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Free and Fair Elections – A New Database

Sylvia Bishop† and Anke Hoeffler‡

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†*Department of International Development, 3 Mansfield Rd, Oxford OX1 3TB, UK*
(email: sylvia.bishop@stx.ox.ac.uk)

‡*Department of Economics, Manor Road Building, Oxford, OX1 3UQ, UK*
(email: anke.hoeffler@economics.ox.ac.uk)
Corresponding author

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Abstract

The holding of elections has become universal but only about half of all elections have been free and fair. Electoral malpractice not only distorts the quality of representation but has implications for political, social and economic outcomes. Existing datasets either provide broad information on election quality for large panels or they provide very detailed information on electoral processes and events for a small number of elections. Our data collection effort closes this gap. We provide an assessment of elections that is closely tied to the commonly used term ‘free and fair’ and base this proxy on ten variables for a global panel. Our preliminary results suggest that there are a number of elections that are unfree but fair. Most observer organisations concentrate on the election as an event, i.e. whether the election was fair. We therefore recommend that international organisations should put more emphasis on monitoring the run up to the elections, i.e. whether the elections were free.

1. Introduction

Almost all countries hold elections to determine their leaders, only 14 countries did not hold national elections during the past decade¹. However, our newly collected database suggests that only about half of all the elections were free and fair. Electoral malpractice is widespread and many elections do not reflect the will of the people.

If many elections are not designed to offer a free and fair choice, why are elections so popular? After the fall of the Soviet Union we experienced a global ‘fourth wave of democratization’ (McFaul, 2002). The popular uprisings in Central and Eastern Europe provided a template for populations across the world to demand participation in the process of choosing their leaders. The end of the Cold War also meant that donors did no longer have to support authoritarian rulers for geo-strategic reasons. Thus, internal and external pressures lead to elections becoming a worldwide norm. Autocrats conceded elections because it was not possible to stay in power if they refused to hold elections. Elections serve a number of purposes in authoritarian regimes (Schedler, 2013, chapter 5). Multiparty elections provide internal and external legitimacy of the regime. They also produce information on allies, voters and adversaries and during the election process rulers can disseminate information on the power and determination of their regime. Although elections place some constraints on the autocrat they do also constrain challengers. By allowing the opportunity to challenge the regime at the polls they create constraints on non-electoral challenges. Often the autocrats’ rule is threatened by the military and elections provide some ‘coup-proofing’ of the regime.

Most of our information on election quality comes from international observer organisations. If many authoritarian regimes have no intention of holding free and fair elections, why do they let international organisations observe their elections and potentially uncover electoral fraud? Like holding elections, their observation has become the international norm (Hyde, 2011). The number of observed elections has steadily increased over time and it has become internationally expected behaviour to invite election observers. This behaviour is designed to signal a democratic intention to donors and investors.

Why is electoral (mal)practice an important issue? Apart from reducing the objective quality of representation, poor electoral quality also has implications for political, social and

¹ Countries that did not hold mass franchise leadership elections between 2002 to 2011 were Angola, Brunei, China, Cuba, Eritrea, Jordan, North Korea, Libya, Oman, Qatar, Saudi Arabia, Swaziland, Tonga and the United Arab Emirates.

economic outcomes (Birch, 2011). One example is the study by Chauvet and Collier (2009) who investigate the relationship between elections and government economic choices in developing countries. They find that regular elections have structural effects, they improve the overall level of policies. However, if the elections are of low quality, they exert no significant policy discipline. For economic outcomes Collier and Hoeffler (2014) show that elections matter. Free and fair elections discipline leaders and they provide economic growth to increase their chances of political survival.

In order to examine the quality of elections we focus on whether the elections are ‘free and fair’. This has become a very popular term to describe elections. Figure 1 provides a count of how many times the expression ‘free and fair election’ is mentioned. Up until the 1960s this was not a popular description, becoming gradually more widespread and since the late 1980s ‘free and fair’ is a very frequently used term to describe elections.

--- Figure 1 about here ---

A considerable number of datasets provide assessments of the quality of elections. However, although the term ‘free and fair’ is in common use, none of the datasets provides information on whether the election was ‘free and fair’.² Most databases refer instead to the quality of elections (Kelley, 2012), electoral self-determination (CIRI, 2010) or electoral integrity (Norris *et al*, 2013).

Our objective is first to define what we understand by free and fair elections and provide a measurement of the phenomenon. We suggest that ‘freeness’ of the election refers to the rules of the election and the process leading up to the election. ‘Fairness’ of the election refers to the events on the election day. Based on ten variables we assess whether the elections were free and fair. We find that about half of all elections are marred by malpractice that lead us to conclude that the election was either unfree or unfair or both. However, our data suggest that there are a number of elections that are unfree but fair (e.g. not all voters were registered but there were no irregularities on the election day). On the other hand there were few elections that were free but unfair, this does not appear to be a popular option when trying to influence the election results. Most observer organisations concentrate on the election as an event, i.e.

² As we discuss in more detail below the CIRI database comes closest to providing information on freeness and fairness. The database used to record a dummy variable for ‘free and fair’ elections but this has been relabelled ‘electoral self-determination’.

whether the election was fair. Our results suggest that international organisations should monitor more closely the run up to the elections, i.e. whether the elections were free.

Our paper is organised in the following way. In Section 2 we define ‘free and fair’ elections and discuss our empirical measures. Section 3 provides some empirical findings and in Section 4 we discuss the related literature and compare our measure to other proxies of electoral quality. Section 5 offers our conclusions and suggestions for future research.

2. Definition and Measurement Issues

Elections are a key element of democracy. The origin of the word ‘democracy’ is Greek and translates as ‘rule of the people’ and this can be understood to be “a political system in which ideologically and socially different groups are legally entitled to compete for political power and in which institutional power holders are elected by the people and are responsible to the people.” (Vanhanen, 2000b:2) Thus, good quality elections strengthen the newly elected leadership’s political legitimacy. Many international organisations and the media use the expression ‘free and fair’ to describe the quality of the election. However, although the expression ‘free and fair’ is universally used, there is considerable discussion in the literature how to define the terms and how to measure the quality of elections. Like many phenomena in the social sciences, the ‘freeness’ and ‘fairness’ of elections is difficult to define and measure.

In order to develop measures of ‘freeness’ and ‘fairness’ we follow the method suggested by Bollen (1990:19). He advocates starting with a theoretical definition, followed by the identification of the major dimensions, the measurement of each dimension, explanations of the creation of the indicators and how to replicate them, specification of the relationship between each dimension and finally report estimates of reliability and validity.

2.1 Definition

As a definition of ‘free and fair’ election we use the standard as set out in the ‘Declaration on Criteria for Free and Fair Elections’. This declaration was adopted by the Inter-Parliamentary Council in 1994 and the declaration starts as follows³:

³ The Inter Parliamentary Union is the international organization of Parliaments, established in 1889. The Union fosters parliamentary dialogue, works for global peace and co-operation and for the establishment of representative democracy. <http://www.ipu.org/english/home.htm>, accessed 19 Sept 2013

“In any State the authority of the government can only derive from the will of the people as expressed in genuine, free and fair elections held at regular intervals on the basis of universal, equal and secret suffrage.”⁴

The subsequent parts of the declaration set out the meaning of universal suffrage, the rights of citizens to vote, to join a party and to stand in elections as well as the rights and responsibilities of states in the conduct of free and fair elections. The declaration does not define ‘freeness’ and ‘fairness’ as such but provides a list of rights and responsibilities that constitute a ‘free and fair’ election. Based on this declaration we summarize our understanding of the meaning of ‘free’ and ‘fair’. ‘Freeness’ means that all adult citizens must have the right to be registered and to vote and must be free to make their choice. They also have the right to establish and join parties and campaign freely within the country. ‘Fairness’ refers to the equal treatment of equals. For example the declaration states that every voter is ‘entitled to exercise his or her right equally with others’, that voters should have equal and effective access to a polling station and that every party should have an equal opportunity of access to the media.

2.2 Major Dimensions

Following on from this theoretical definition we continue by exploring the two major dimensions of our election quality measure. The notion of ‘freeness’ pertains to the rules of the political contest and according to Elklit and Svensson (1997: 35) it is the precondition for ‘fairness’. If these rules are not established, the question of the fair application of these rules is meaningless. This links into another aspect of the notion of ‘free and fair’ elections: the assessment of elections should cover the entire process, not just the election day. The right to vote, the registration of voters, freedom to stand as a candidate in the election and campaign freely and access to the media are all important in the run up to the elections. After the polls close the votes must be counted accurately and the results from each polling station have to be reported and added up correctly. Complaints have to be handled by an independent agency.

