

Regime Types and Regime Change: A New Dataset

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Abstract: Social scientists have created a variety of datasets in recent years that quantify political regimes, but these often provide little data on phases of regime transitions. Our aim is to contribute to filling this gap, by providing an update and expansion of the Democracy-Dictatorship data by Cheibub et al. (2010) with three additional features. First, we expand coverage to a total of 192 sovereign countries and 16 self-governing territories between 1950 and 2016, including periods under colonial rule. Second, we provide more institutional details that are deemed of importance in the relevant literature. Third, we include a new, self-created indicator of successful and failed coups d'état, which is currently the most complete of its kind. We further illustrate the usefulness of the new dataset by documenting the importance of political institutions under colonial rule for democratic development after independence, making use of our much more detailed data on colonial institutions. Findings show that more participatory colonial institutions have a positive and lasting effect for democratic development after transition to independence.

Keywords: Political regimes, Regime transitions, Measurement, Colonialism

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1. Introduction

Empirical studies comparing political institutions, their determinants, and the possible outcomes they produce have increased almost exponentially in recent years. To this end, a variety of excellent datasets have been created by social science researchers that attempt to quantify different political regimes at the country level, most notably Polity IV, Freedom House, and the Database of Political Institutions.

In this paper, we introduce a dataset of political regimes and institutions that is specifically designed to facilitate empirical research on political transition phases, which we believe is currently somewhat underdeveloped in the field. It consists of three main elements. First, we update and expand the binary Democracy-Dictatorship (DD) data by Cheibub et al. (2010), which has been widely used by researchers since its first publication and is arguably more sensitive to phases of regime transition. We expand time and regime coverage by updating the data to 2016, including three additional countries and 16 currently self-governing territories, and classifying the political institutions of territories that either are or were formally under colonial rule. Second, we provide more institutional details for each country, such as parliamentary type, a spatial democracy measure, a binary indicator for the implementation of new constitutions, etc. Third, the dataset includes a new, self-created indicator of successful and failed coups d'état, which we uniquely code according to the regime categorization by Cheibub et al. (2010).

Our dataset can therefore be seen as a complement to those of, e.g., Beck et al. (2001), Boix et al. (2013), Vreeland (2008), Cheibub et al. (2010), or Coppedge et al. (2016), with important additional information on regimes and their political institutions. We thereby hope to enable researchers to gather more information on regime characteristics and particularly on the topic of regime change and political transitions.

2. The DD update

The DD indicator, introduced by Cheibub et al. (2010), is a dichotomous indicator of democracy based on a minimalist definition of the concept. Its creators coded almost 200 countries on whether or not elections were conducted, whether these were free and fair, and if there had been a peaceful turnover of legislative and executive offices following those elections. Including all years between 1946 and 2008 in which a country was sovereign, the full dataset consisted of exactly 9159 total observations. Ever since its first publication, the DD dataset has been remarkably successful, which is mainly due to the fact that it employs objective criteria and operational rules to capture political democracy. According to conservative estimates, it has already been cited by more than 450 published scholarly articles since its release in 2010.¹

Our version of this dataset started as a simple update, as all observations of the original DD variables end in 2008, meaning that they do not include the full extent of major recent transition phases, such as the Arab Spring. In this process, we have further added features, and also changed certain elements. First, while the original dataset covered the period from either 1946 or independence to 2008, we now include the years 2009-2018, such that all countries are coded between 1950 and 2018. Yet, we retain the main structure and continue to code regime types in six categories. Democracies are sorted into three types coded 0-2: Parliamentary democracies, mixed democracies (with weak presidents), and presidential democracies. Non-democracies are likewise separated into three types coded 3-5: Civilian autocracies, military dictatorships, and royal dictatorships. The latter category consists of absolutist hereditary monarchies, while the distinction between civilian autocracy and military dictatorship rests on whether the head of state or government has a military rank or not. The typology is described in two variables, where the first provides the numerical code (*DD regime*) and the second the respective name

¹ The number of references is counted in the Scopus and Web of Science databases as of August 2018, and approximately 1700 references in Google Scholar.

type (*DD category*). The latter also provides information on whether a country was a colony in a given year, which we specify in a dummy variable (*Colony*). For colonies, we further include a separate variable that provides information on which colonial power ruled the particular territory in the years between 1950 and independence (*Colony of*).

Second, the dataset includes three new sovereign countries that are not in the original data: Monaco, South Sudan, and Tuvalu. We count South Sudan as independent since 2011, and Tuvalu since 1979, when it gained its independence from the United Kingdom. Conversely, we do not include now defunct states, including the German Democratic Republic, the Republic of Vietnam (South Vietnam), or the USSR. We treat Czechoslovakia as the predecessor of the modern day Czech Republic, West Germany as the predecessor of the current Federal Republic of Germany, the USSR as the predecessor of Russia, Yugoslavia, as well as Serbia and Montenegro, as the predecessor states of modern Serbia, North Vietnam as predecessor of the current Vietnam, and North Yemen (the Yemen Arab Republic) as the predecessor of the current Yemen. On an institutional basis, all these decisions are easily justifiable as, for example, the German Democratic Republic at reunification was transformed to new Länder in the Federal Republic of Germany. Throughout, countries are included with their modern names, e.g. such that the Democratic Republic of Congo also includes the periods in which the country was called Congo-Kinshasa or Zaire and Belize also includes the period as British Honduras.

