

***Disentangling the Economic Effects of Political Institutions (DEEPI):***

*Disaggregate regime characteristics and impact on economic growth and redistributive policies*

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## **1. Motivation and project participants**

Some countries are poor and inegalitarian, whereas others are rich and relatively egalitarian. These are not random outcomes. Arguably, a country's political institutions are crucial in these developments (e.g., North et al. 2009; Acemoglu and Robinson 2012; but, also see, e.g., Glaeser et al. 2004; Clark 2007). Yet, even scholars ascribing to an "institutionalist" view are uncertain about which exact institutional features matter most, and for what outcomes. There is also uncertainty about how contextual factors – such as natural resources and political cultures – interact with institutions in affecting growth and redistributive policies. To illustrate, the typical political scientist or economist would arguably answer "Do political institutions matter for economic growth?" with a resounding "yes". But, he or she would be hard-pressed to find well-justified answers to questions like "Does increasing district magnitude in democratic parliamentary elections generally induce higher economic growth?"; "Does district magnitude matter more for growth rates than open or closed list ballots?"; or, "Does district magnitude have a different effect on growth in rich democracies than in poor?" These are examples of questions that *Disentangling the Economic Effects of Political Institutions* (DEEPI) will analyze. DEEPI will gather data on disaggregate political regime characteristics and then analyze the impact of regime components, *and* more detailed institutional structures, on economic growth and on redistributive policies.

In order to move the knowledge frontier towards a state where we (with reasonable certainty) can conclude on how and when specific institutions affect growth or redistributive policies, we need to develop more precise theories, construct appropriate methodologies for disentangling institutional effects, and collect data on specific institutions with wide variation over space and time. DEEPI will thus make substantial contributions by collecting original data on detailed institutional and policy characteristics – extending about 200 survey items back to 1800 in a new Historical Varieties of Democracy (V-Dem) dataset, and expanding the Social Policies around the World (SPAW) dataset. These will then be used to analyze the institutional determinants of growth and redistributive policies. As detailed below, studying these outcomes jointly has benefits, as they are causally interrelated in complex manners (see, e.g., Alesina and Rodrik 1994). Modeling the relationships between the outcome-variables – and the feedback mechanisms from the outcomes on institutions – will thus improve our understanding of the dynamics and long-term effects of institutional changes.

In addition to the core team at the University of Oslo (the PI, an Assistant Professor/Post-doc, a Ph.D. Fellow, and Research Assistants), DEEPI comprises an international team of scholars, including Agnes Cornell (Aarhus U.); John Gerring (Boston U.); Svend-Erik Skaaning (Aarhus U.); Jan Teorell (Lund U.); and Daniel Ziblatt (Harvard U.). DEEPI will also involve Sirianne Dahlum (U. Oslo); Tore Wig (U. Oslo); Håvard Nygård (PRIO); and Magnus Rasmussen (Aarhus U.). Team members will participate in the data collection and in the substantive research of DEEPI.

## 2. Background and status of knowledge

The generic “institutionalist” argument taken as point of departure for DEEPI can be briefly stated as follows (see North 1990; Acemoglu and Robinson 2012): Some countries have political regimes constituted by a number of “good institutions”; these institutions ensure that political leaders have incentives to pursue policies that benefit broad segments of the population (e.g., providing education and health services). They thus ensure a relatively egalitarian distribution of resources or decent growth rates, or both. Such regimes could be quite stable, since the broader public has few incentives to overthrow them. But, they need not be if powerful elites have the incentives *and* capabilities to replace them with “extractive” regimes – with “bad institutions” – that allow for the concentration of resources in the elites’ hands. The latter regimes pursue policies (e.g., expropriation, subsidizing inefficient firms, or overvaluing the currency) that transfer resources from the broader population and some elite groups to the elite groups controlling power. These policies have regressive redistributive consequences *and* may reduce growth. Regimes with bad institutions may endure, as the elites in power have strong incentives to expend resources co-opting and repressing potential sources of dissent.

