Relevance: Ambiguous definitions, unclear conclusions?

Because democratic institutions are designed to place political power in the hands of the majority, we expect democracy to lead to outcomes in the interest of the majority of citizens: economic growth, inequality reduction, peace, and the stability of the democratic institutions themselves. However, such effects are not always easy to discern. India grows no faster than China, Sri Lanka has had a long and bloody conflict, and Brazil has larger income inequality than Venezuela. These examples are not atypical – research using cross-national data indicates that democracies on average perform only slightly better than non-democracies. This is particularly true in low-income countries and countries that have democratic institutions in combination with non-democratic traits.

Nevertheless, concluding that democratic institutions is not beneficial for the majority is probably premature. In this project, we will investigate two possible reasons for the puzzling lack of clear findings.

First, there is no consensus on how to define and operationalize democracy. Most theorists agree that democratic recruitment to positions of political power happens through competitive elections. Beyond that, there is disagreement as to whether this is a sufficient basis for defining democracy and, if not, what other political institutions and practices are necessary to include. Despite this lack of consensus, cross-national studies employ only a narrow range of proposed democracy measures, mostly with inadequate consideration of whether the concepts underlying the measure is useful in their particular context, or whether the measure makes use of the most relevant available data. This partly explains the absence of clear findings.

Second, a question such as ‘is democracy good for growth’ is not sufficiently precise to yield clear answers, even if we could agree on a good definition of democracy. Many different institutional components go into a conception of democracy, and all of them may not be important for growth. We will probably obtain more precise answers if we ask for instance how growth is affected by the presence of institutions designed to limit decision-makers’ ability to allocate public funds to projects that benefit themselves and their core supporters. For some outcomes, such institutions may be more important than whether decision-makers are elected.

Both lines of investigation require us to look into the underlying components of democracy and specific institutions within these components. In the Appendix, we identify seven components that cover most elements proposed as essential to democracy, and identify a set of suggested operationalizations for each of these. The set of components is deliberately broad in order to allow constructing a variety of democracy measures. This disaggregation allows us to approach the problems mentioned above systematically, and to evaluate theoretically.
and empirically various suggested aggregation procedures. Through the remainder of this proposal, we will refer to measures of ‘democracy’ as ‘indices’ or ‘aggregate measures’, and to measures of sub-components of democracy as ‘indicators’.

2 The research project

2.1 Background and status of knowledge

2.1.1 Defining democracy

There are several points of contention regarding how to define democracy. Is democracy a dichotomous or continuous concept (Przeworski et al. 2000; Elkins 2000)? Should it be defined ‘institutionally’ according to the existence of particular political institutions or ‘substantively’ according to some underlying principles (e.g. Schumpeter 1976; Przeworski et al. 2000; Beetham 1999)? Which elements should be included in, and excluded from, the concept? Are there necessary or sufficient requirements for democracy, or are there multiple, but related, factors that can ensure democracy without any one factor being necessary or sufficient (Gurr 1974; Goertz 2005; Gates et al. 2006)?

Different democracy definitions have different shortcomings. Minimalist definitions are easier to operationalize (Przeworski et al. 2000), but may have less conceptual validity and exclude relevant elements. The definition obviously affects classification of specific regimes and also empirical studies of relationships between democracy and other variables. Przeworski et al. (2000, 15)’s ACPL measure defines democracy simply as a political regime in which “those who govern are selected through contested elections”.

However, the equation of democracy and elections may make for a ‘fallacy of electoralism’ (Diamond 1999, 9). Several researchers argue there exist several ‘dimensions’ of democracy (see e.g. Munck and Verkuilen 2002), where contestability of political elite selection is only one. Some indices are built on a two-dimensional structure, with competition and participation being the two dimensions (Vanhanen 2000; Coppedge and Reinicke 1991; Gasiorowski 1996). Others, such as the Polity (Marshall n.d.) and MIRPS measures (Gates et al. 2006), are based on three dimensions. These are also criticized for leaving out important elements, such as political and civil rights (at the core of the Freedom House measure), accountability (horizontal and vertical), rule of law, and political effectiveness. Our point of departure is a range of elements grouped into seven components, detailed in the Appendix.