Third, we include 16 formally non-sovereign territories as part of our updated DD version. Even though these are all technically non-independent states, they all operate with their own political institutions as effectively separate, or quasi-separate, entities. The dataset therefore uniquely includes Anguilla, Bermuda, the British Virgin Islands, the Cayman Islands, Gibraltar, and Turks and Caicos, which are all technically dependencies of the United Kingdom; Aruba, Curaçao, and Sint Maarten, which are dependencies of the Netherlands; the Cook Islands that are administered by New Zealand; and Guam, the Northern Mariana Islands, Puerto Rico, and the US Virgin Islands that are all unincorporated territories of the United States. We naturally also include Hong Kong and Macao, which are nowadays

administered by China, but used to be British and Portuguese colonies, respectively. The background for including these territories is that they all have their own parliaments and governments that control every major policy area, except for foreign policy and defence, and interference by the sovereign homeland in public affairs is (or ought to be) minimal. Bermuda, for example, remains the largest overseas territory of the United Kingdom, and has been effectively self-governing since 1620, boasting one of the oldest parliaments in the world. Tiny Anguilla has enjoyed a similar status ever since seceding from Saint Kitts and Nevis in 1980, when the latter began its process towards independence. Conversely, we do not include any French possessions, due to the particular French institutional arrangement in which territories elect representatives directly to the legislative process in Paris, and interference in public policy issues is present on a regular basis. A similar institutional choice applies to Danish possessions in the North Atlantic, which we also exclude. This effectively makes our dataset the only empirical reference that directly codes the political institutions of colonies in a systematic way, which essentially goes beyond employing proxies like colonizer identity and settlement statistics (La Porta et al. 1998; Acemoglu and Robinson 2001).

The fourth difference from the original dataset is that we have changed the approach to the temporal structure of the data. Cheibub et al. (2010) strictly code all features in calendar years, while we apply a different timing rule. In order to ease the empirical application of the data, we count all regime changes before July 1 of year x as pertaining to year x , and all regime transitions after that date as pertaining to year $x+1$. Relative to the original approach, our data are therefore lagged by half a year. The reason we make this seemingly arbitrary choice is easily explained: For example, when Spain's long-time dictator Francisco Franco died in November 1975, it started the country's democratization phase, during which it first changed from a military to a civilian dictatorship, and only then became a democracy. Would we not introduce this half-year time lag, the change from military to civil dictatorship would be ascribed to the whole year of 1975, even though it was only effective for about a month of that same year.

However, we also add an indicator of whether a regime transition occurred in the second half of the year, which easily enables all users to restore the original timing rule, if needed (*Regime change lag*).

As specified above, the dataset includes a variable capturing whether countries enjoy full democratic rights, understood as the right for a full franchise to vote and run for office and generally free and fair elections that determine legislative and executive offices (*Democracy*). However, here we further introduce two innovations. First, we offer three dummy variables that provide more information on why a country is coded as democratic or autocratic: whether power has actually changed peacefully with the present institutions as a result of elections (*Alternation*), whether the elections offer a de facto choice between different parties (*Multiparty*), and whether the elections are considered free and fair by election observers (*Free and fair election*).

Second, we introduce the important innovation that our democracy variable extends to the full period from 1950, i.e. before all countries became independent. Thus, it captures the somewhat paradoxical situation that some territories received democratic representation rights (again, except foreign policy and defence) before becoming independent. A relatively inconsequential example is Botswana that held its first free elections in the spring of 1965 but only gained its formal independence from the United Kingdom on the 30th of September the following year.² However, the dataset also includes several countries that experienced many years of colonial democracy before independence, such as Jamaica,

² Cheibub et al. (2010) discuss the problem of assessing whether the Botswana is democratic, as it has not changed government since 1966. It should be noted that by coding democracy prior to independence, we resolve the Botswana problem in the original DD data. The coding rule in Cheibub et al., as well as here, is that a country must have changed government through an election in order to be coded as democratic. While Botswana has not done so since 1966, the 1965 election that brought Seretse Khama to power both was democratic and resulted in a change of government. Khama was certainly not the preferred candidate of the British colonial authorities.

where the population gained full political rights in 1942, some 20 years before its formal independence.³ A major feature of our dataset is therefore that the main political institutions of quasi-independent countries are coded, even though these are not fully sovereign territories in a legal sense. We derive the relevant information from the background data on suffrage in Przeworski (2007) combined with information on the fairness of elections from newspapers, magazines and the Encyclopedia Britannica (2018).⁴ In addition, we also code a variable (*Electoral*) that captures whether a country has no regular elections (a score of 0), elections in an effectively one-party state (1), elections with opposition parties but without an actual chance of government change (2), and full democracy (3). This variable also extends back to the colonial period of countries that were not independent for some or all of the period since 1950. It thus allows users to separate full democracy, a score of 3, from a situation of category '2', which corresponds to what is otherwise sometimes called electoral autocracy, competitive authoritarianism, and illiberal democracy (LeDuc et al. 2010; Levitsky and Way 2002; Zakaria 1997).

The result is a dataset covering 208 countries and self-governing territories, observed for all years between 1950 and 2016. Of all 212 fully sovereign countries in the world, we only leave out four from our dataset: Andorra, the Vatican, Kosovo, and San Marino.⁵ Andorra is excluded due to its somewhat complicated status as a sovereign nation, where the function of its official head of state is shared between the French president *ex officio* and a bishop appointed by the Vatican. San Marino is in most ways de

³ More pertinently, Rhodesia – the predecessor state of modern Zimbabwe – was democratic until 1962 according to our coding rules. Rhodesia is thus an example of a country that was democratic for at least part of its colonial period.

⁴ A particularly valuable magazine turned out to be the *Caribbean Quarterly* from which we have drawn information on numerable institutional details.