But, what are these “good” and “bad” institutions? Many accounts relate “good institutions” to democracy. Yet, this fails to address the large variability in outcomes such as growth and redistribution among democracies, and the *enormous* variability among autocracies (Rodrik 2008). This seemingly unaccountable variability may be a product of our inability to measure institutions in a fine-grained fashion. For theoretical and practical reasons, we want to identify which regime components and particular institutions that are important, and for what. Some studies emphasize regime components related to horizontal accountability and executive constraints as a way of incentivizing rulers to pursue growth- and equality-enhancing policies (e.g., Acemoglu et al. 2001). Others highlight the importance of broad-based political participation for incentivizing leaders to push progressive-redistributive or growth-enhancing policies (Bueno de Mesquita et al. 2003; Lindert 2005). Still others highlight competition between elites, aka contestation, as the central regime-component (Przeworski et al. 2000). At an even more detailed level, the literature also contains suggestions as to which institutional structures – such as electoral system characteristics in democracies (Persson and Tabellini 2004) and parties and legislatures in autocracies (Wright 2008) – that matter for growth and redistributive policies.

Nevertheless, many of the propositions above remain conjectures; clear *evidence* distinguishing the impact of different regime-components and institutions is often lacking, primarily because these institutional characteristics are often measured (if at all) only for the contemporary era, missing the crucial eras of institutional (and economic) development in many parts of the world. In other words, the lack of empirically founded knowledge stems, in large part, from the scarcity of datasets with long time series that track countries’ institutional features in detail. Extant datasets with long time series, such as Polity, contain only highly aggregated measures, masking the richness and nuances in institutional composition across countries and time. This reduces the precision of the conclusions that can be drawn from (quantitative) empirical studies. Under the circumstances, it is not surprising that institutional theories gesture vaguely to concepts like “good institutions”. With the data collection efforts embedded in DEEPI, we will have an unprecedented opportunity to properly test how different regime components *and* specified institutions affect growth and redistributive policies.

## 3. Approaches, hypotheses and choice of method

DEEPI will develop novel, and more precise, arguments on *how* and *why* particular institutions affect the incentives of policy makers and others to pursue actions with consequences for growth and redistribution. Moreover, DEEPI will assess implications from these arguments using appropriate methods, involving both advanced statistical models – constructed to deal, for example, with endogenous and slow-moving explanatory variables – and supplementary small-n studies.

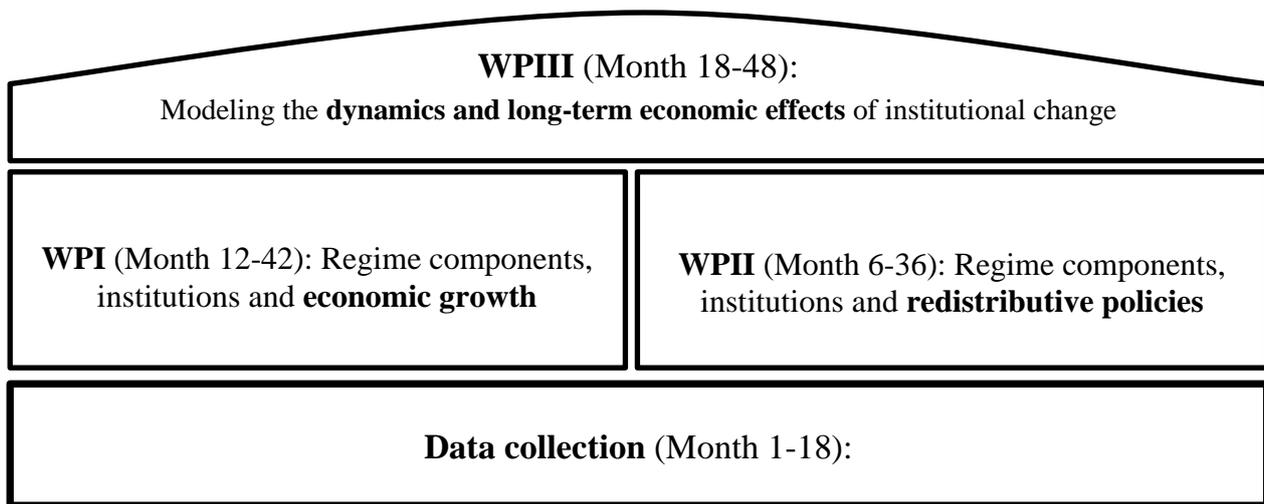


Figure 1: DEEPI’s structure, timing of tasks and WPs, and core participants among team members.