2.1.2 The outcomes of democracy

Growth The literature on democracy’s effect on economic growth mostly employ aggregate democracy measures. Empirical studies differ considerably regarding democracy’s effect on growth (Przeworski and Limongi 1993), although recent studies tend to find that democracy enhances growth (e.g. Baum and Lake 2003). We argue that the inconclusive results are due to some components of democracy having a positive effect on growth, whereas others do not. Accordingly, different democracy measures give diverging results, since institutional components are weighted differently. Disaggregated approaches, when used, have yielded important insights. Bueno de Mesquita et al. (2003) find that the most important components are the absolute size of the winning coalition and its size relative to the selectorate. Lindert (2005) argues that expansion of participation rights, rather than existence of competitive elections, led to the expansion of growth-enhancing primary education systems in Western Europe and North America. Persson and Tabellini (2003, 2004) indicate that the make-up of electoral systems has important effects on economic variables like public spending, corruption, trade openness and productivity growth.
Stability  With ‘stability’ we think of the ability of political systems to withstand radical changes to their institutional setup. Several studies show that democracies are more stable than autocracies, at least when average income is sufficiently high (Przeworski et al. 2000). However, these studies tend to use minimalist definitions of democracy. Gurr (1974) demonstrates the importance of consistency across sub-components of political regimes, and Gates et al. (2006) shows that such consistency is as important as income. There is also an ongoing debate on whether presidentialism increases the probability of democratic breakdown (e.g. Linz 1990; Cheibub 2007). More detailed constitutional components, like constitutional amendment procedures, may affect constitutional stability (e.g. Rasch and Congleton 2006), and maybe even the probability of democratic breakdown (see Cheibub 2007). Beyond the three components in Gurr (1974) and Gates et al. (2006) there is little systematic research on how various components serve to stabilize each other.

Conflict  Studies of democracy and interstate conflict show a clear relationship between democracy and peace (Russett and Oneal 2001), but for internal conflict the relationship is less clear. Hegre et al. (2001) and Fearon and Laitin (2003) find a curvilinear relationship – political systems that combine democratic and non-democratic elements are most likely to experience civil conflict. However, exactly which combinations of democratic and non-democratic components that increase conflict risk is unclear, as most studies use the highly aggregated Polity index of democracy. Exceptions are Strand (2007), who shows the importance of weak constraints on the executive in combination with elections – here the fallacy of electoralism seems particularly detrimental. Vreeland (2008) concludes from another ‘unpacking’ exercise that the curvilinear relationship is driven by the unfortunate coding of ‘factionalism’ in the Polity project. A more detailed exploration of democracy’s sub-components is likely to be fruitful.

Inequality  The empirical literature finds no clear effect democratic institutions (Sirowy and Inkeles 1990; Nielsen and Alderson 1995) – one study concludes that democracy increases income inequality (Hegre, Gissinger and Gleditsch 2003), but ? and Lindert (2005) suggest based on case studies that inequality falls after democratization. The statistical studies tend to be somewhat aged, however, and mainly study aggregate indices. Moreover, these studies tend to focus exclusively on vertical (inter-individual) inequality. Yet, there is growing awareness that horizontal inequalities, i.e. systematic socioeconomic inequalities between ethnic-, religious- or geographical groups, may be more important (see e.g. Stewart 2000; Østby 2008b). Østby (2008a) find some evidence that the conflict potential of horizontal inequality is contingent on regime type, but more research is needed to determine what aspects of democracy may affect the link between horizontal inequality and conflict.

2.2 Approaches, hypotheses and choice of method

This brief review clearly indicates that research on democracy’s effects suffers from imprecise and at best incompletely justified democracy indices. Most studies rely on a few ready-made aggregations of democracy – primarily the Polity, Freedom House, and ACPL measures. The project seeks to increase theoretical and empirical precision by 1) radically disaggregate the democracy concept, 2) collect information on sub-components, and employ either 3) the sub-components themselves or 4) some theoretically informed aggregation of them in studies of the relationship between democracy and its potential outcomes. A considerable amount of work has been done for point (2), but much research remains for the other three.
2.2.1 Data Collection

The first task is to review, assemble, and supplement data for a wide range of indicators and indicators of democracy’s components. A large number of indicators have been proposed and (partly) coded – a preliminary overview is given in the Appendix. We will supplement this body of data, and obtain and organize it within a common and publicly available database framework. The Quality of Government Institute in Gothenburg (QGI) (represented by Jan Teorell’s participation in the project) will provide a very useful point of departure. The Kellogg Institute for International Studies, University of Notre Dame (KIIS) will employ a large number of country experts to collect data on a wide range of institutional indicators for the 1900–2010 period to supplement the coverage. This data collection effort will take place in collaboration with our project and with joint funding. Data collected through the RCN project 196850/V10 at PRIO on power-sharing institutions will also contribute to our body of data.