⁵ The Cook Islands and Niue are also technically sovereign nations, but share citizenship and head of state with New Zealand. Although we include it in the data, as both Cheibub et al. (2010) and Boix et al. (2013), we note that Nauru, despite being a member of the United Nations, is effectively a client state of Australia. We do not count disputed states such as, e.g., South Ossetia and Northern Cyprus, or colonies and overseas territories that are not evidently self-governing.

facto a part of Italy, and approximately 20 percent of the population are Italian citizens. Finally, Kosovo remains under joint protection of the United Nations and the European Union and is only partially recognized internationally, while the Vatican City State is a unique construction among sovereign states that cannot easily be compared to anything else. The full data therefore covers 13,728 country-year observations, of which 10,281 pertain to formally sovereign nations.

A relevant question to ask is how the updated data compares to existing alternatives. Comparing the 8535 observations from the original DD dataset that coincide with ours, we find 76 instances in which we disagree with the coding. All of these are essentially due to the different timing approach, such that only a year separates a regime change in the original data by Cheibub et al. (2010) and our present data update. Differences to the recent alternative by Boix et al. (2013) are also minor (henceforth BMR): Of 9015 joint observations, we disagree with the BMR data on only 322 observations (3.6 percent). About half of these discrepancies are due to timing differences, where BMR follow the calendar year and thus tend to record a regime change in the year before we do. The remaining half results from the different regime definitions that are employed by both. Discrepancies between our data and the V-Dem data presented by Coppedge et al. (2016) are similarly small.

Differences are, in turn, much more pronounced when compared to the Polity IV dataset (Marshall and Jaggers, 2010). Of the 9131 joint observations, our data and Polity IV disagree on 860 observations (9.4 percent) for what Polity defines as “full democracy” at a minimum score of 6, and on 945 observations (10.3 percent) when setting this level at the lower score of 3. In about a third of these cases, the discrepancy occurs when Polity codes a country as democratic, while we code it as a civilian autocracy, i.e. a country in which the government most likely cannot lose an election. For example, this is the case for South Africa, which is counted as fully democratic in Polity IV and BMR, but not according to the DD dataset (see Cheibub et al. 2010 for a more extensive discussion). A comparison with the Freedom House (2016) indicator of political rights and civil liberties reveals similar discrepancies. In 375 of a total 7880 joint observations, Freedom House (FH) codes a country as democratic while the updated DD

indicator does not, and in 447 cases it counts an observation as politically unfree, while the DD indicator codes it as democratic. This amounts to a total of 822 cases (10.4 percent), where both datasets differ in their evaluations of political regimes.

Overall, the updated DD indicator thus compares well to other democracy measures, even though the comparison also reveals that correspondence with the BMR dataset is much clearer than with other alternatives. Figure 1 highlights differences for the illustrative case of Ghana, with full lines representing democracy, and dotted lines representing periods under autocratic rule. All indicators agree that Ghana is fully democratic from 2006 onwards, but vary considerably regarding the *timing* of Ghana's democratization. In addition, only DD and BMR code the period 1969-1971 as democratic, and FH does not consider the brief democratic spell of 1979-1981. The main reason is that the BMR and DD datasets, as well as our update, all rest on a minimalist conception of democracy (i.e. electoral democracy). In turn, Polity IV and FH rest on more maximalist definitions, which is why they both tend to be more restrictive in their definition of institutional democracy (Munck and Verkuilen 2002). In any case, it is clearly visible that our DD update maximizes observations on regime transition phases, because it codes all phases when Ghana alternated between electoral democracy and different autocratic regimes from 1950 to 2018, including its colonial period before 1957.

Figure 1 about here

3. Additional institutional details

Besides the update of the democracy status, we further add a few institutional details to our broadened DD dataset for sovereign and non-sovereign entities that we believe will specifically facilitate the investigation of regime transitions. First, we include a spatial index of democracy, which is coded as the unweighted average of the democracy variable in geographical neighbours (*Spatial democracy*). This allows the direct comparison of political institutions to countries' neighbours and thus permits the estimation

of spatial spill-overs of regime change (cf. Ziblatt, 2006; Aidt and Franck, 2015). Second, we include a dummy for communist or socialist regimes (*Communist*). Third, we include some brief information on all monarchs and presidents, i.e. heads of state with some level of constitutional status. We report the name (*Monarch name, President name*), birth year (*Monarch birthyear, President birthyear*), year of accession (*Monarch accession*) or election / effective power transfer (*President accession*), and gender (*Female monarch, Female president*). Fourth, we also include a dummy capturing whether the status as head of state is temporary (*Interim phase*), because there have been more than two in the course of one year, as often occurs during an institutional crisis phase or a democratic regime change.⁶ Fifth, we further add a dummy, based on the Comparative Constitutions Project (Ginsburg et al., 2009), which denotes whether a new constitution was implemented in a given year (*New constitution*). This captures the existence of major de jure regime changes.

Sixth, we add a number of details on political institutions. These include the number of chambers in parliament, allowing users to separate uni- and bicameral institutions (*No. of chambers in parliament*). We add the number of members of the lower house in all cases, and the number of members of the upper house in bicameral systems (*No. of members in lower house, No. of members in upper house*). The data also include information on which particular system is used for the election of members of the lower house (*Election system*). Furthermore, we supplement specific information on electoral systems with a dummy for whether a majority of members are elected using proportional representation systems, or not (*Proportional representation*). We also include a dummy for whether the right to vote and run for office is extended to all citizens above the legal voting age, regardless of gender, race, or income (*Full suffrage*).