Figure 1 illustrates the structure of DEEPI, with data collection efforts considered a foundation. It will take place during the first 18 months. The largest effort relates to the historical coding of around 190 V-Dem indicators (and about 30 other questions, particularly relevant for 19<sup>th</sup> century polities) going back to 1800, for all larger, independent polities across the world. DEEPI will also expand the Social Policies around the World (SPAW) dataset. DEEPI will further be divided into three work packages (WPs). WPI is titled *Regime components, institutions and economic growth*, and WPII is named *Regime components, institutions and redistributive policies*. WPI and WPII will generate studies both on how broader regime-components and on how particular institutional structures influence the outcome of interest, and will also lead to one Policy Brief each. Further, growth and redistributive policies, as discussed further below, may be causally related in fairly complex manners, and may also impact on institutional composition and regime durability. Linking these areas together and studying their interaction and long-term dynamics – e.g. through developing simulation models that can incorporate the complexities of the interrelationship – is the contribution of WPIII. The different parts of DEEPI are presented below, before discussing methodological and design issues.

### 3.1. Data collection (Months 1-18)

DEEPI will allocate substantial resources to data collection, constructing the new Historical V-Dem dataset and expanding the SPAW dataset. Both will be made public. The Historical V-Dem questionnaire has already undergone pilot testing on Denmark and Columbia, and the codebook currently contains the about 190 most relevant V-Dem survey items, and more than 30 additional questions particularly pertinent for 19<sup>th</sup> century polities (e.g., on secret ballots, multiple voting curia, and lower–upper house relations). About half the items will be coded by expert coders and around the other half with more factual questions will be coded by RAs employed at the U. of Oslo and other team member institutions, allocated after the team members’ areas of competencies (e.g., RAs coding the structure of the executive will be employed at Lund, since Teorell has developed several of these questions). The coding will span 1800–1920 (rather than 1900, to overlap with the current V-Dem and allow for reliability and validity testing), and include all the larger independent polities that existed during the 19<sup>th</sup> century.

The baseline is selecting one expert coder per polity (exceptions will be made, e.g., for German and Italian Duchies and Principalities, where a single coder may code more than one). A few questions based more on judgment calls than the rest – for instance on the respect for freedom of expression and degree of bureaucratic rectitude – will also be coded across polities to ensure comparability. The coders will preferably be historians, or political scientists who conduct historical work. Some

potential experts, particularly for Latin American and European polities, are already identified. A three-part process is envisioned, comprising (i) individual coding, (ii) deliberation, (iii) revision (if needed). During the initial coding the researcher is expected to communicate with anyone who might assist in the coding and to consult library materials as needed. After (i) is complete, the researchers will look at each other's codes and engage in discussions (by Skype, monitored by DEEPI team members). This deliberation should serve to enhance cross-country comparability and validity. The Historical V-Dem data will be of general benefit to the scientific community. They will provide essential information on historical developments of regimes, and a foundation for inferring about different causes and consequences of institutions.

For WPII, the SPAW dataset is crucial. In this dataset – which is under construction – DEEPI member Magnus Rasmussen with contributions from the PI have collected data on all major welfare state programs for around 200 polities with time series back to the 19<sup>th</sup> century (first observation in 1795). SPAW draws on various sources, including *Social Security Programs throughout the World* reports from the US Labor Department, ILO reports on social security starting in the 1920s, legal databases such as the TRAVAIL, the NATLEX database, and various national sources. SPAW includes data on eligibility (rules defining who can partake) and distributive potential of each major transfer program, currently with >40 variables. Resources from DEEPI will expand SPAW to also cover, in more detail, particular characteristics of pensions for civil servants and military personnel. These are expectedly central redistributive tools autocrats use to co-opt key constituencies (Haggard and Kaufman 2008). The other planned expansions are coding whether the rate of payment in (and not only access to) a social policy program is dependent on being in particular social groups, and coding the extension of selected public services, notably health services and state housing.

### **3.2. WPI (Months 12-48): Regime components, institutions and economic growth.**

*Regime components and growth:* Results on whether democracy enhances growth or not diverge widely (see Knutsen 2012a). This may partly stem from different measures incorporating different regime components (Munck and Verkuilen 2002), which may have very different effects on growth. WPI will contain a groundbreaking study disentangling whether participation, contestation or rather civil liberties protection, has the clearest causal impact. Participatory aspects of democracy may be important for enhancing growth through improving the funding and quality of schooling systems, and thus human capital (see, e.g., Lindert 2005; Gerring et al. 2012). The contestation dimension may also be highly influential, as contested elections allow the population to throw poorly performing politicians out of office. This incentivizes politicians not to “rent-seek” – and allows for selecting the most capable politicians to govern – although intense competition may also induce politicians to pursue (long-run) growth-retarding policies to please myopic voters (Przeworski and Limongi 1993). Yet, the most important aspect of democracy for growth may be strong protection of civil liberties (e.g., Knutsen 2011a, 2012b). This improves the diffusion of ideas, in turn spurring technological change. Despite the plausible arguments, and a few attempts at empirical identification (Bueno de Mesquita et al. 2003), we remain highly uncertain about how these components actually affect growth. This is unsurprising, given the high collinearity between components and the lack of specific indicators with long time series; outside V-Dem, no civil liberties measures have time-series beyond 1972 (Freedom House's highly aggregated measure). In the early 19<sup>th</sup> Century there were regimes (e.g., the UK and Scandinavia) that provided decent civil liberties protection, but where voting rights were granted only a small minority. Information from such regimes will thus allow us to better disentangle effects.