Our goal is to cover all independent states in the world for the 1960–2010 period. Some indicators may also be coded back to 1900. Reviewing existing sources, we will systematically identify where data coverage is poor and supplement where feasible. Several indicators, for example from Polity, systematically lack data on small countries. Other indicators are coded only for some years. We should be able to expand coverage for indicators that are coded according to clear coding rules.

A preliminary review indicates that extension is particularly needed in two areas:

**Institutions of horizontal accountability** Polity’s XCONST measure has broad coverage and some face validity (see Gleditsch and Ward 1997), but its coding rules are very non-transparent and the level of aggregation is high; it is unclear which institutions are required to achieve a top score. Some indicators relevant to this sub-component will be coded by country experts. We will also supplement the *Judicial checks and balances* (2004) data on judicial checks and balances. This is an excellent source, but covers only 71 countries for a single period. We also intend to collect data on how constitutions are protected, and if possible on institutions that secure transparency in budgeting and public expenditure processes.

**The freeness and fairness of elections** Data sets such as ? measure the extent of participation using the most readily available source, namely the official election results. Electoral fraud, however, is a frequent phenomenon that often invalidates the official source for the data. Fraud can be institutionalized through gerrymandering or disenfranchisement; it can happen during elections through for instance ballot-box stuffing; or it can occur after elections through fraudulent counting. We will produce a corrected version of the Vanhanen dataset (for a limited time frame) based on own collected data, KIIS country expert codings, Lindberg (2006), and other sources. We will also employ information on the regularity of political leader changes from the Archigos data set (Goemans, Gleditsch and Chiozza 2009).

2.2.2 Mapping various conceptualizations of democracy

Partly in parallel with the data collection, we will review, systematize and evaluate various conceptualizations of democracy. Since there is no clear consensus on a definition of democracy, there is no consensus on the appropriate list of sub-components/indicators, nor on how they interact theoretically. The review will look into the tradeoff between the necessarily subjective assessments of broad democracy conceptions and more objective but thinner measures.
Disaggregation allows identifying a number of more easily measurable indicators that together form a broad picture of democracy. This endeavor, however, requires a clear theoretical specification of which indicators are salient, how they interrelate, and how they should be re-aggregated to form meaningful indices. This task involves specifying the logical structure of various suggested democracy concepts, relating them to each of our seven components, and formulating how various conceptualizations translate into specific rules for how to combine indicators into valid aggregate measures. Outlines of such specifications exist (see e.g. Goertz 2005; Diamond and Morlino 2005), but more explicit and detailed work along these lines is needed.

Likewise, we will work out theoretical specifications for each of the seven components partly to guide our data collection, partly to underpin the discussion in Section 2.2.4, partly as input to the conception of democracy itself.

2.2.3 Aggregating democracy indicators and evaluating previous aggregate measures

Aggregation Moving from aggregate democracy measures to specific indicators will give more leverage for specific research questions, and such indicators should often be used in place of aggregate measures. However, researchers and policy makers will not stop asking how ‘democracy’ affects for example inequality and conflict – there is a demand for unidimensional aggregations of political regimes’ sub-components. Moreover, although it makes sense to divide ‘democracy’ into several components, it is clear that several of these are reinforcing each other, and are correlated. We are thus open for aggregating our components into one (or a few) meaningful measures of democracy.