Rigging of the elections does not only happen on the day of the election, but pre- and post-election processes are also open to manipulation (Schedler, 2002). However, when elections are assessed, international observers concentrate on the election day. Their judgement of

⁴ As stated in Godwin-Gill (2006) p viii.

whether the election was ‘free and fair’ is based on the conduct of the vote and count on the election day (Elklit and Svensson, 2005: 149).

Based on these considerations our measure should not just provide a singular assessment of the quality of the election but should be based on two separate indicators, judging ‘freeness’ as well as ‘fairness’. Both indicators should be available separately. Some elections may be free but not fair. For example all adults are registered to vote but the ballots are miscounted. Other elections may not be free but fair, for example not all eligible voters are registered but the votes are counted accurately. Neither election would be of a high quality but for different reasons. Related to the two dimensions, a measure of ‘free and fair’ elections should consider the entire election process not just the events on the election day.

2.3 Measurement of the Dimensions

Elections are a complex phenomenon and there are a number of indicators that can potentially provide information on whether the elections were free and fair⁵. Probably no election is perfect in terms of rules and application of the rules. However, in our measurement of electoral malpractice we only want to highlight cases in which the irregularities were not minor but were widespread and did or could have influenced the outcome of the election. Our indicators of freeness and fairness should thus only indicate which rules were (1) intended to skew the electoral process in favour of the incumbent leader or party and (2) application of the rules and events by the leader or the challenger that could have caused the election result to misrepresent the will of the people. Although our measurement of free and fair elections centres on the IPU ‘Declaration on Criteria for Free and Fair Elections’ we also considered more explicitly how the freeness and the fairness of elections can be undermined. Schedler (2002) discusses a menu of electoral manipulation which we used as a basis as well as questionnaires filled in by OSCE election observers. These ‘negative’ definitions of electoral processes and events guide us in our detection of irregularities that could have changed the outcome.

The main data sources we used were Keesings Contemporary Archives, United States Department of State Human Rights Reports and election observer reports from a number of different organisations. Using information from election observers, we can distinguish two main categories of elections: One for which there are observer reports and the other one on

⁵ Our discussion follows Bollen’s discussion on the measurement of political democracy (Bollen, 1980:384).

which there are none. The latter group appears to be a group of two extremes, some countries appear to hold elections that are perceived to be free and fair and thus are not observed in detail and reported on (e.g. most western democracies). Or they are held by regimes that will not allow observers on the ground or are deemed to be so obviously marred by malpractice that detailed observation and reporting would not improve the conduct of the elections. Kelley (2012) provides an excellent analysis of where international election observers are sent and under which circumstances observation works or fails. Following her analysis we conclude that we have most information on elections which appear to be ‘problematic’ to some extent but are not perceived as such severe cases of malpractice that observers are not present. It is an interesting question why some regimes allow elections to be observed although they know that the election process is marred by uncompetitive rules and fraud. Hyde (2011) examines why pseudo-democracies invite observers.

From this discussion two main issues arise. First, there are a number of elections for which we have little information. The absence of information can lead to the conclusion that there were no problems and this would cause us to code too many false positives, i.e. many instances of violation of rules, violence and intimidation are not reported and we would thus conclude the election was free and fair. We try and guard against coding too many false negatives by using a number of databases (e.g. Keesings, US State Department, DPI and CIRI) and if none of these sources indicate problems we code all of our indicators fulfilling our criteria of free and fair elections. This was mainly the issue with western democracies. For other regimes there is often little information and we code this as missing information rather than assuming that there was no problem.

The second issue is that for countries with observer reports we have plenty of information. However, the information is not uniform and we have to make some judgements on whether the observed malpractice corresponded to minor irregularities or could have influenced the outcome of the election. We mainly considered what the intent of the rule or its application was and whether this could have benefited the leader (or the challenger). For example some countries do not allow prisoners to vote but even though this rule restricts the registration of voters it is not designed to influence the outcome of the election. If on the other hand supporters of the challenger are systematically left of the voter register we consider this as a malpractice. Since a lot of coding was based on our judgement we compiled a detailed code book to make the coding process as transparent as possible. We are also aware that the presence of observers may have prevented some forms of malpractice, i.e. there might be a

systematic measurement bias. More of the problematic elections are observed and we have thus have more information on these elections but the quality of these elections were better due to the presence of observers. We are not able to fix this issue but want to flag it so that users of the data can consider the impact of this bias on their results.

2.4 Creation of the indicators and replication

In order to code the quality of each leadership election we created ten indicators. Six pertain to the freeness of the election, i.e. the rules of the election and the process prior to the election day. Four indicators score the fairness of the elections by which we understand the voting and events on or immediately after the election day. If the criteria set out were fulfilled we code the variable one and zero otherwise. We discuss each variable in turn.

Variable 1: Legal Framework

The legal framework guarantees the right to vote and run for office and that elections are run at regular intervals. If any of the following rules were violated, the legal framework indicator received a 0. The legal framework describes the rule of the game. As we will discuss below, these rules are rarely unfree or unfair.

- a. Citizens are constitutionally guaranteed the right to vote
- b. Citizens are constitutionally guaranteed the right to run for office
- c. Laws governing the electoral process are not changed just before the election
- d. Elections are held at regular intervals

Subpoints 1 (a) and 1 (b), requiring that citizens have the right to vote and stand, required some judgement on common exceptions to a universal franchise. We did code as 0 if clergy could not vote as this was at times an important anti-government political constituency. However, we did code as 1 if clergy could not stand for office, as this was generally a separation of powers *de facto*. We coded as 0 if past political actions that were not themselves antidemocratic excluded citizens from standing. This generally excluded people only of a particular political leaning. We also coded as 0 if candidates were required to have an academic qualification that would exclude a high percentage of the population: for example A levels in Uganda, or a degree (for first-time candidates only) in Thailand 2001.

It is worth noting that we only require that citizens can vote. We did not assess the justice of citizenship requirements. Thus, occasionally disenfranchised populations exist, but all citizens could vote, and these cases are coded as 1. For example, Liberian citizenship laws require black African origin, and people of other origins may only obtain permanent residency status. These permanent residents cannot vote.

Variable 2: Electoral Management Bodies (EMBs)

Elections have to be managed independently, otherwise they are deemed to impact on the quality of the election. Many countries have EMBs to insure the quality of the elections. We found that most problems arose from the fact that EMBs were not independent and impartial from the government. Some countries have no EMBs but the elections are managed by government ministries. These were coded as not applicable; it would have been unhelpful to code them as violating criterion 2c as they were often highly reputable elections (for example elections in Belgium, Denmark and Finland).

- a. Election boundaries are set so that no one candidate/party is favoured (no gerrymandering) (de facto)
- b. EMBs are held accountable to election law and abide by it
- c. EMBs are independent and impartial
- d. EMBs have sufficient time to organize elections (i.e. no snap election)
- e. Decisions made by and complaints made to the EMBs are subject to review and possible reversal

Variable 3: Electoral Rights

Having the legal right to vote is not always sufficient to ensure that citizens are able to exercise this franchise in practice. We code this indicator as 0 if any of the following rules are violated. Note that if citizens are not guaranteed the vote de jure (which is rare), then this indicator is automatically violated.

- a. Equal suffrage is in place for citizens of voting age (e.g. no voter group is systematically disadvantaged) (de facto)
- b. Equal and effective access to polling stations is in place
- c. Any limitations on voting are based on internationally recognizable and acceptable norms

- d. Voters have been informed effectively about how and where to vote

Many observer reports do not explicitly refer to voters having difficulties in exercising their right to vote. We decided to code as 1 if the observer report was comprehensive and the turnout was over 50%.

Variable 4: Voter Register

An expanded voter register allows for easier manipulation of the voting process; an incomplete voter register can place de facto limits on citizens' right to vote (overlapping with the previous indicator). We code this indicator as 0 if any of the following are violated:

- a. Voter registers are up-to-date for the election taking place
- b. Voter registers are accurate: without false names, lack of correct names of individuals, inclusion of name of non-eligible voters (e.g. the dead or children) and multiple entries
- c. Voters are able to easily and effectively register to vote and can meet the necessary requirements on time

Under-registration of voters can be due to different reasons: It may be due to anti-democratic intentions due to capacity issues. We coded as 0 any cases where registration fell below 80%, and for cases over 80% we only coded as 0 if there was evidence of deliberate malpractice. This threshold was a compromise intended to capture all deliberately antidemocratic regimes, and minimize the number of democratic regimes with a low capacity to be given a 0 coding.

Variable 5: Ballot Access

Governments have multiple options for restricting competition de facto, despite legal rights of the opposition to run. We code as 0 if any of the rules below are violated. Note that if citizens are not guaranteed the stand de jure, then this indicator is automatically violated.