Finally, we include specific information on the political institutions of colonies. We add the name of the colonial legislature, more information on suffrage restrictions, such as if there are separate rolls for white and indigenous voters or other particular voting restrictions, and the distribution of elected and

⁶ In this case, the name of the president given is the one with the comparatively longest tenure phase.

non-elected members of the legislature. Finally, we add a dummy capturing whether the colony was formally self-governing or not (*Self-governing*). The dataset therefore enables the particular study of the evolution of political institutions before independence, and – as we illustrate in the following – their potential importance for modern institutions and democracy.

4. The coup data

Besides the update of the regime classification in Cheibub et al. (2010), and the specific information on colonial political institutions, another main feature of our dataset is the incorporation of several self-compiled variables on successful and unsuccessful coups d'état. We include data on all verifiable coup attempts since 1950 and separate successful and failed attempts, all according to the regime categorization scheme in Cheibub et al. (2010). Our starting point was the information available in Polity IV and Powell and Thyne (2011), who each provide a list of coups and coup attempts. However, there is a substantial mismatch between these lists, and a number of cases where both lists include the same coup, but disagree on the exact timing.

With the combined list, we thus verified all the given information employing newspaper material from the Lexis-Nexis database and, in cases dating before 1970, historical information from the Encyclopedia Britannica, Luttwak's (1968) handbook of coups, Singh's (2014) coups study, and newspaper archives. The resulting database has a number of notable features. First, we code whether a successful coup in a particular year occurred (*Successful coups*), and if the coup was primarily led by the military, a group of civilians, or in rare cases members of the royal family (*Type*). Second, the approach allows us to code if a failed coup occurred in a country (*Failed coups*), many of which are either not covered by existing databases, or seem to be coded on the basis of rumours. In turn, our database does not include rumoured coups, which we define as cases where only government sources claimed a coup had been foiled, or cases in which only one international newspaper reported that a coup attempt had taken place.

To avoid coding these false positives, all coup attempts in our data had to be reported independently by at least two international newspapers.⁷

Third, the coup variable includes four numerical variables capturing the number of coups in a country in a given year (*All coups*), the number of coup attempts that were successful (*Successful coups*) or failed (*Failed coups*), and an indicator of whether any coup attempt occurred (*First coup*, *Second coup*, *Third coup*). In subsequent variables, we include information on the month of the coup (*month*), the coup leaders' names (*Coup leaders*), military and civilian ranks (*Military rank index*, *Civilian rank index*), and whether the coup was military, civilian, or royal (*Type*). We do so for the first three coup attempts in each year, which is the maximum number of separable events that we find in a single country and year since 1950.

In total, the coup database includes 489 country-years in which coups occurred. In 30 cases, more than one coup occurred during a single year, which brings the total count of coup attempts to 530. In a total of 242 cases, or slightly less than half, these were successful at overthrowing the government in power. A total of 381 coup attempts were led by current or former members of the military, 130 were led by civilians, while only 12 were insider coups within royal families.

In combination with the updated information on democracy and regime types, the coup indicators allows identification of regime transitions that would not necessarily show up in the DD dataset, such as successful military coups against military incumbents. It also provides potential background for subsequent institutional and regime changes, as well as crucial information on the institutional set-up prior to home rule or independence, which we exploit in the following.

⁷ We found a number of cases in which existing databases reported a failed coup that we were unable to verify. Conversely, all successful coups were verified by reference to Lexis-Nexis. In almost all cases, the coups were reported in the *New York Times*, *Washington Post*, *Globe and Mail*, *London Times*, *the Guardian* and *Frankfurter Allgemeine Zeitung*. Having access to Australian newspapers such as the *Sydney Morning Post* also allowed a wider coverage of smaller states in the Pacific and South East Asia. The *Los Angeles Times* likewise proved a particularly valuable source for events in Latin America.

5. Colonial institutions and democratic development: An application

To further highlight the usefulness of the unique features in our dataset with a concrete example, we provide a direct test of one of the most disputed ideas in development economics: the question whether colonialism affects post-independence political institutions in a path-dependent manner, and if this effect can generally be evaluated as positive for democratic development. Recent contributions show how debated this question still is, with scholars like Ferguson (2012) claiming a largely positive legacy of (British) colonialism, while Acemoglu and Robinson (2013) highlight the substantially negative record of (extractive) colonial structures for present day political and economic development. All of these scholars agree that the impact of colonialism for affected countries is strong and persistent to the present day, but disagree regarding the sign of the impact. Recently, even this has been called into question by Maseland (2018), who finds colonial legacies to be sharply declining in importance, at least for African political institutions and their overall economic development.

Related questions are not particularly new in the empirical literature on political economic determinants of democracy, starting with early work by Hadenius (1992) and Lipset et al. (1993). At the time, these contributions were nevertheless strongly limited by the availability of adequate data. Once new and more comprehensive datasets became available by the late 1990's, the issue was subsequently addressed in large-n cross-country studies, mostly using cross-sectional data, and in some cases panel data analysis. Most of this literature effectively investigated the impact of colonial structures on comparative economic development, mainly treating the potential effect of colonialism on democratic institutions as one possible channel for outcomes on income per capita (Grier 1999, Sokoloff and Engerman 2000, Acemoglu et al. 2001, La Porta et al. 2008, Feyrer and Sacerdote 2009). Within this literature, a subset of contributions has more specifically analysed the importance of colonialism for the democratic development of former colonial dominions (Bernhard et al. 2004, Lange 2006, Olsson 2009, Jones 2013). These authors also usually treat political and economic institutions as determinants of economic development, but seem to be more interested in the exact transmission mechanisms of

democratic and participatory legacies, rather than uncovering an empirical effect on economic growth. Notwithstanding, both strands of literature find overwhelming evidence that colonial history matters a great deal for the development of formal institutions and economic prosperity after transition to independence. Questions on the persistence of these effects have only been raised very recently, with some authors highlighting the declining impact of colonial legacies, while emphasising the growing importance of pre-colonial institutions (Michalopoulos and Papaioannou 2013, Maseland 2018).