No existing aggregate democracy indexes are without serious validity or reliability problems (Munck and Verkuilen 2002; Goertz 2005). Broad measures like Polity and the Freedom House Index are often problematic, largely because aggregation procedures do not reflect how the democracy concept is logically structured (see e.g. Munck and Verkuilen 2002; Goertz 2005). Scores on the various questions are simply added together with minimal justification. Paying attention to the various nuances of a multi-dimensional democracy concept is useless in the absence of a suitable aggregation procedure. Some good attempts at linking aggregation procedures to their theoretical argument exist (e.g. Inglehart and Welzel 2006), but may still be too simplistic (Knutsen 2010). Moreover, widely used aggregation methods often fail to account for the inherent uncertainty in the aggregation process resulting from the fact that indicators are noisy signals of the actual location of countries on underlying dimensions (Kaufmann and Mastruzzi 2004; Høyland, Moene and Willumsen 2009).

We will systematically develop and evaluate aggregation procedures based on the review of conceptualizations and a range of statistical techniques. For example, we will use latent variable measurement techniques from a Bayesian Markov-Chain Monte Carlo framework to evaluate the empirical overlap between various conceptually identified aspects of democracy (see e.g. Bollen 1993; Jackman 2009; Høyland, Moene and Willumsen 2009; Treier and Jackman 2008).

Even with our planned data collection efforts, we will have missing values for indicators in many cases. In addition to dealing with uncertainty in indicator scoring, one advantage of the Bayesian framework is that it allows for model specific imputation of missing values. In combination with the compilation of a wide range of alternative indicators we expect to be able to produce aggregate measures with nearly complete coverage.

Validation We will carry out a systematic analysis of divergences between our suggested measures and other aggregate democracy measures, in accordance with the recommendations of Adcock and Collier (2001). The analysis of the relationship between democracy measures
and our four outcomes may provide a useful nomological validation of our aggregates, particularly in combination with parallel studies of how theoretically relevant sub-components relate to the outcomes.

We intend to carry out a number of case studies and small-\(n\) comparative studies to illustrate the scoring of the various indicators and aggregate measures, particularly for cases where we argue existing aggregates produce poor codings. These evaluations will also indicate whether the components are weighted appropriately in our measures.

Case-based evaluations often reveal interesting differences between various measures, especially on countries that are not very democratic nor very dictatorial. The scoring of these intermediate regimes is sensitive to what dimensions and indicators are included, and how they are weighted. For example, according to the Freedom House Index (and Russia observers, e.g. McFaul and Stoner-Weiss 2008), Russia became less democratic after Putin took over the presidency from Jeltsin, whereas the Polity Index indicates the exact opposite. Other interesting cases that may be considered for study are Botswana, Kenya, Mongolia, Nigeria, Singapore and Venezuela.

2.2.4 Reanalyzing empirical relationships in four fields, using disaggregated and aggregated democracy measures

The third task is to use the new disaggregated and aggregated data, and the associated theoretical rationales, to further the study of how democracy affects growth, inequality, conflict and stability. We expect to improve theoretical specifications and contribute to theory development in these fields by 1) substituting ‘democracy’ as an independent variable with more directly relevant components of democracy or particular institutional sub-components, and 2) employing better aggregation procedures. Some theoretical contributions on democracy’s effects are quite specific (see e.g. Boix 2003), but many others fail to be explicit as to which democracy components matter for the outcome of interest. Clearer theoretical specifications will also allow more precise empirical estimation.

For growth, for instance, institutional structures that make it more difficult to pass comprehensive reforms may reduce growth rates (see e.g. Knutsen 2011). We will study the effect of constitutional rules such as requirements for parliamentary supra-majorities and the executives’ opportunities for dissolving parliament (Franchino and Høyland 2009). We will also study how institutions of horizontal accountability affect growth through their impact on property rights protection (North and Weingast 1989; North 1990). For inequality, we will for instance look at how the extent of political participation affects inequality and redistribution (?), and how institutions such as the constitutional protection of minorities affect intergroup (‘horizontal’) inequality – systematic exclusion of minorities from power is likely to be important (Cederman and Girardin 2007). For conflict, we will in particular explore the importance of institutions of constraints in semi-democratic regimes. For stability, we will for example consider how constitutional rules affect the stability of constitutions and political regimes, and whether institutions of horizontal accountability are more important in majoritarian systems than in PR systems. A study on how specific combinations of electoral rules and types of legislative-executive relations affect democratic breakdown may be a concrete output.