- a. Citizens eligible to stand are able to compete in the election (de facto)
- b. Parties/Candidates get equitable treatment when applying for office
- c. Any rejections of candidature are based on internationally recognizable and acceptable norms
- d. No one candidate gets over 75% of the votes

Coding of criterion 5d merits some discussion, as it is the only ex-post indicator of an unfair election included in our coding system. Reviewing violations of this criterion, we found no elections where we had reason to suspect the election was clean and the result was entirely due to candidate popularity. Thus, we feel assured that this criterion will not give a misleading impression. For the majority of elections violating this criterion, the likely causes of the outcome were clear from other information we had coded. However, 8 cases had fewer than two other criteria coded, while 5 had been boycotted by the opposition, a fact which is only captured by this criterion within our scheme. For these cases, the coding of 5d provided valuable additional information.

In addition, we are aware that our database does not have any other means of capturing long term systemic advantage. A high proportion of violations of criterion 5d occur in Sub-Saharan Africa and post-Soviet states, suggesting that the transition from a one party state might well structurally contribute to very skewed vote outcomes. The requirement that no candidate gains over 75% of the vote goes some way to capturing long term disadvantages that may seriously constrain the ability of opposition to mobilize, without any specific actions needing to be taken during the campaign period or voting day.

Variable 6: Campaign Process

Even where the opposition can run de facto, their ability to compete with the incumbent during the campaign process may be hindered. In addition, the opposition may also use this stage of the process to “cheat” (e.g. through vote buying). We code this indicator as 0 if any of the following criteria are violated:

- a. No violence, bribery, intimidation or any other unequitable treatment of voters occurs during the process (either threatened or carried out)
- b. No violence, bribery, intimidation or any other unequitable treatment of candidates occurs during the process (either threatened or carried out) (key aspect)
- c. Campaigns are free from government interference and the candidates are able to freely express themselves by holding rallies, etc.
- d. Campaign Finance:
 - i. Prohibition on use of government resources other than that provided to all candidates
 - ii. Without massive financial advantages for the incumbents

Two main concerns arose here. The first was how to deal with generalized violence, where the relationship to the election was unclear. We did code as 1 the danger of violence for citizens did not increase if they engaged in political activity, or if isolated clashes occurred between party supporters with complex motivations. The second was how to deal with infrequent or unsubstantiated reports of violence or bribery. Unlike voting process (see below), we did code as 0 for infrequent reports, as these issues are likely to be underreported. For unsubstantiated but widespread reports, for example in cases where it was evident that all stakeholders assumed bribery occurred, we coded as 0 as substantiation is not a feasible requirement. Where allegations were both unsubstantiated and infrequent, we were perforce guided by the attitude of the authors of our sources when assessing whether to take these allegations as fact and coded as 1.

Variable 7: Media Access

Another opportunity to distort equal competition arises where the media can be manipulated. This might be through constraint, or through exploitative use of state media. We code this indicator as 1 if all of the following criteria are met:

- a. All parties/candidates are provided with access to the media
- b. All parties/candidates have equitable treatment and time on government owned media and the ruling party does not get disproportionately large media coverage in the name of news/editorial coverage
- c. Freedom of speech is preserved

Variable 8: Voting Process

This variable was coded 1 if all of the following criteria were met:

- a. Votes are cast by secret ballot
- b. Voters are practically limited to one vote per person (de facto)
- c. Adequate security is in place for both the voters and the ballots
- d. Balloting is done without ballot box stuffing, multiple voting, destruction of valid ballots, officer voting, or manipulation of votes cast outside polling place
- e. Voting occurs without intervention of any agent

At times it was unclear whether a ruling party was receiving more coverage via ongoing news stories, and whether coverage of different groups was qualitatively different. We coded

1 where it was clear that all serious opposition parties and candidates had been able to spread their message effectively and had not been grossly misrepresented, setting aside quarrels about exact parity which we did not have sufficient information to judge.

Variable 9: Role of Officials

It is not necessary to directly manipulate votes to distort an election during the voting process. Illicit intimidation and persuasion, lack of transparency and subtle rule violations are captured by this indicator, which is coded 0 if the following are violated:

- a. The officials adhere to the election procedures (e.g. they have been trained adequately and know which procedures to follow; they do not interfere in the voting process and file complaints made to them, etc.)
- b. Unauthorized persons are barred from entering the polling station (e.g. Army members)
- c. No campaigning is done within the polling station
- d. Transparency is in place: all parties are able to have observers in the station
- e. International Election Observers can view all parts of the voting process

Incompetence of officials was frequently a mild complaint but not deemed to have any impact on the outcome. These procedural issues were ignored.

Variable 10: Counting of Votes

Finally, an honest vote count is of course crucial to the fairness of an election. We coded as 0 for a dishonest count if any of the following were violated:

- a. Tabulation of votes can be tracked from polling stations up through intermediate centers and to the final processing station
- b. Entire counting process is observed by more than one group
- c. No rules on what constitutes a valid ballot that favor one candidate/party
- d. No evidence for fraud in any way (e.g. no inflation of election results by polling officials, no tampering with the ballot boxes during the counting or movement, etc.)

We came across cases where a recount was demanded for a limited number of polling stations, and settled by a court of similar body. Where resolution was peaceful and legal, we

did not code as 0 for the original miscount. Likewise did not code as 0 for procedural problems with the count not held to affect the outcome.

3. A First Look at the Data

Following the above coding guidelines we have been able to code some information on 1,114 elections in 169 countries for the period 1975-2011. For 890 elections we have sufficient information to code whether the elections were free and fair. As Figure 2 shows, the number of elections has increased over time. Due to different election cycles the graph has a lot of ‘spikes’ but there is a strong positive trend. Per year there were an additional 0.88 elections.

--- Figure 2 about here ---

Is this positive trend due to an increase of free and fair elections? Or is it due to an increase in poor quality elections? In order to establish the quality of the election we use variables 1-7 to determine whether the election was free. If at least four variables scored a one, i.e. fulfilled our criteria on the legal framework, EMBs, electoral rights, media access, voter registration, voting process and ballot access, we defined the election as ‘free’. If at least two variables out of variables 8-10 fulfilled our criteria on voting process, the role of officials and vote counting, we coded the election as ‘fair’. This allows us to categorize elections in different manners. First, we can distinguish between free and fair elections and elections that are marred by *any* irregularities. Second, we can distinguish between four different types of elections: (1) free and fair elections, (2) unfree and unfair elections, (3) unfree but fair elections and (4) free but unfair elections.

In Figure 3 we sum the total number of elections per five year periods (1975-79, 1980-84, ..., 2005-09) to smooth out the series. We plot the free and fair elections in light grey and the unfree and unfair elections in dark grey. Over the entire period about 53 per cent of all elections were free and fair. Figure 3 shows that for the earlier periods the number of problematic elections were considerably lower than the number of free and fair elections. About 70 per cent of all elections were free and fair. Towards the end of the period there were proportionally more problematic elections, only about 50 per cent of all elections are now free and fair. Thus, the evidence suggests that although the number of elections has increased, the number of problematic elections has increased disproportionately.

--- Figure 3 about here ---

We then turn to the question which problems are most common in elections. Are they more often marred by problems in the run up to the election (freeness) or by problems on the election day (fairness)? For 890 elections we can determine whether the election was free and fair and Table 1 offers a cross-tabulation. About 53 per cent of all elections (469) are rated as free and fair while there were problems with freeness *and* fairness in 212 elections (24 per cent). About 19 per cent of all elections are characterised by problems during the run up of the elections (unfree) but not during the election day. An example of unfree but fair elections is when there are irregularities in the voter registration but no irregularities in terms of voting on the day or the counting of votes. Only a small number of elections (about four per cent) have no irregularities in the run up to the elections but are marred for example by voter intimidation or ballot box stuffing on the election day. These elections are free but unfair.

--- Table 1 about here ---

We now turn to a closer inspection of the data by examining (1) regional differences and (2) the characteristics of incumbent elections.

Regional Differences

In Table 2 we list the 890 elections by region (as per World Bank classification). The first column shows the number of elections held and the second column lists the percentage of free and fair elections for each region. This table suggests that there is a considerable regional variation. In the high income countries about 90 per cent of all elections were free and fair, while in the Middle East and North Africa region the proportion of free and fair election is very small (about six per cent).

--- Table 2 about here ---

When we only consider elections in middle and low income countries, about 29 per cent of all elections are free and fair. Thus, Sub-Saharan Africa has only slightly fewer free and fair elections than the global average for developing countries. Figure 4 depicts the number of elections in Sub-Saharan Africa on a year by year basis and provides a comparison to the number of elections in all other regions. While the number of elections increased over time in Sub-Saharan Africa, this rate was much lower than in other regions. Per year there were 0.27 additional elections, while this rate was an additional 0.59 elections elsewhere.