What all of these studies have in common, is that they are effectively forced to develop empirical proxies to capture the nature of colonial institutions, as direct measures of the latter are practically not available. Here, a number of different strategies can be distinguished: First, a large share of the literature uses dummy variables to test whether the identity of the colonizer (or the type of legal system established by the colonizer) has a lasting effect on economic and political development (La Porta et al. 1998, 2008, Grier 1999, Bernhard et al. 2004, Lange 2006, etc.). This literature usually relates more favourable outcomes with British colonialism and a common law tradition, as compared to French or Spanish colonialism and the associated civil law tradition. Second, and connected to the first group of studies, a number of authors have also focused on the temporal dimension of colonialism, mainly capturing its overall duration (Grier 1999, Feyrer and Sacerdote 2009, Olsson 2009, etc.). Generally, findings point in the direction that longer periods of colonial rule are beneficial for contemporary levels of income per capita and democracy, as state structures had more time to be consolidated during the phase of foreign rule. Third, another strain of related literature basically argues that geographic and climatic conditions had a decisive impact on whether the colonizing power set up extractive or inclusive institutions in the host society, which in turn also largely determines current political and economic status. The corresponding authors have tried to proxy for this fact by employing several different measures, for example, by capturing climatic conditions (Sokoloff and Engerman 1997), or the mortality rates of settlers and the indigenous population density (Acemoglu et al. 2001). Findings in this literature generally point to the fact that former colonies with more extractive institutions are also less likely to be economically

developed and politically less participatory to the present day. Finally, a recent study by Jones (2013) develops a more fine-grained indicator of political institutions under colonial rule, by measuring the comparative pay of colonial governors. Since better paid colonial posts also attracted more able administrators, it is argued, these territories were consequently better managed, leaving a path dependent trajectory after transition to independence that is visible in the currently higher economic and political development of affected territories.

In an attempt to shed new light on this discussion, we use the colonial features of our new dataset, which offers more direct indicators of colonial institutions than most previous studies. In particular, the electoral variable allows us to capture whether a colony had fully democratic institutions at least five years prior to gaining independence, or if it had an elected parliament or other similar type of consultative assembly at all (see page 7). We employ a sample of countries that are all former colonies and observed in our data before and after their transition to independence. This gives us a panel data set covering a total of 66 countries/colonies, and up to almost 3.000 individual observations.

Our main dependent variable is the extended democracy indicator by Cheibub et al. (2010), which is observed on an annual basis, or in overlapping five year averages such that we require that the country has been democratic for at least five consecutive years. In further tests, we use three additional dependent variables to test if colonial political institutions shape more than merely the electoral institutions. Specifically, we are interested in whether the colonial institutions have also instilled stable post-independence institutions that enable the peaceful negotiation of conflicts. We use the coup indicator from the new database (whether any coups occurred in a given year), a dummy capturing whether any political assassinations occurred in a year, which we derive from Banks and Wilson (2013), and a measure of the absence of general government repression from Fariss (2014).

As primary controls, we construct two dummies from the colonial electoral variable to capture democracy in dependent territories: the first, colonial representation, is equal to one if the colony had any type of elected domestic presentation at least five years prior to its independence, and zero otherwise.

The second, colonial democracy, is equal to one if colonial representation was fully democratic at least five years prior to its independence, and zero otherwise. To control for the formal status of territories, we introduce a dummy that is equal to one, if the country is fully independent, and zero if it has the status of a colony. Further control variables are taken from the literature reviewed above, where we introduce the log of purchasing-power adjusted GDP per capita and the log of total population size, both of which derive from the Penn World Tables, mark 9 (Feenstra et al. 2015), a dummy for former colonies of the British or Dutch commonwealth and a dummy for former French colonies, based on information in Encyclopedia Britannica (2018), a dummy that captures former colonies situated in Africa, and another dummy that captures former colonies situated in Latin America and the Caribbean. Descriptive statistics of all variables are shown in Table A1 of the appendix.

Table 1 shows the results for our analysis of colonial representation and its association with democratic development under independence. Here, columns 1 to 3 employ annual observations of the dependent variable, while columns 4 and 5 use the overlapping five year averages. The corresponding equations are all estimated with a random effects logit regression model. In column 1, we employ a simple baseline model consisting only of the basic control variables.

We observe that neither income per capita nor total population are significantly associated with democratic political structures, while becoming independent presents a significant and negative relationship with political democracy in our sample. As expected, we further find that British and Dutch dominions are significantly more likely to be democratic, while the coefficient is insignificant for French colonies. Likewise, being located in Africa is irrelevant for the likelihood of having democratic governance, while being located in Latin America and the Caribbean makes the latter significantly more likely.

Table 1 about here

In column 2, we add our primary controls of interest, which both enter the equation with a significant and positive sign. By itself, both these variables do not carry too much valuable information though. In order to capture the impact of colonial representation and colonial democracy for democratic governance after transition to independence, we further introduce an interaction of the colonial representation variable with the independence dummy in column 3; collinearity problems prevents us from adding an interaction with colonial democracy.

The marginal effects of colonial representation and colonial democracy during the phase of independence is shown in the lower part of the table, where both are highly significant and enter the equation with a positive sign. All else equal then, having domestic representation or democratic structures during the colonial phase, makes the presence of political democracy after transition to independence significantly and substantially more likely. In column 4, we find that these effects also hold even 30 years after independence. We thus observe no evidence that their influence is decreasing over time.