The empirical research will largely utilize statistical techniques. However, we intend to complement this research with small-\(n\) comparative studies and case studies, primarily studying the countries listed above. We expect the case studies to help understand and illustrate specific mechanisms and processes that may be hard to identify in statistical studies. We consider the large- and small-\(n\) as complementary to achieve a proper understanding of the effects of democracy.
2.2.5 Other data

We will use a range of sources for data for our four outcome variables, such as World Bank (2010) and ?. Regime stability data will be derived from our democracy data sets.

2.3 Project plan, management, organization and cooperation

The project will extend from July 2011 to June 2014. The sequencing of the project is laid out in the milestones section of the grant application form. This section summarizes the organization of the project.

The core team – the PI, three of the researchers (the post-doc, Gudrun Østby, and Bjørn Erik Rasch), RAs and master students – will be located at the Department of Political Science (ISV), University of Oslo.

The project will collaborate with two institutions. The Kellogg Institute of International Studies, University of Notre Dame, will use country experts to code a wide range of indicators for all countries globally for the 1900–2010 period, under the direction of Professor Michael Coppedge.\(^1\) Associate Professor Jan Teorell, University of Lund, will also participate in this activity. Coppedge, Teorell and their co-investigators will also contribute to the theoretical and empirical work on disaggregating and aggregating democracy indicators. Both have made significant contributions to the measurement of democracy.

Scott Gates and Håvard Strand at the Peace Research Institute, Oslo, will collaborate both on measurement of democracy and on studying the stability and war outcomes. The Centre for the Study of Civil War will contribute with matching funds.

In addition, the following researchers will participate in the project: Professor Sabine Carey (University of Mannheim), Assistant Professor Hanne Fjelde, Uppsala University, Professor Kristian S. Gleditsch (University of Essex), Senior Researcher Bjørn Høyland (CI-CERO).\(^2\)

The post-doc researcher will be recruited to work on the measurement of democracy and at least one of the outcomes – in particular on democracy’s effect on growth, the outcome where the team has (relatively) weaker competence.

Together, the team has extensive research experience on the measurement of democracy, on the required research methods, and on how political institutions relate to the four outcomes. All have published extensively in high-ranked journals.

Collaboration will take the form of three workshops at the University of Oslo and submissions of panels to conferences such as the ISA, APSA, and ECPR joint sessions. Workshop 1 will address measurement of democracy and its disaggregated components, Workshop 2 the effects of democracy and its components on economic growth, inequality, conflict and political stability, Workshop 3 the aggregation of democracy’s components and how aggregated measures relate to the four outcomes.

The project will collaborate with the Research Programme on Democracy (RPD) at the University of Oslo [http://www.demokrati.uio.no/], led by Bjørn Erik Rasch. The data collection and measurement work will be of interest to other researchers in RPD, and our project will benefit from contact with some focal RPD areas such as the relationship between majorities and minorities in democracies, and the global economic and political challenges for current democracies.

We intend to recruit RAs from the large pool of master students at the ISV, and also to invite master students to write master theses as part of the project. The RAs will primarily work on collecting data on the constraints and election indicators (see Section 2.2.1)

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\(^1\)The country expert coding has financing from other sources, including the Kellogg Institute itself.

\(^2\)Some of these are fully funded at own institutions and only require travel funds.
3 Perspectives and compliance with strategic documents

3.1 Compliance with strategic documents

This project complies with key points in the University of Oslo’s strategic document ‘Strategi 2020’ through its focus on publication of results in high-ranking journals, extensive international collaboration, and dissemination outside the research community. The project’s focus is highly complementary to the University’s inter-faculty RPD discussed above. Finally, the project is in line with the ISV’s explicit focus on democracy and governance.

3.2 Relevance to society

The four outcomes under study are all beneficial to societies at large. To the extent that the research succeeds in identifying institutions that promote these outcomes, and actors take steps to put such institutions into effect, societies will benefit.

3.3 Environmental, ethical, and gender perspectives

The project has no direct, negative environmental impacts nor any conflict with the Research Council of Norway’s Research Ethics Checklist. Any individual data collected will be properly anonymized. This also applies to informants in case-studies if there is a risk of retribution from their government or others. Three of the project’s eleven core participants are female researchers. We expect at least 50 percent of the master students to be female, reflecting the slight dominance of female students at ISV.