--- Figure 4 about here ---

In Figure 5 we sum the number of elections by five year periods and this graph shows clearly that the number of elections increased considerably after 1989. The light grey bars represent the number of free and fair elections. While the number of free and fair elections increased over time, the number of problematic elections (represented by the dark grey bars) was higher in every period. For the period 2005-09 the number of free and fair elections declined when compared with the previous period and the numbers for 2010-12 suggest that only a small proportion of elections were free and fair (2 out of 26). This is further evidence for democratic backsliding in Sub-Saharan Africa (as discussed by Bates *et al* 2012, 2013).

--- Figure 5 about here ---

In Sub-Saharan Africa about 44 per cent of all elections were unfree and unfair, while 23 per cent of elections were unfree but fair. However, like for the global sample the combination of a free run up to the elections and then restricting the voting and vote counting on the day is very rare (only about two per cent of all elections are free but unfair). Table 3 provides a detailed breakdown of (1) free and fair elections, (2) unfree and unfair elections, (3) unfree but fair elections and (4) free but unfair elections.

--- Table 3 about here ---

Incumbent Elections

Incumbent elections deserve particular consideration. Irregularities in elections can occur due to actions taken by incumbents or the challengers. However, there are a number of electoral procedures that incumbents can more easily exert influence over than challengers (Calingaert, 2006). Take for example voter registration and vote counting where the opposition has fewer opportunities to cheat. Bribing and intimidating voters may thus be tactics more often used by the challengers. For 826 elections we have information on whether the incumbent stood and whether s/he won the election. Out of this sample, 628 were incumbent elections. The cross tabulations in Table 4 show that about 55 per cent of these incumbent elections are free and fair, this is a similar percentage to the whole sample (53 per cent of elections are free and fair, as shown in Table 1).

--- Table 4 about here ---

Which election tactics characterise (non-)incumbent elections? We compare the tactics in non-incumbent elections (Table 5) to the tactics in incumbent elections (Table 6).

--- Tables 5 & 6 about here ---

The biggest difference in election tactics is that in non-incumbent elections the proportion of free but unfair elections is relatively high (about 10 per cent of all elections). At this point it is unclear whether the irregularities on the election day is mainly caused by the incumbent or the challenger. This is an interesting avenue for further inquiry.

Are incumbents more likely to win irregular elections? When incumbents stand in free and fair elections they have a 58 per cent probability of winning, while this probability is increased to 75 per cent if they stand in irregular elections. This is comparable to the figures reported by Collier and Hoeffler (2014). They calculate that due to irregular tactics incumbents extend their average time in office from 6.4 years to 15.8 years. Furthermore, they suggest that irregular elections matter for economic performance. Due to the employment of irregular tactics incumbents avoid the discipline that elections impose on them: they do not have to rely on providing good economic performance that would increase their chance of re-election.

--- Table 7 about here ---

4. Other Election Databases – A Comparison

4.1 Data on the Quality of Elections

There are a number of databases that provide proxies for ‘democracy’ and the quality of elections. While democracy is not synonymous with elections, elections are an integral part of the definition of democracy and it is therefore interesting to review some of the democracy indicators as well as databases on elections. We start our discussion with an overview of the most widely used databases and suggest that none of these offer an in depth assessment of whether elections are ‘free and fair’. We also consider some of the more recently developed election quality databases. Some offer very detailed information about the ‘freeness’ and ‘fairness’ of the elections but only cover a small number of elections. Thus, researchers have to choose between less detailed quality indicators which are available for many years and

countries and indicators that are detailed but only available for a small number of elections. We discuss each dataset with respect to their measurement of the quality of elections. Table 6 provides an overview of all the datasets we considered.

--- Table 8 about here ---

Polyarchy

We start with Vanhanen's Polyarchy dataset. It offers an assessment of democratization and the definition centres on two main principles: public contestation and the right to participate. Political competition is measured as the smaller parties' share of the votes cast in elections, it is calculated by subtracting the percentage of votes won by the largest party from 100. Political participation is measured as the percentage of the population who voted. The Index of Democratization (ID) is calculated by multiplying the two indexes and dividing by 100. This construction of the Index of Democratization assumes that political competition and participation are equally important to define democracy and that low competition cannot be substituted by high participation and vice versa. Thus, democracy is defined by two election variables. They are both quantitative and free from any subjective assessment that can be inherent in qualitative data. These quantitative variables allow us to assess the quality of elections. The participation variable can be interpreted as an indicator of whether the elections were 'free' and the competition variable indicates whether the election was 'fair'. Both indicators on competition and participation, as well as the overall Index of Democratization are available for 187 countries from 1810-2000.

There are a number of reasons why the use of the Vanhanen Polyarchy data is problematic in the assessment of the 'freeness' and 'fairness' of the election. Vanhanen (2000:255-257) himself provides a critical discussion of the issues. The share of the largest party determines the index of political competition. Electoral systems with proportional representation tend to have more parties gaining seats and thus the competition measure is biased to produce higher values for proportional electoral systems when contrasted with plurality or majority electoral systems.

Another potentially problem is that the Vanhanen competition index does not allow us to distinguish between popularity and fraud. Popular leaders can win landslide victories. On the

other hand elections may be won by leaders committing widespread electoral fraud to win at large margins. In both cases the competition indicator would be small but we are unable to distinguish whether this is due to popularity and fraud (Hyde and Marinov, 2011).

Participation rates do not only reflect the ‘freeness’ of elections, but also the difference in national laws. In some countries, for example Austria, voters are legally obliged to vote. Participation rates also depend on the age structure of a country, in countries with a large youth bulge the participation rate is lower. There is also a potential endogeneity issue. The empirical study by Birch (2010) suggests that voters are more likely to turn out if they perceive the elections to be free and fair.

Freedom House

Other democracy definitions focus less narrowly on elections. Freedom is at the centre of the Freedom House assessment of political regimes and freedom is measured as political rights and civil liberties. Freedom House rates freedom based on a large number of variables. The assessment of political rights includes a rating of the electoral process and Freedom House staff consider the following three questions:

- Is the head of government or other chief national authority elected through free and fair elections?
- Are the national legislative representatives elected through free and fair elections?
- Are the electoral laws and framework fair?

Thus, Freedom House has extensive information about whether elections were free and fair but this information is only used internally to construct the measure of political rights and overall freedom. While the measures of political rights and freedom are publicly available for the years 1973 to most recent, the ratings of the electoral process questions have only been made public since 2006.

Polity IV

One of the most widely used datasets in social sciences is Polity IV. The indicator ‘democracy’ is based on four component variables: (1) competitiveness of executive recruitment, (2) openness of executive recruitment, (3) constraints on the chief executive and (4) competitiveness of political participation. Thus, this definition of democracy considers openness and competitiveness of the political regime as well as constraints on the political

leadership. The democracy indicator is an additive eleven-point scale (0-10) with higher values indicating more democratic regimes. The four component variables are all qualitative and the different rules of recruitment, competition and participation receive different weights.⁶ The democracy score as well as the four underlying component variables are available. Although the dataset does not provide information on whether elections were free and fair, some judgement about the rules of recruitment and competition can be made. However, there is no information to which extent the rules of recruitment and competition were adhered to. Thus, Polity IV variables can be interpreted as providing some information on the freeness of elections but not on their fairness. Data are available for 167 countries for 1800-2012.

DPI

A dataset that offers an assessment of the quality of elections is the Database of Political Indicators (DPI, Beck *et al* 2001). Data are available for 180 countries for 1975-2012. The database lists executive and legislative election dates and provides indicators whether the system is presidential or parliamentary. Two variables provide information on the quality of the elections. One is a dummy variable which takes a value of one if ‘vote fraud or candidate intimidation [were] serious enough to affect the outcome of elections’. However, as the authors acknowledge, their assessment is based on reported fraud and thus ‘there may have been instances of fraud/violence that were not reported, thus resulting in false negatives.’ According to the DPI fraud is only recorded in 14 per cent of the elections.⁷

The electoral competitiveness variables measure provides information on the quality of the elections. On a 1-7 scale an election only receives one point if there is an election but no legislature, two if there is an unelected legislature, three if there was no choice of candidates, four if there were multiple candidates but only one party, five if there were multiple parties but only one party won seats, six when the largest party gained more than 75 per cent of the seats and seven when the largest party received less than 75 per cent of the seats. An interpretation of the DPI fraud dummy is whether the election was clean or ‘fair’ while the electoral competitiveness variable captures the notions of ‘free’ as well as ‘fair’. A high score in the electoral competitiveness score indicates that the elections were free because multiple

⁶ One example would be a polity that recruits the executive in a competitive election (two points), the competition is a regulated process which is in principle open to anybody (plus one point), an accountability group (e.g. legislature) has effective control over the executive (plus four points) and political participation is permitted and political groups regularly compete for political influence at the national level (plus three points).