A second WPI publication will analyze the changing relationship between democracy and growth over the course of modern history. Previously, Knutsen (2011b) has found evidence – using Polity – showing that the net relationship has varied substantially over time. The reason remains unclear, however, as there are different candidate explanations related e.g. to changing production structures,

changing international-political context, changing trade and foreign investment flows, and changing (typical) composition of democracies and autocracies. With Historical V-Dem, it will be possible to distinguish between these explanations, as the latter becomes possible to operationalize properly.

*Institutions and growth:* A third WPI publication is related to the first, but is a somewhat more disaggregated and inductive empirical study on the robust institutional determinants of growth: The list of suggestions from the literature answering “which institutions induce economic growth?” is fairly long and heterogeneous. Hence, we will employ disaggregated institutional measures from V-Dem and automated model selection techniques (Hendry and Krolzig 2005). The goal is establishing a model of institutional determinants of growth that is parsimonious and robust. WPI will further include work on whether institutional differences contribute to explaining the large variation in growth rates between different autocracies (see Rodrik 2008). Using Historical V-Dem data, WPI will contain a study elaborating on how institutions – often related to regime parties – constraining executives *and* influencing leader selection affect growth in autocracies. WPI will further produce a study on whether more fine-grained institutional details in democracies’ electoral systems – ballot structure and district size – affect growth, following up the more crude finding in Knutsen (2011e) that PR and semi-PR democracies outperform plural-majoritarian. There are good reasons to expect such institutional details to matter (see, e.g., Persson and Tabellini 2004). Investigating this properly necessitates detailed data with extensive time series, as electoral systems change quite infrequently. Again, Historical V-Dem data will be invaluable.

### **3.3. WP II: Regime components, institutions and redistributive policies**

*Regime components and redistributive policies:* The literature on how political regimes relate to inequality and redistribution contains numerous fascinating and sophisticated arguments (e.g., Boix 2003; Acemoglu and Robinson 2006; Ansell and Samuels 2010). Yet, it is characterized by a divergence between theoretical predictions and observed patterns (Teorell 2010). To illustrate, there is no clear evidence that *income inequality* affects democratization prospects (e.g., Knutsen 2014; Ziblatt 2008), or that democracies follow more progressive-redistributive policies than autocracies (e.g., Mulligan et al. 2003). WP II will analyze how regime components matter for redistributive policies, separating between different such policies and between the political saliency- and other characteristics of recipients. It will investigate, for instance, the conditions under which politicians have incentives to pursue redistributive policies that are more universal in character, and when they have incentives to create policies ensuring exclusive benefits for narrow social groups. *Is the participation component of democracy the most crucial in ensuring universal rather than targeted policies*, as many existing accounts presume (e.g., Bueno de Mesquita et al. 2003; Lindert 2005)? Although there are strong arguments pointing in this direction, we need to investigate this using long-time series data and more proper proxies of how targeted social policies are, while simultaneously controlling for other regime-type components. The combination of the Historical V-Dem and SPAW data will allow for this. Hence, one WP II-study will test the proposition that the participation component strongly enhances universality of coverage for social policies. The analysis will further elaborate on how social group- and regime-features interact in providing incentives for politicians and social groups, to work either for or against progressive redistributive schemes. Another study – which requires expanding SPAW – will analyze under which regimes (and contexts) politicians use allegedly inefficient services, such as public housing, for distributive purposes.