A separate question nevertheless is if the political institutions are stable, and in particular whether the institutions inherited from colonial times prove to be stable. In columns 5-7, we therefore repeat the previous estimation models from columns 2-4, but employ a measure capturing if democracy is stable across overlapping five-year periods as the dependent variable. Interestingly, coefficients on the income per capita and total population variables remain insignificant but increase substantially in size. Finally, the lower part of columns 5 and 6 again shows the marginal effects for our variables of interest. We find that both enter the equation with a positive sign, but only colonial democracy achieves significance at conventional levels.

Overall, these results confirm the idea that the presence of representative organs or democratic structures during colonialism, makes the maintenance of political democracy significantly more likely for newly independent states. As such, the feature of the database that the degree of democracy is observed prior to independence allows us to show that colonial institutions continue to shape modern institutions decades after independence.

However, it remains an open question if having representative colonial institutions affect any ‘quality’ of democracy. In Table 2, we therefore test if societies with a democratic colonial past are also more likely to be peaceful and non-repressive. We apply the same approach as in Table 1 with the exception of columns 5 and 6, in which we employ a random effects OLS estimator as the Fariss (2014) repression measure is a well-behaved continuous variable.

Insert Table 2 about here

In columns 1 and 2, we find no evidence that the colonial institutions affect the risk of observing a coup attempt after independence: only economic development and being placed in Latin America and the Caribbean are significant. Conversely, we find that both larger and poorer countries are more likely to experience assassinations, and that assassinations are less likely after independence. The latter finding is likely to reflect that many independence movements resorted to assassinations prior to gaining independence. More importantly, the findings show that countries with a past with representative colonial institutions are less likely to experience assassinations, an effect that if anything is increasing over time.

Similarly, we observe that independent, richer and less populous countries have less repressive governments. Again, government repression is also shaped by the colonial institutions in a significant and highly important way: countries that inherited either representative or fully democratic institutions from their colonial past are substantially less likely to have repressive governments. We also find no significant evidence that this association is decreasing over time.

Overall, although we must emphasize that not all estimates may not have a clear causal interpretation – whether or not countries had democratic colonial institutions can in principle reflect deep cultural factors that persist to this day and affect the probability of having a functioning, peaceful democracy – we find that for three of four characteristics, the existence of representative institutions in the colonial past shape the way modern political institutions work.

6. Summary

As the famous British economist Paul Collier has recently put it, large datasets and the corresponding effort to collect the information contained in them are the public goods of economic research (Collier 2013). Recent studies on regime transition point to a number of open questions that require more accurate data, data capturing different aspects than what is available, or simply more data (Ziblatt 2006, Aidt and Franck 2015). Our aim is to contribute to partially filling this gap by providing an update and expansion of the DD dataset, and a new and expanded dataset on coups that includes several novel features. This data is available for 192 sovereign countries and 16 self-governing territories between 1950 and 2018. Hereby, we hope to enable researchers to drive forward important research questions on regime transitions and the political and economic outcomes they produce that are somewhat underrepresented among the empirical studies of political regimes.

We attempt to show the usefulness of our data collection efforts with an application of our colonialism dataset, where we re-investigate the importance of colonial structures for the political institutions of countries after transition to formal independence. Contrary to earlier studies, our data offers a direct measure of colonial institutions; in particular, it captures whether the colonial government had a representative body, or whether its government was fully democratic. Findings show that having domestic representation or democratic structures during the colonial phase, makes the presence of political democracy after transition to independence significantly more likely. The additional finding that the colonial institutions also appear to affect how peaceful and non-repressive the political process is points to the usefulness of further research using the present and other datasets that capture elements of the institutional setup of the developing world.

References

- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91, 1369-1401.
- Acemoglu, Daron, and James Robinson. 2012. *Why nations fail. The origins of power, prosperity and poverty*. New York: Crown Business.
- Aidt, Toke S. and Raphaël Franck. 2015. Democratization under the Threat of Revolution: Evidence from the Great Reform Act of 1832. *Econometrica*, 83, 505-547.
- Banks, A.S. and K. A. Wilson. 2013. Cross-National Time-Series Data Archive. Databanks International. Jerusalem, Israel. Available at: <http://www.databanksinternational.com>
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer and Patrick Walsh. 2001. New tools and new tests in comparative political economy: the database of political institutions. *World Bank Economic Review*, 15, 165-176.
- Bernhard, Michael, Christopher Reenock, and Timothy Nordstrom. 2004. The legacy of Western overseas colonialism on democratic survival. *International Studies Quarterly*, 48, 225-250.
- Boix, Carles, Michael Miller and Sebastian Rosato. 2013. A complete data set of political regimes, 1800-2007. *Comparative Political Studies*, 46, 1523-1554.
- Cheibub, José A., Jennifer Gandhi and James R. Vreeland. 2010. Democracy and dictatorship revisited. *Public Choice*, 143, 67-101.
- Collier, Paul. 2013. *Exodus. Immigration and Multiculturalism in the 21st Century*. London: Penguin.