⁷ This calculation is based on Collier and Hoeffler (2014).

parties and candidates were allowed to contest the election. A relatively high score of six may indicate that the elections were not completely ‘fair’, because the ruling party may have received more than 75 per cent of the votes because the votes were counted fraudulently or some opposition voters did not turn out due to intimidation). Thus, the DPI measures are only of limited use when assessing whether elections are ‘free and fair’, because the electoral competitiveness variable considers both dimensions, freedom and fairness, and the electoral fraud variable is likely to be too conservative.

CIRI

The Cingranelli and Richards (CIRI) Human Rights Data Project includes a variable of electoral self-determination. Formerly this variable was known as ‘free and fair elections’. This is the result from expert coding, using mainly US State Department and Amnesty International reports. The database spans 200 countries and territories and data are available from 1981-2010. The indicator is a categorical variable and it measures to ‘what extent citizens enjoy freedom of political choice and the legal right and ability in practice to change the laws and officials that govern them through free and fair elections’⁸. A score of zero is given to countries where the right to self-determination through free and fair elections did not exist in law or practice. The intermediate score of one indicates that the right to self-determination through free and fair elections existed by law but that there were some limitations to the fulfilment of this right in practice, for example biased vote counting and tabulation, use of defective polling machines, government manipulation of voter registration lists, voter intimidation, physical violence, bribery.⁹ Unfortunately, while this dataset is widely used and trusted, there is no further information why the coding was given. It also does not allow for a distinction whether problematic elections were unfree (e.g. limits and irregularities in voter registration, party campaigning) or unfair (e.g. voter intimidation, fraudulent vote counting) or both.

QED and DIEM

Two datasets that provide information on the quality of elections are the Quality of Elections Data (QED) and the Data on International Election Monitoring (DIEM) (Kelly and Koley, 2010 and Kelly 2012). The QED data provides information on 1,202 elections from 1975-

⁸ Cingranelli and Richards (2010) p. 5.

⁹ Cingranelli and Richards (2008) p. 59-64.

2004 and is based on the annual US State Department Reports of Human Rights Practices. Additional information is collected from other election monitoring organisations. Two variables provide an assessment of the quality of the election. The variable 'Extent of Problems' is coded zero if there were no problems recorded, one for minor problems and 2 for moderate problems. 'Acceptability' takes a value of one if the organisation judges the election to be free and fair, it takes a value of 0.5 if the organisation's report is ambiguous and zero if the organisation states that the election does not represent the will of the voters and was not free and fair. Thus, the QED dataset provides an assessment of whether elections were free and fair. There are also variables coding whether there were problems prior to the elections and on the election day itself. These measures can be interpreted as assessment of whether the election is 'free' (prior to the election) and 'fair' (election day). The variables include cheating before the election (e.g. restrictions on campaigns) and on the election day (e.g. ballot box tampering). The QED database also provides information on problems on violence and unrest prior to the elections and on the election day.

More detailed information on the election process and election day is provided by the DIEM database. The information spans 306 elections in 109 countries from 1980 to 2004. These are elections that were reported on by election monitors, typically these elections are in the middle spectrum of democracy. There is information on the legal framework, information on the limits to the scope of elective offices and data on the limits who can run for office.

NELDA

A data collection effort that concentrates on measuring electoral competition is the dataset on National Elections Across Democracy and Autocracy (NELDA) as presented in Hyde and Marinov (2011). They base their understanding of competition on Sartori (1976), making a distinction between *competition* as 'the structure or rule of the game' and *competitiveness* as the outcome of that game. The main aim of the NELDA dataset is to provide information on elections that can be lost. Only competitive elections can be lost and Hyde and Marinov (2011:192) code elections as competitive when all three of the following criteria are fulfilled: (1) opposition must be allowed, (2) multiple parties are legal and (3) more than one candidate competes. They argue that these ex-ante measures are better suited to assess whether competition is possible. Ex-post or outcome based measures, such as the share of votes of the largest party can reflect the popularity of the leader but they can also reflect large scale election fraud. Thus, the share of votes does not necessarily reflect the degree of competition

(Hyde and Marinov, 2011:199). Since the NELDA measures of competition concentrate on ‘the rules of the game’ they provide a judgement of the ‘freeness’ aspect of the quality of elections.

IEM

The Index of Electoral Malpractice (Birch 2011) is based on election observer reports and is available for four regions: (1) Latin America and the Caribbean, (2) Eastern and Central Europe, (3) the former Soviet Union and (4) Sub-Saharan Africa. Since the coding is entirely based on election observer reports the elections covered tend to be in the middle spectrum of democracies, i.e. they are likely to be characterized by (some) malpractice. Various aspects of manipulative strategies relating to the legislative framework, campaign practices and the electoral administrative process are coded. Based on 14 variables an overall index of electoral malpractice is generated. The database spans the years 1995 – 2007.

DAE

The Database on Authoritarian Elections (Schedler, 2013) provides information on elections in non-democratic regimes. Schedler uses four categories of political regimes: (1) closed authoritarianism, (2) electoral authoritarianism, (3) electoral democracy and (4) liberal democracy. The focus of the DAE is on the second category. Unlike closed authoritarian regimes, they do hold multiparty elections. However, these multiparty elections are not ‘free and fair’, unlike the elections in electoral democracies (category 3). For authoritarian elections detailed information is available on electoral manipulation (human rights violations, media restrictions, electoral fraud, exclusion), protest and competitiveness. The DAE covers the years 1980-2002.

PEI

There are a number of recent data collection efforts that provide detailed information on elections. We only mention these briefly because they only span a relatively small number of elections. Due to the small number of observations it is difficult to compare. Elklit and Reynolds (2005) introduce a framework for the systematic study of election quality. Based on this work they provide detailed information on 15 elections, assessing the election quality and the management of the elections in 54 indicators per election. The project on Perception of Electoral Integrity (PEI) as described by Norris *et al* (2013) provides a wealth of information on elections, ranging from the assessment of the legal framework, the quality of the election

and surveys of public opinion. At the end of its pilot phase the PEI project had coded 20 elections.

IAEP and Archigos

Lastly, we want to mention two other important databases which provide information on political leadership and elections but do not provide detailed information on the quality of elections. The Institutions and Elections Project (IAEP) focuses on the makeup of the legislative and executive branches of government. It provides detailed information on the constitutions, laws and rules and institutions for about 161 countries for 1970-2005. This database provides election dates and rules, e.g. whether there are scheduled elections or whether the political leader has the power to call elections. However, the database does not provide any assessment of the conduct of the elections. Another impressive data collection effort is Archigos, a database on political leaders (Chiozza, Goemans and Gleditsch, 2009). Archigos provides detailed information on the ‘effective’ leader of a country, i.e. the person that de facto exercises power in a country. This includes the manner in which s/he came to power and left office. Entry and exit from political power can be regular (e.g. through elections) or irregular (e.g. coup d’etat, assassination). However, since the main focus is on leaders and not on elections, there is no detailed information on the quality of elections.

4.2 Data Comparison

For each one of the large-n databases we either used their measure of free and fair elections or created a variable on free and fair elections. We are conscious that most datasets discussed above do not aim to assess whether an election was free and fair and apply different concepts to measure the quality of political democracy or elections. However, in order to make a comparison of the data possible we decided to construct a measure of free and fair elections from each dataset. The various measures of election quality have different scales and we force all of these indicators into a dichotomous variable to assess whether the election was free and fair. Table 7 provides information on how we constructed the free and fair election indicators based on the following datasets: Polyarchy, Polity IV, DPI, CIRI, QED and NELDA.

--- Table 9 about here ---

The various measures of the quality of elections are only weakly correlated with each other. The two variables that are most highly correlated are the QED and CIRI measure ($\rho=0.59$).

Correlation coefficients presented in Table 8 reveal that our measure of free and fair elections is correlated with the Polity IV measure ($\rho=0.63$) and the CIRI and QED measures ($\rho=0.52$). It is only weakly correlated with the Polyarchy measure ($\rho=0.25$) and the NELDA measure ($\rho=0.1$). Cross-tabulations suggest that the biggest source of disagreement between our coding and the CIRI and QED measures are elections that we code as not free and fair but CIRI and QED do.

--- Table 10 about here ---

The QED database offers information on irregularities before the election and irregularities on the election day and thus corresponds closely with our measures of freeness and fairness. The correlation between the two measures of freeness is lower ($\rho=0.4$) than the correlation between the measures of fairness ($\rho=0.56$). Cross-tabulations suggest that QED and our freeness measure disagree in about 20 per cent of the cases, half due to QED coding elections as free while we code them as unfree and *vice versa*. In the case of fairness QED and our measure disagree on about 40 per cent of the cases and they all fall in the category of us coding the election as unfair and QED coding the election as fair.

