successive differences of quarterly GDP growth rate for Albania during the period January 2005 September 2014 follow a normal distribution.
- H_1 : The successive differences of quarterly GDP growth rate for Albania during the specified period follow a non-normal distribution.

The observed value of KSL test = 0.094 and the associated significance level = 0.200^* . The observed value of SW test = 0.982 and the associated significance level = 0.782.

Decision Rule

Accept the null hypothesis H_0 at the confidence level 78.2%. That is, at the confidence 78.2%, the quarterly GDP growth rate for Albania during the specified period is a fair game.

4.2. Statistical analysis of the quarterly unemployment rate in Albania: Jan. 2005 – Sept. 2014

The data set is quarterly unemployment rate for Albania during the specified period, see table 1. Using SPSS, version 21 (2013), compute the statistical parameters for the data.

Sample size	39		
Mean		14.11	
	Lower	13.60	
95% Confidence Interval for	Bound		
Mean	Upper	14.61	
	Bound		
Median	13.80		
Variance		2.382	
Standard Deviation	1.543		
Coefficient of variation	0.1094		
Minimum	13		
Maximum	19		
Range	6		
Interquartile Range	1		
Skewness	1.162		
Kurtosis	1.813		

Test the hypothesis

- H₀: The quarterly unemployment rate for Albania during the specified period follows a normal distribution.
- H₁: The quarterly unemployment rate for Albania during the specified period follows a non-normal distribution.

The observed value of KSL test = .296 and the associated significance level = .000. The observed value of SW test = .772 and the associated significance level = .000.

Decision Rule

Reject the null hypothesis H_0 at 99.9% level of confidence. In other words, the official data regarding to the quarterly unemployment rate in Albania during the period January 2005 – September 2014 contradicts Central Limit Theorem at the confidence level 99.9%.

We compute the statistical parameters for successive differences of quarterly unemployment rate in Albania during the specified period, see table 1.

Sample size	38		
Mean		0.113	
	Lower	-0.066	
95% Confidence Interval for	Bound		
Mean	Upper	0.293	
	Bound		
Median		-0.50	
Variance		0.298	
Standard Deviation		0.543	
Coefficient of variation		4.8345	
Minimum		-0.9	
Maximum		1.6	
Range		2.5	
Interquartile Range		0.4	
Skewness	1.491		
Kurtosis		2.302	

Test the hypothesis

- H₀: The successive differences of quarterly unemployment rate for Albania during the specified period follows a normal distribution.
- H₁: The successive differences of quarterly unemployment rate for Albania during the specified period follows a non-normal distribution.

The observed value of KSL test = .226 and the associated significance level = .000. The observed value of SW test = .822 and the associated significance level = .000.

Decision Rule

At the confidence level 99.9%, the unemployment process in Albania during the period January 2005 – September 2014 is an unfair game (or speculative game).

Remark 1

It is a very hard work to perform a statistical analysis across 39 issues of democratic deficit for Republic of Albania during the period January 2005 – September 2014.

5. Conclusions

Democratic deficit is an insufficient level of democracy in political institutions and procedures, in comparison with a theoretical ideal democratic government.

According to this definition, democratic deficit is the gap between << what is >> and << what ought to be >>.

Democratic deficit denotes the absence of development of care institutions such as government, parliament, and political parties. In this sense, democratic deficit may be used to describe (or reflect) the various ways in which the care institutions may shortfall to function properly (e.g. lack of accountability, lack of transparency, inadequate or insufficient participation of citizens in policy making, technocratic decision making process, etc.). In other words, democratic deficit is any institution in which there is believed to be a lack of democratic accountability and control over the decision-making process. In this context, democratic deficit means << too little democracy >>.

The public aspirations toward democratic ideals, principles, and values (that is, demand for democracy) proved almost universal around the world.

At the same time, however, the democratic states today are suffering from a << democratic deficit >>, representing the divergence of perceived democratic performance from public aspirations and expectations. Citizens in many democratic countries had proved increasingly skeptical about the actual workings of the core institutions of representative democracy, notably governments, parliaments, and political parties.

Any contemporary (modern) democratic state may suffer from democratic deficit.

The notion of << democratic deficit >> encompasses distortions in the random dynamic flows of influence from citizens to government, parliament, and political parties. The democratic deficit could be explained by some combinations of growing public expectations for democracy (demand side of democracy), the potential impact of negative news about government or parliament performance, and perceived shortfalls in government or parliament performance (supply side of democracy).

Support for political system is best understood as a random process containing the following components:

- 1. Support for regime principles, including approval of democratic values.
- 2. Evaluations for the overall performance of the regime, exemplified by satisfaction with the workings of democracy.
- 3. Confidence in democratic state institutions, notably government, parliament, political parties, the courts, the civil services, and the security forces.
- 4. Trust in elected and appointed officeholders, including leaders and politicians.

Trust in political institutions such as governments, parliaments, and political parties displays random and persistent contrasts among democracies in Europe and the USA, as well as fluctuations among different branches of government within each democratic state.

The appropriate mathematical theory for analyzing trust in political institutions is Modern Probability Theory.

The multidimensional notion << democratic deficit >> depends on 39 issues (components), and each issue is a random variable (in the sense of Probability Theory). For the sake of simplicity, in the present study we investigate only issue no.1 and no.19 in Republic of Albania during the period January 2005 – September 2014. The sources of official data are Institute of Statistics of Albania (INSTAT) and Bank of Albania (BoA).

- At the confidence level 74.9%, the quarterly GDP growth rate for Albania during the specified period contradicts the Central Limit Theorem.
- At the confidence level 78.2%, the quarterly GDP growth rate for Albania during the specified period is a fair game (in the sense of J.L. Stein, E. Fama, and N.N. Vorobiev).
- At the very high confidence level 99.9%:
 - i. the quarterly unemployment rate for Albania during the specified period contradicts the Central Limit Theorem;
 - ii. the quarterly unemployment rate for Albania during the specified period is an unfair game.
- What does the present study tell us about the quality of democratic government at the state level?
- How responsive is the democratic state policy to voter preferences (public opinion)?

To be clear, by responsiveness we mean the existence of a positive Pearson correlation between voter preferences and state policy; by congruence we mean that the state policy actually matches majority opinion (preferences).

Erikson, Wright and McIver (1993), Matsusaka (2005, 2010), Park, Gelman and Bafumi (2006), Lax and Phillips (2009, 2012) find out that the voter preferences had actually a moderate impact to the state policy: they established a moderate correlation, in the Gelfand's sense, between voter preferences and aggregate democratic state policy.

- A complete model (picture) of statehouse democracy requires studying and evaluating both responsiveness and congruence during a specified period.
- The modern democratic state governments are on average 50-60% effective in translating majority preferences into the state policy.

Together, the presence of responsiveness to voter preferences combines with evidence of policy incongruence creates a complicated situation of statehouse democracy. We expect the existence (presence) of democratic deficit.

- The democratic state policy is more polarized than voter preferences.
- To estimate the state-level voter preferences across 39 issues (components) for democratic deficit, we use Multilevel Regression and Postratification (MRP) method. So that, we compute Pearson's coefficient of correlation between voter preferences and state policy for each specific issue (across 39 issues for democratic deficit).
- The voter preferences-state policy relationship is affected by interest group dynamics. We show that the effects of this relationship are very complicated, depending on political corruption. Interest groups can block or enable majority preferences, because the balance of interest groups is the key: some democratic states would have higher congruence, other democratic states would have lower congruence.
- The democratic state governments being closer to the people are better able to tailor effective voter preferences-state policy relationship.

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