*Institutions and redistributive policies:* Theoretical and empirical work in WP II will be conducted on how different institutions, in democracies and in autocracies, incentivize ruling elites to redistribute income and other resources to specific groups. One output from WP II is a study on how party-based and non-party based autocracies design and implement redistributive policies, with one hypothesis being that those that are party-based have a broader constituency to which they

redistribute (Knutsen 2014). Social policies such as pensions or paid sick leave should thus cover more social groups in party-based autocracies. This is backed up by the notion that party institutions provide prospects for making credible commitments on redistribution to different social groups (Knutsen and Rasmussen 2014). However, also certain party characteristics (measured in V-Dem), such as the extent to which they have local anchoring and are clientelistic or programmatic, expectedly induce differences in coverage also *between* party-based autocracies (and presumably between democracies as well). Hence, we will also detail the role of more specific ruling-party characteristics for social policy coverage. The extension of SPAW to code characteristics of military and civil servant pensions will also allow us to systematically investigate how party-based and other autocracies shape social policies for channeling resources to some of the most critical groups autocratic regimes rely on for support (see Haggard and Kaufman 2008). A final study will analyze whether democracies with PR electoral systems actually induce social policies that cover more broadly (universalism) than plurality-majoritarian systems, using SPAW data. Such a relationship has been posited by several authors, and established using crude proxies (see Persson and Tabellini 2004), but has yet to be investigated with detailed data on eligibility characteristics of social policies that directly measure universality of coverage.

### **3.4. WPIII: Modelling the dynamics and long-term economic effects of institutional change**

We want to study not only short-term- and direct effects on growth and redistributive policies, but also how institutional changes impact on long-term political-economic developments. One key issue is then how the economic outcomes, in turn, affect the durability of institutions and the broader regimes they are embedded in; there may be important feedback mechanisms. Regime durability is, among other things, linked to how redistributive strategies are employed, in part, for political survival reasons (e.g., Bueno de Mesquita et al. 2003), and also economic growth may causally relate to regime durability (e.g., Feng 2005). Yet, regime components and particular institutions – such as multiparty legislatures or elections in autocracies, or the parliamentarism/presidentialism distinction in democracies – could impact on the duration of regimes more generally (e.g., Gandhi 2008; Linz 1990; Knutsen and Nygård 2014). Regime stability, in turn, has important long-run repercussions for growth and redistributive outcomes (e.g., Alesina et al. 1996). Such endogeneity and complex links necessitate careful modeling and understanding of all the different processes. Building simulation models to explore the long-run political and economic development of a country – following a particular institutional change – may require modelling all above-mentioned relationships jointly. DEEPI will engage in such modelling to evaluate the dynamics and long-run effects of institutional changes to growth and redistributive policies.

One WPIII study will analyze how well a small set of causal relationships explain the *empirical pattern* that “good things” – i.e., high income levels, (stable) democratic political regimes, and, albeit to a less clear extent, broad-coverage social policies – often go together (e.g., Western Europe), whereas the opposite is also the case (e.g., much of Sub-Saharan Africa and MENA). This will involve the construction of simulation models to jointly incorporate the various links (estimated piecewise using “standard models”) and to further model the dynamic processes of change that are difficult to capture with conventional methods. Moreover, the study will evaluate how well particular simulation models, drawing on different assumptions, re-create notable political and economic development trajectories observed in modern history. Another article – drawing on the simulation models employed in the first – will forecast developments of democracy, growth, and social policy designs over the coming 40 years under different scenarios (for a relevant such study on violent conflict predictions, see Hegre et al. 2013). A final output is a comprehensive research monograph – to be published at a major university press – on how regime components and political institutions affect growth and redistributive policies. It will draw on the theoretical insights, statistical analysis, and selected case studies from the entire project, but present them in a condensed, non-technical manner.

#### 4. Challenges and research design issues

DEEPI's empirical studies must deal with the high correlation between particular institutional arrangements, and the related difficulty in disentangling their effects. There are off-the-shelf techniques, such as Partial Least Squares, appropriate for dealing with highly collinear regressors. Strategies such as those employed by Acemoglu and Johnson (2005) – identifying distinct instruments for different institutions – are sometimes also viable. Yet, the biggest factor in solving collinearity problems relates to data availability. Particular institutional structures go together – as a case in point, competitive multi-party elections tend to co-exist with freedom of speech (Møller and Skaaning 2013) – and change slowly or seldom (Pierson 2000). Hence, sufficient time-series variation is required for identification. Long time series also improve opportunities for properly correcting for endogeneity biases, and studying whether relationships change substantially over time. The data collection under DEEPI will thus improve opportunities to draw inferences. Yet, massive amounts of data alone can never lead to valid conclusions. Therefore, DEEPI will develop more precise theories on how regime components and particular institutions affect the outcomes. Although many theoretical contributions from DEEPI will be non-formal, others will be formal. The complex links between particular institutions, institutions possibly interacting with contextual factors in affecting policy makers' incentives, and feedback mechanisms from the outcomes, point to the benefits of formal theoretical modelling for producing unambiguous implications.