5. Discussion

The holding of elections has become almost universal but only about half of all elections have been free and fair during the period 1975-2011. Electoral malpractice not only distorts the quality of representation but has implications for political, social and economic outcomes (see for example Birch, 2011; Chauvet and Collier, 2009; Collier and Hoeffler, 2014). Although a number of databases offer an assessment of the quality of elections they do not correspond to the notion of whether the election was free and fair. Existing data collection efforts either offer information on democracy and elections for a large number of countries and years but this information tends to be relatively broad, for example describing electoral fraud in a dichotomous variable, and the documentation tends to offer no further details (e.g. DPI and CIRI). Other databases offer much more detail but only cover elections in authoritarian regimes or semi-democracies (e.g. DAE and IEM). More recently established

databases offer a wealth of information on electoral (mal)practices but only cover a very small number of elections (e.g. PEI). We are trying to close this gap in the literature by (1) providing an assessment of the quality of election that is closely tied to the commonly used term ‘free and fair elections’, (2) by providing information on all elections, irrespective of regime and (3) providing sufficient information on elections so that we and other researchers can make a judgement on whether an election was free and fair. We provide ten variables measuring the rules of the election, the process before the election and events on and immediately after the election day. Our data cover 1,114 elections in 169 countries over 37 years (1975–2011) and we provide a detailed codebook to make our coding decisions transparent and replicable.

Currently we have sufficient data on 890 elections to provide some summary statistics and comparisons with existing electoral quality measures. According to our proxy only about half of the elections are free and fair. We suggest that ‘freeness’ of the election refers to the rules of the election and the process leading up to the election. ‘Fairness’ of the election refers to the events on the election day. Based on ten variables we assess whether the elections were free and fair. Our data suggest that there are a number of elections that are unfree but fair (e.g. not all voters were registered but there were no irregularities on the election day). On the other hand there were few elections that were free but unfair, this does not appear to be a popular option when trying to rig the election. Most observer organisations concentrate on the election as an event, i.e. whether the election was fair. Our results suggest that international organisations should more closely monitor the run up to the elections, i.e. whether the elections were free.

Preliminary analysis indicates that a higher than average proportion of elections in Sub-Saharan Africa are characterized by malpractice. We want to further document and investigate what makes African elections unfree and unfair. Is this due to irregularities in the voter registration or vote counting or due to bribery, voter intimidation and violence?

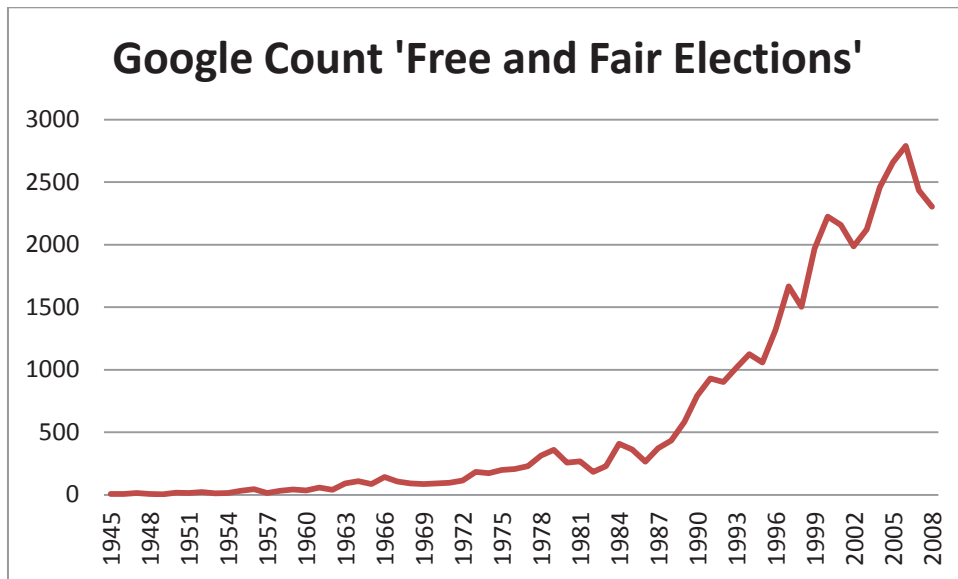
Comparisons with other variables on electoral quality show that our measure is correlated with existing proxies. Conceptually our attempt to measure the freeness and fairness of the election is closest to CIRI and QED. However, the comparison shows that we tend to be more conservative in our judgement. We classify fewer elections as free and fair.

Our database can be used to explore a number of different issues. One project could be to revisit the policy and economic consequences of electoral malpractice building on Chauvet

and Collier (2009) and Collier and Hoeffler (2014). The measure could also be used to investigate *why* some countries have unfree and unfair elections. Another research question would be how electoral systems have developed over the past 35 years. Is the sequence from no elections in authoritarian regimes to unfree and unfair elections and then to free and fair elections? Which dimension improves first, freeness or fairness? Our results suggest that problems of freeness are more widespread. Issues of fairness are usually addressed by sending election observers but how can we improve the freeness dimension of elections?

Figures

Figure 1



Source: <https://books.google.com/ngrams>, for more information see Michel *et al* 2010.