Properly understanding how various democratic institutions function may have positive, indirect effects on various environmental and gender aspects. Democratic institutions, have for instance been shown to improve the educational situation of women and reduce certain forms of environmental degradation.

4 Communication with users and utilization of results

Most dissemination will be through leading international journals. For details, see the grant application form.

5 Appendix: Seven components of democracy

**Competition** With no competition for elected offices, popular control over public decision making suffers greatly. Przeworski et al. (2000) provide perhaps the most stringently operationalized measure on whether offices are obtained through competitive elections. Other sources are the competition components in the Polyarchy measure of 7, the executive recruitment components in Polity (Marshall n.d.) and in the measures of Arat (1991); Bollen (1980); Coppendge and Reinicke (1991); Coppendge, Alvarez and Maldonado (2008); Gasiorowski (1996); Hadenius (1992). Some of the sources have limited temporal scope, and supplementing data by original coding may be necessary. Components of the Archigos dataset (Geomans, Gleditsch and Chiozza 2009) – the extent to which political leaders gain or lose power through regular means also provide information on this dimension.

**Participation and Political Inclusiveness** The most common additional democratic attribute is the degree of “participation” in political processes (e.g. Dahl 1971). The democracy measures of 7Coppendge and Reinicke (1991); Coppendge, Alvarez and Maldonado (2008); Gasiorowski (1996); Bueno de Mesquita et al. (2003) and the participation component of Polity (Marshall n.d.) provide data.

**Political and Civil Rights** A third aspect is the existence of formally guaranteed political and civil rights and liberties. These are vital for ensuring citizens’ ability to control political debates and processes (e.g. Diamond and Morlino 2005; Inglehart and Welzel 2006). Freedom House provides two broad, relevant indexes (Freedom House 2010), and also has a separate indicator on press freedom. Bollen (1980) include indicators on press freedom and freedom of group opposition. Moreover, the CIRI Human Rights Data Project provide detailed data on various civil liberties. Other operationalizations are found in Gasiorowski (1996); Hadenius (1992), and in datasets that record the extent of human rights violations (Cingranelli and Richards 1999; Poe, Tate and Keith 1999; Wood and Gibney 2010).

**Horizontal Accountability** Institutions that ensure political accountability are vital for democracy, as they ensure that elected officials follow the interests of constituents, rather than personal interests. Horizontal accountability are ensured by institutions such as strong parliaments, general auditors, independent judiciaries, etc. Polity (Marshall n.d.) codes a ‘constraints on the executive’ indicator. Other operationalizations are suggested by Judicial checks and balances (2004); Djankov et al. (2000). Fish and Kroenig (2009) include detailed data on national legislatures.
Vertical Accountability Accountability is also ensured through a more direct interaction between politicians and citizens. Institutions that facilitate this are rules that secure transparency concerning budgeting, legislation, and implementation. A free press is essential for vertical accountability van Belle (e.g. 1997). Other systematic data are scant for this component.

Rule of Law Formal rights and liberties, like constitutionally guaranteed free speech, count for little if not guaranteed in practice, and this is strongly related to existence of rule of law (e.g. Inglehart and Welzel 2006). Also effective competition and participation require that political elites obey the law, for example when it comes to ensuring free and fair elections (see e.g. Schedler 2002). Elections can be manipulated for example through systematic violence and imprisonment of opposition candidates (see e.g. Schedler 2002; Lindberg 2006). Such indicators are also included in the CIRI data. The World Governance Indicators (Kaufmann, Kraay and Mastruzzi 2007) includes a rule of law indicator. ICRG (nd) also produces relevant data for this component. Disaggregated measures from other sources tap various sub-components of rule of law (e.g. Djankov et al. 2003; Judicial checks and balances 2004).

Political Effectiveness As discussed by e.g. Munck and Verkuilen (2002), it matters whether those elected exercise power over agenda setting and decision making. If, like in present Iran, a non-elected entity dominates important areas of political life, democracy is but a facade. This aspect could be called an “effectiveness aspect”, and is reflected in some democracy measures (Bollen 1980; Arat 1991; Hadenius 1992; Marshall n.d.). The Polity project used to code a ‘scope’ variable along the same lines, but this has not been updated since 1986.