- Coppedge, Michael, Staffan Lindberg, Svend-Erik Skaaning and Jan Teorell. 2016. Measuring high level democratic principles using the V-Dem data. *International Political Science Review*, 37, 580-593.
- Encyclopedia Britannica, 2018. *Encyclopedia Britannica*. Available at <http://www.britannica.com/> (accessed June 2018).
- Fariss, Christopher J. 2014. Respect for human rights has improved over time: modeling the changing standard of accountability. *American Political Science Review*, 108, 297-318.
- Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer. 2015. The next generation of the Penn World Table. *American Economic Review*, 105, 3150-3182.
- Ferguson, Niall. 2012. *Empire: How Britain made the modern world*. London: Penguin.
- Feyrer, James, and Bruce Sacerdote. 2009. Colonialism and modern income: Islands as natural experiments. *The Review of Economics and Statistics*, 91, 245-262.
- Freedom House. 2016. *Freedom in the World 2016*. Washington: Freedom House.
- Ginsburg, Tom, Zachary Elkins and James Melton. 2009. *The Endurance of National Constitutions*. Cambridge: Cambridge University Press.
- Grier, Robin M. 1999. Colonial legacies and economic growth. *Public Choice*, 98, 317-335.
- Hadenius, Axel. 1992. *Democracy and Development*. Cambridge: Cambridge University Press.
- Jones, Patricia. 2013. History matters: New evidence on the long run impact of colonial rule on institutions. *Journal of Comparative Economics*, 41, 181-200.
- Lange, Matthew K. 2006. British colonial legacies and political development. *World Development*, 32, 905-922.

La Porta, Rafael, Florencio Lopez-de-Silanes, Adrei Shleifer, and Robert Vishny. 1998. Law and finance. *Journal of Political Economy*, 106, 1113-1155.

La Porta, Rafael, Florencio Lopez-de-Silanes, and Adrei Shleifer. 2008. The economic consequences of legal origins. *Journal of Economic Literature*, 46, 285–332.

LeDuc, Lawrence, Richard G. Niemi, and Pippa Norris. 2010. Introduction. In: L. LeDuc, R.G. Niemi, & P. Norris (Ed.), *Comparing Democracies 3: Elections and Voting in the 21st Century*. London: Sage.

Levitsky, Steven., and Lucan A. Way. 2002. The rise of competitive authoritarianism. *Journal of Democracy*, 13, 51-65.

Lipset, Seymour M., Kyoung R. Seong., John C. Torres. 1993. A Comparative Analysis of the Social Requisites of Democracy. *International Social Science Journal*, 136, 155-175.

Marshall, Monty G. and Keith Jagers. 2010. *Polity IV Project: Political Regime Characteristics and Transitions, 1800–2015: Dataset Users' Manual*. Maryland: University of Maryland.

Maseland, Robbert. 2018. Is colonialism history? The declining impact of colonial legacies on African institutional and economic development. *Journal of Institutional Economics*, 14, 259-287.

Michalopoulos, Stelios and Elias Papaioannou (2013). Pre-colonial ethnic institutions and contemporary African development. *Econometrica*, 81, 113–52.

Munck, Gerardo L. and Jay Verkuilen. 2002. Conceptualizing and Measuring Democracy: Evaluating Alternative Indices. *Comparative Political Studies*, 35, 5-34.

Olsson, Ola. 2009. On the democratic legacy of colonialism. *Journal of Comparative Economics*, 37, 534-551.

Przeworski, Adam. 2007. Conquered or granted? A history of suffrage extensions. *British Journal of Political Science*, 39, 291-321.

Singh, Naunihal. 2014. *Seizing Power. The Strategic Logic of Military Coups*. Baltimore: Johns Hopkins Press.

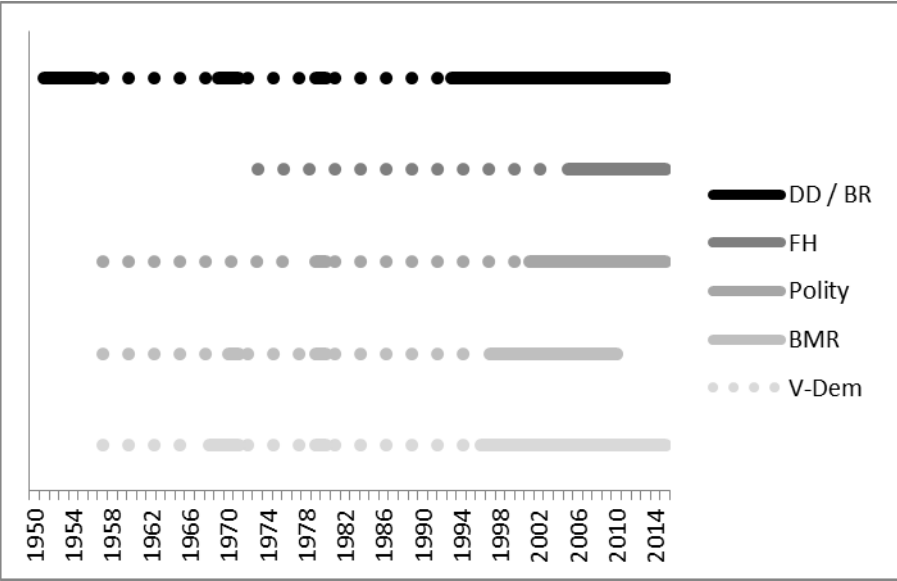
Sokoloff, Kenneth L., and Stanley L. Engerman. 2000. Institutions, factor endowments, and paths of development in the new world. *Journal of Economic Perspectives*, 14, 217-232.

Vreeland, James R. 2008. The effect of political regime on civil war: unpacking anocracy. *Journal of Conflict Resolution*, 52, 401-425.

Zakaria, Fareed. 1997. The rise of illiberal democracy. *Foreign Affairs*, 76, 22-43

Ziblatt, Daniel. 2006. How did Europe democratize? *World Politics*, 58, 311-358.

Figure 1 Democratic and autocratic spells in Ghana, five indicators



Note: full lines denote periods categorized as democratic; dotted lines periods of autocracy.