Figure 2

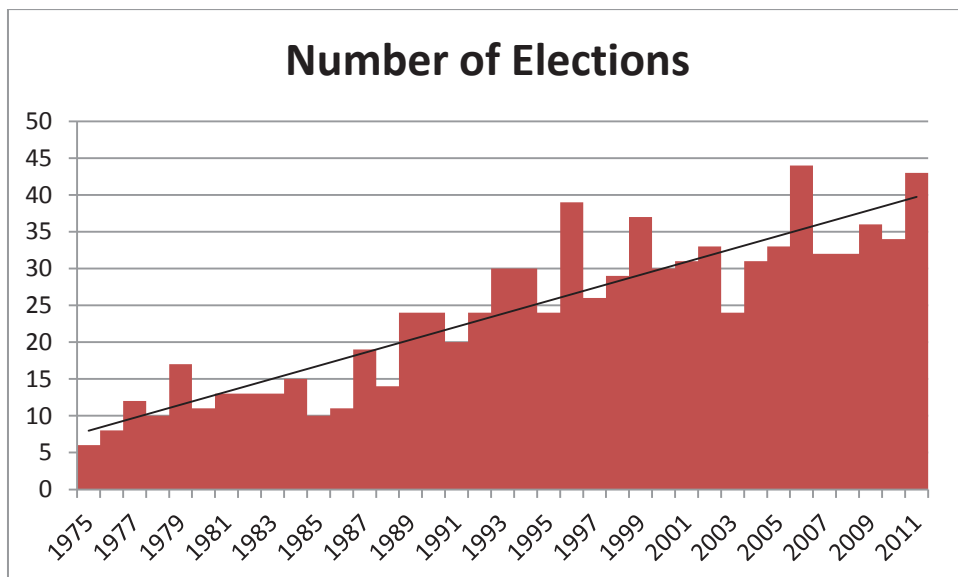


Figure 3

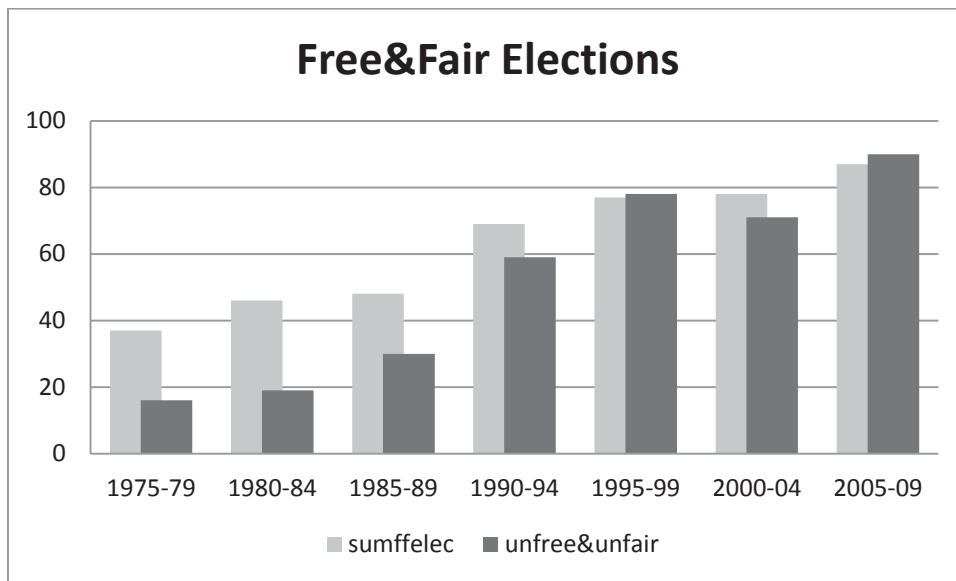


Figure 4

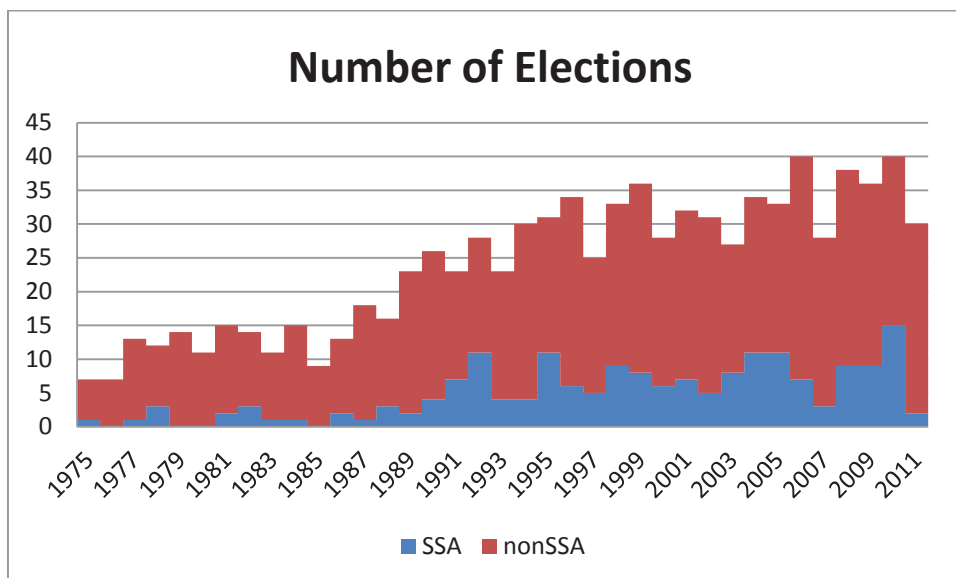
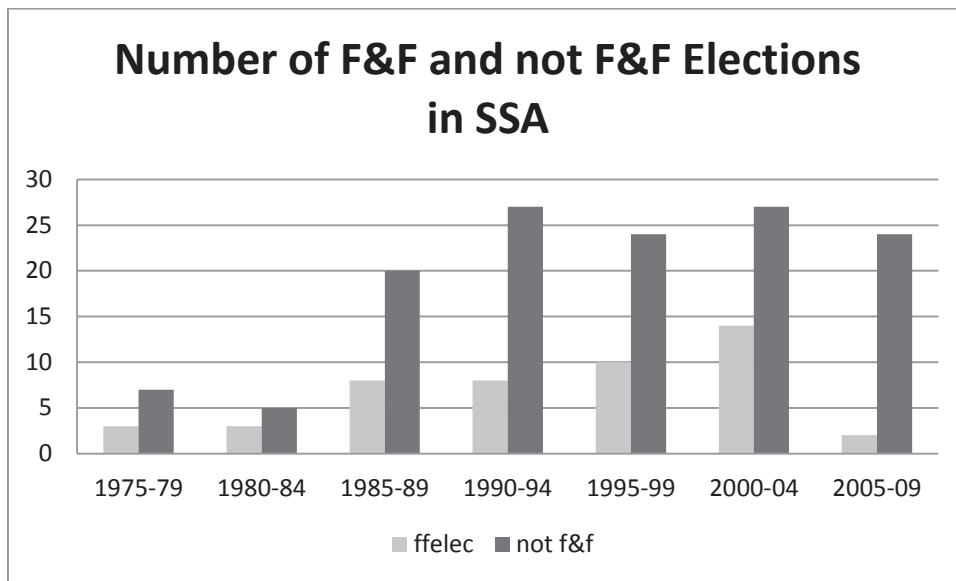


Figure 5



Tables

Table 1: Free and Fair Elections

	Fair		
Free	0	1	Total
0	212	169	381
1	40	469	509
Total	252	638	890

Table 2: Free and Fair Elections by Region

Region	Number of Elections	Percentage of free&fair elections
High Income Countries	333	92
Latin America&Caribbean	173	43
Sub-Saharan Africa	182	26
Europe&Central Asia	87	24
East Asia	66	23
South Asia	32	13
Middle East&North Africa	17	6

Table 3: Free and Fair Elections in Sub-Saharan Africa

	Fair		
Free	0	1	Total
0	80	50	130
1	4	48	52
Total	84	98	182

Table 4: Incumbency and Free and Fair Elections

	Incumbent Elec.		
Free&Fair	0	1	Total
0	129	281	410
1	105	347	452
Total	234	628	862

Table 5: Non-Incumbent Elections

	Fair		
Free	0	1	Total
0	52	53	105
1	24	105	129
Total	76	158	234

Table 6: Incumbent Elections

	Fair		
Free	0	1	Total
0	157	109	266
1	15	347	362
Total	172	456	628

Table 7: Incumbent Wins

Free&Fair			
Incumbent Win	0	1	Total
0	72	155	227
1	218	215	433
Total	290	370	660

Table 8 Datasets on Electoral Quality

Dataset	Principal Investigators	Short Description	Country/election Coverage	Time Coverage
Polyarchy	T. Vanhanen	Data on election participation (turnout) and competition (share of the votes obtained by largest party) http://www.prio.no/Data/Governance/Vanhanens-index-of-democracy/	187 countries	1810 - 2000
Freedom in the World	Freedom House	Data on political rights and civil liberties http://www.freedomhouse.org/report-types/freedom-world	195 countries	1973-2013
Polity IV	M. Marshall and colleagues	Data on democratic and autocratic "patterns of authority" and regime changes http://www.systemicpeace.org/inscr/inscr.htm	167 countries	1800-2012
DPI – Database of Political Indicators	T. Beck, G. Clarke, A. Groff, P. Keefer, P. Walsh	Information on the chief executive, parties in the legislature, electoral rules, electoral competition and fraud, duration of present regime, checks and balances and federalism. http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20649465~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html	180 countries	1975-2012
CIRI	David L. Cingranelli, David L. Richards and K. Chad Clay	Quantitative information on government respect for 15 internationally recognized human rights, including electoral self-determination. http://www.humanrightsdata.org/ version 2013	202 countries	1981-2011
Project on International Election Monitoring	J. Kelley	<i>Quality of Elections Data (QED)</i> Qualitative assessment of national level legislative and presidential elections <i>Data on International Election Monitoring (DIEM)</i> Data coding the assessment and activities of international election monitoring organizations to national level legislative and presidential elections. http://sites.duke.edu/kelley/	172 countries 108 countries	1978-2004 1980-2004
NELDA - National Elections across Democracy and Autocracy	S. D. Hyde and N. Marinov	Detailed information on elections for national executive figures, including information on the regulations of political parties, term limits, incumbents, election boycotts, election observers. http://hyde.research.yale.edu/nelda/	161 countries	1945-2011
DAE	Andreas	Detailed dataset covering authoritarian multiparty elections. Data covers electoral manipulation such as	194	1980-2002

Database of Authoritarian Elections	Schedler	violations of physical integrity, media freedom, legislative and presidential fraud, legislative and presidential exclusion. http://biiacs.cide.edu/	elections	
IEM- Index of Electoral Malpractice	Sarah Birch	Detailed information on electoral (mal)practice in Latin America and the Caribbean, Central and Eastern Europe, former Soviet Union and sub-Saharan Africa. The index of Electoral Malpractice is measured on a scale of 1-5 (lower values correspond to less malpractice) and is based on 14 variables. Information is based on observer reports. http://www.essex.ac.uk/government/electoralmalpractice/data.htm	161 elections in 61 countries	1995-2007
Comparative Democracy Assessment	J. Elklit and A. Reynolds	Assessment of the quality of election and election management, based on 54 indicators for the 11 steps of the electoral process covering the initial legal framework to the closing post-election procedures. Data available for 19 elections. http://www.democracy-assessment.dk/start/page.asp?page=22	15 elections	1898-2010
PEI - Perception of Electoral Integrity	P. Norris, J. Elklit and A. Reynolds	Perception of electoral integrity is based on expert assessment and evaluation of elections, other evidence includes assessment of legal frameworks, election results and surveys of public opinion. The Electoral Integrity Project data is based on a pilot project. http://www.electoralintegrityproject.com/	20 elections	2012
IAEP- The Institutions and Elections Project	P. Regan and D. Clark	Data on political institutions and practices. http://www2.binghamton.edu/political-science/institutions-and-elections-project.html	160 countries	1972-2005
Archigos	G. Chiozza, H. Goemans and K. S. Gleditsch	contains information on the date and manner of entry and exit, their gender, birth- and death-date, previous times in office and their post-exit fate, covering more than 3,000 leaders http://www.rochester.edu/college/faculty/hgoemans/data.htm	186 countries	1875-2004

Note: All websites accessed 19 September 2013.

Table 9 Construction of Fair and Free election dummies from the various datasets.