Small-n studies will be very helpful in generating hypothesis concerning what institutions are the main drivers of the two outcomes, and for suggesting why these institutions matter. Further, some implications from the theoretical models developed in DEEPI will quite certainly be difficult to test using large-n data and statistical tools. Particularly under WP II, qualitative case studies are indispensable also for *evaluating* the different theories, through careful design, intensive data collection on a large number of variables, and using process-tracing methods. DEEPI will elaborate on how and *why* institutions impact on the outcomes through combining in-depth case studies of particular countries – selected systematically from their place in the broader distribution of cases or from other established criteria (see, e.g., Gerring 2007) – with statistical analysis. DEEPI involves several statistical studies. Over the last two decades, scholars studying determinants and effects of political institutions have become increasingly apt at dealing with certain threats to inferences, such as country-specific effects generating omitted variable bias and endogeneity biases. The studies in DEEPI will thus often involve models – such as fixed-effects 2SLS or system GMM (Blundell and Bond 1998) – that account for endogeneity biases and country-fixed effects. The studies will also employ multiple imputation techniques to address sample selection biases (see Honaker and King 2010). Furthermore, separating the short-term effects of changes in institutions on, say, growth, from the long-term consequences is of interest, and studying the latter requires comprehensively modelling relationships between different institutions, between the institutions and various outcomes, and between the outcomes. DEEPI will use sophisticated modelling and simulation tools to this end.

#### 5. The project plan, in brief, and a list of likely outputs

DEEPI will run over 48 months. Data collection extends from M1-18, WPI from M12-42, WP II from M6-36, and WP III from M18-48. DEEPI will lead to several publications. Table 1 lists outputs discussed above and the contributors (team members and others). The list is not exhaustive; new hypotheses will emerge, and team members are encouraged to also pursue independent studies.

Table 1: A (non-exhaustive) list of likely outputs from DEEPI

WP	Topic	Format
I	<b>Regime components and growth:</b> Theorizing and testing how different democracy components – contestation, participation, civil liberties – affect growth	Article
I	<b>Regime components and growth:</b> Why has the democracy-growth relationship varied over the course of modern history? Changes to the structure of the economy, the international-political context, or the typical composition of democracies and autocracies over time? Statistical study.	Article
I	<b>Institutions and growth:</b> Automated model-selection analysis. Disaggregate institutions and growth; which institutions matter? Identifying parsimonious, but robust models of institutional determinants of growth.	Article
I	<b>Institutions and growth, in autocracies:</b> Leader-selection institutions and their effects on growth (and investment) in autocracies. Theoretical and statistical study.	Article
II	<b>Regime components and redistributive policies:</b> Under which conditions do elites have incentives to pursue either universal- or more targeted/segmented social policies? Testing whether the participation component of democracy is the most important for ensuring universal policies, as plausible existing arguments imply.	Article
II	<b>Regime components and redistributive policies:</b> Regime types and use of targeted service provision for distributional purposes; when and why do politicians prefer channeling resources through presumably inefficient programs such as state-owned housing? Theoretical and statistical study (and possibly case-study).	Article
II	<b>Institutions and redistributive policies, in autocracies:</b> Elaborating on and testing whether party-based autocracies pursue policies that have broader coverage (with progressive, redistributive effects) than other autocracies. Further, do different ruling-party-characteristics (local branches, clientelism vs. programmatic party) affect social policy coverage? Statistical and small-n comparative study.	Article
II	<b>Institutions and redistributive policies, in democracies:</b> Testing whether proportional representation electoral systems are more likely to generate universal social policies, as suggested by theoretical accounts and empirical studies using crude proxies of universal vs. targeted spending suggest? Statistical study.	Article
III	How well can estimated relationships between institutions, growth, redistributive policies (and regime durability) “explain” patterns of economic and political development: geographical distribution (West Vs. “The Rest”); some countries with rapid changes; poverty-autocracy-instability traps. Simulation modeling.	Article
III	Forecasting democratization, democratic breakdown, economic growth, and social policy design over the coming four decades, using simulation modeling (and pre-existing predictions of demographic and developmental variables).	Article
III	Synthesizing study: Institutional determinants of growth and redistributive policies.	Monograph

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