Dataset	Variable(s)	Variable Construction: free and fair election dummy takes a value of one if ...
Polyarchy	<i>Comp</i> : Political competition measured as the smaller parties' share of the votes cast in elections, calculated by subtracting the percentage of votes won by the largest party from 100	<i>Comp</i> < 25
Polity IV	<i>xrcomp</i> : competitiveness of executive recruitment <i>xropen</i> : openness of executive recruitment <i>parreg</i> : regulation of participation <i>parcomp</i> : competitiveness of political participation	<i>xrcomp</i> =3 and <i>xropen</i> =4 and <i>parreg</i> =5 and <i>parcomp</i> =5
DPI	<i>fraud</i> - Were vote fraud or candidate intimidation serious enough to affect the outcome of elections? <i>liec</i> and <i>ieec</i> : legislative and executive indices of electoral competitiveness	<i>fraud</i> =0 and <i>liec/ieec</i> =7
CIRI	<i>elecsd</i> - Electoral Self-determination - measures to what extent citizens enjoy freedom of political choice and the legal right and ability in practice to change the laws and officials that govern them through free and fair elections	<i>elecsd</i> =2
QED	<i>accept</i> (SA1) - 'Acceptability' codes whether the election is free and fair <i>problems</i> - (SA2) 'Extent of Problems' is codes the extend of problems in the election <i>kfree</i> - (SR11): codes the overall pre-election condition <i>kfair</i> - (SR21): codes the extend of election day cheating	<i>accept</i> =0
NELDA	<i>Opp</i> (<i>nelda3</i>): Was Opposition allowed? <i>Multiple</i> (<i>nelda4</i>): Was more than one party legal? <i>Candidate</i> (<i>nelda5</i>): Was there a choice of candidates on the ballot?	<i>Opp</i> =1 and <i>multiple</i> =1 and <i>candidate</i> =1

Note: Some datasets follow a country year format (Polyarchy, Polity IV, DPI, CIRI) and code variables irrespective of whether an election took place during that year. If there was no election during that year values represent the most recent election. Other datasets code elections (QED and NELDA) and report data for individual elections. To merge the datasets we only considered the election years as stated in DPI and QED and NELDA. For years with multiple elections we only used the information of the election with the lowest quality.

Table 10 Correlation with Free and Fair Election Measure

	Correlation Coefficient
Polyarchy	0.25
Polity IV	0.63
DPI	0.44
CIRI	0.52
QED	0.52
NELDA	0.10

References

- Bates, R.H., S.A. Block, G. Fayad and A. Hoeffler. 2013. The New Institutionalism and Africa, *Journal of African Economies* 22 (4): 499-522.
- Bates, R.H., G. Fayad and A. Hoeffler. 2012. The State of Democracy in Africa, *International Area Studies Review* 15: 323-338.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer and Patrick Walsh. 2001. New tools in comparative political economy: The Database of Political Institutions. *World Bank Economic Review* 15: 165-176.
- Birch, Sarah. 2011. *Electoral Malpractice*. Oxford: Oxford University Press.
- Birch, Sarah. 2010. Perceptions of Electoral Fairness and Voter Turnout. *Comparative Political Studies* 43(12) 1601–1622.
- Birch, Sarah. 2008. ‘Electoral institutions and popular confidence in electoral processes: a cross-national analysis.’ *Electoral Studies* 27 (2): 305-20.
- Bollen, Kenneth A. 1990. Political Democracy: Conceptual and Measurement Traps. *Studies in Comparative International Development* 25 (1): 7-24.
- Calingaert, D. 2006. ‘Election Rigging and How to Fight it’, *Journal of Democracy*, Vol. 17, pp. 138-151.
- Chauvet, L. and Collier, P. 2009. ‘Elections and Economic Policy in Developing Countries’, *Economic Policy*, Vol 5, pp. 509-550.
- Cingranelli and Richards. 2010. Short Variable Descriptions for Indicators in the THE CINGRANELLI—RICHARDS ((CIRI)) HUMAN RIGHTS DATASET, p. 5.
<http://www.humanrightsdata.org/documentation.asp>, accessed 25 June 2013.
- Cingranelli and Richards. 2008. THE CINGRANELLI—RICHARDS ((CIRI)) HUMAN RIGHTS DATASET Coding Manual, p. 59-64.
<http://www.humanrightsdata.org/documentation.asp>, accessed 25 June 2013.
<http://ciri.binghamton.edu/>
- Chiozza, G., Goemans, H. and K. S. Gleditsch. 2009. Introducing ‘Archigos’: A Data Set of Political Leaders, *Journal of Peace Research* 46(2): 269-283.
- Collier, Paul and Anke Hoeffler. 2009. *Democracy's Achilles Heel, or, how to Win an Election without really Trying*. Centre for the Study of African Economies WPS 2009-08.
<http://www.csae.ox.ac.uk/workingpapers/pdfs/2009-08text.pdf>
- Collier, Paul and Anke Hoeffler. 2014. Do elections matter for economic performance? *Oxford Bulletin of Economics and Statistics*. Forthcoming.
- Elklit, Jørgen and Andrew Reynolds. 2005. A Framework for the Systematic Study of Election Quality. *Democratization* 12(2): 147-162.

Elklit, Jørgen and Palle Svensson. 1997. What Makes Elections Free and Fair? *Journal of Democracy* 8 (3): 32-46.

Goodwin-Gill, Guy S. 2006. Free and fair elections. Geneva: Inter-parliamentary Union. K3293.GOO 2006

Hermet, Guy, Alain Rouquié and Juan J. Linz. 1987. Elections without Choice. John Wiley & Sons, New York.

Hoglund, K. 2009. 'Electoral violence in conflict-ridden societies: concepts, causes, and consequences.' *Terrorism and Political Violence* 21 (3): 412-27.

Hyde, Susan. D. 2011. *The Pseudo-Democrat's Dilemma*. Ithaca: Cornell University Press.

Hyde, Susan D. and Nikolay Marinov. 2012. Which Elections Can Be Lost?, *Political Analysis*, 20(2): 191-210.

Jagers, Keith and Ted Robert Gurr, 1995. Tracking democracy's third wave with the polity III data. *Journal of Peace Research* 32:469-482.

Kelley, Judith G. 2012. *Monitoring Democracy: When International Election Observation Works, and Why it Often Fails*. Princeton University Press: Princeton.

Marshall, Monty G, Ted Robert Gurr and Keith Jagers. 2013. Polity IV - Dataset Users' Manual. Centre for Systemic Peace. <http://www.systemicpeace.org/inscr/p4manualv2012.pdf>

McFaul, M. 2002. The Fourth Wave of Democracy and Dictatorship: Noncooperative Transitions in the Postcommunist World, *World Politics* 54: 212-244.

Michel, Jean-Baptiste, Yuan Kui Shen, Aviva Presser Aiden, Adrian Veres, Matthew K. Gray, William Brockman, The Google Books Team, Joseph P. Pickett, Dale Hoiberg, Dan Clancy, Peter Norvig, Jon Orwant, Steven Pinker, Martin A. Nowak, and Erez Lieberman Aiden*. Quantitative Analysis of Culture Using Millions of Digitized Books. *Science* (Published online ahead of print: 12/16/2010)

Norris, Pippa, Ferran Martínez i Coma and Richard W. Frank. 2013. The Expert Survey of Perceptions of Electoral Integrity, Pilot Study April 2013: www.electoralintegrityproject.com.

Reynolds, Andrew, 2011. Designing democracy in a dangerous world, European Consortium for Political Research. Oxford: Oxford University Press.

Schedler, Andreas. 2002. Elections without Democracy: The Menu of Manipulation. *Journal of Democracy* 13: 37-50.

Schedler, Andreas, 2013. The politics of uncertainty: sustaining and subverting electoral authoritarianism. Oxford: Oxford University Press.

Schedler, Andreas 2006. *Electoral authoritarianism: the dynamics of unfree competition*, Boulder, Colo.: L. Rienner Publishers. JF1001.ELE

Sartori, Giovanni. 1976. *Parties and party systems: A framework for analysis*. New York: Cambridge.

Schaffer, Frederic Charles (ed). 2006. *Elections for sale: the causes and consequences of vote buying*. Boulder, Colo. ; London : Lynne Rienner Publishers JF1083.

POLITY™ IV PROJECT Political Regime Characteristics and Transitions, 1800-2012
Dataset Users' Manual, Center for Systemic Peace, April 2013

Tullock, Gordon. 1987. *Autocracy*. Kluwer Academic Publishers. Dordrecht

Vanhanen, T. 2000a. A New Dataset for Measuring Democracy, 1810–1998. *Journal of Peace Research* 37 (2): 251–265.

Vanhanen, T. 2000b. Polyarchy Dataset Manuscript, Peace Research Institute Oslo (PRIO),
<http://www.prio.no/Data/Governance/Vanhanens-index-of-democracy/>