Table 1. Colonial institutions and subsequent democratic development

	1	2	3	4	5	6	7
	Democracy	Democracy	Democracy	Democracy	Five-year dem	Five-year dem	Five-year dem
Log GDP per capita	.022 (.467)	.024 (.459)	.179 (.381)	.188 (.508)	1.768 (1.192)	2.215 (2.025)	2.237 (1.894)
Log population	-.134 (.321)	-.051 (.307)	-.168 (.281)	-.089 (.308)	1.052 (.995)	.926 (1.001)	1.088 (1.266)
Independent	-1.708** (.741)	-1.697** (.735)	-4.578*** (1.040)	-2.144*** (.738)	-2.959** (1.319)	-7.009** (3.014)	-3.737* (2.052)
British / Dutch colony	2.212** (.882)	.453 (.931)	.596 (1.219)	.361 (1.101)	-1.407 (2.926)	-1.813 (3.727)	-2.098 (4.405)
French colony	.736 (.752)	-.219 (.883)	-.256 (1.021)	-.466 (1.019)	-2.109 (3.227)	-2.278 (3.551)	-2.915 (4.719)
Africa	.785 (1.512)	.236 (1.307)	.782 (1.523)	.672 (1.467)	.638 (2.162)	1.853 (2.817)	1.686 (2.686)
Latin America / Caribbean	6.471*** (1.735)	5.168*** (1.489)	6.091 (1.696)	5.040*** (1.694)	8.381 (6.206)	10.539 (9.132)	8.812 (8.748)
Colonial representation		2.055** (.947)	-1.942* (1.160)	.342 (1.000)	3.842 (6.532)	-1.348 (6.907)	1.792 (9.249)
Colonial democracy		3.636*** (1.217)	3.537*** (1.362)	3.225** (1.335)	8.198 (8.314)	7.583 (9.041)	9.891 (13.205)
Independent * representation			4.235*** (1.068)			5.179** (2.224)	
Independent * democracy							
More than 30 yrs independence				-1.218** (.542)			-1.633** (.819)
30 yrs * representation				1.979*** (.6489)			2.851* (1.459)
30 yrs * democracy							
Decadal FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2941	2941	2941	2800	2941	2914	2800
Countries	66	66	66	66	66	66	66
Log likelihood	-690.095	-686.185	-589.092	-640.569	-476.020	-390.416	-433.413
Wald Chi squared	81.29	100.65	77.71	61.34	46.38	21.57	27.64
<i>Colonial institutions during independence / after 30 yrs</i>							
Colonial representation			.150** (.061)	.184** (.080)		.129 (.142)	.155 (.189)
Colonial democracy			.274** (.109)	.287** (.118)		.318* (.181)	.439* (.252)

Note: *** (**) [*] denote significance at $p < .01$ ($p < .05$) [$p < .10$]. Standard errors clustered at the country level in parentheses.

Table 2. Colonial institutions and subsequent peace

	1	2	3	4	5	6
	Coups	Coups	Assasinations	Assasinations	Repression	Repression
Log GDP per capita	-0.460*** (.085)	-0.446*** (.082)	-0.266** (.119)	-0.175 (.110)	.455*** (.137)	.421*** (.139)
Log population	-0.089 (.056)	-0.083 (.056)	.128*** (.049)	.122** (.049)	-.152** (.077)	-.168** (.080)
Independent			-1.526*** (.537)	-.811** (.368)	.946** (.384)	.627** (.266)
British / Dutch colony	-.039 (.337)	-.037 (.348)	.577 (.396)	.393 (.341)	-.356 (.397)	-.325 (.392)
French colony	.335 (.316)	.337 (.335)	.469 (.386)	.272 (.343)	-.213 (.339)	-.187 (.334)
Africa	-.361 (.259)	-.351 (.267)	-.113 (.393)	.042 (.376)	.029 (.327)	.003 (.304)
Latin America / Caribbean	-.757*** (.278)	-.823*** (.286)	.363 (.341)	.362 (.344)	.334 (.314)	.261 (.307)
Colonial representation	-.068 (.333)	.068 (.421)	-.762** (.336)	.447 (.416)	1.178** (.486)	.744* (.416)
Colonial democracy	.196 (.388)	.446 (.486)	-.787** (.362)	.402 (.477)	1.658*** (.467)	.948** (.476)
Independent * representation					-.193 (.435)	
Independent * democracy					-.607* (.367)	
More than 30 yrs independence		.255 (.317)		1.652*** (.565)		-.363 (.355)
30 yrs * representation		-.255 (.276)		-1.622*** (.582)		.448 (.349)
30 yrs * democracy		-.543* (.318)		-1.678*** (.599)		.189 (.368)
Decadal FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2508	2508	2042	2051	2490	2590
Countries	66	66	65	65	66	66
Log likelihood	-544.18	-542.492	-299.849	-290.878		
R squared					.524	.540
Wald Chi squared	104.23	115.98	68.28	90.78	12700	16300
<i>Colonial institutions during independence / after 30 yrs</i>						
Colonial representation		-.021 (.039)		-.195** (.094)	.985*** (.308)	1.192*** (.259)
Colonial democracy		-.012 (.045)		-.201** (.094)	1.051*** (.399)	1.136*** (.381)

Note: *** (**) [*] denote significance at $p < .01$ ($p < .05$) [$p < .10$]. Standard errors clustered at the country level in parentheses.

Table A1.Descriptive statistics

	Mean	Standard deviation	Observations
Democracy	.369	.483	3835
Five-year democracy	.320	.467	3835
Coups	.040	1.96	4427
Assassinations	.038	.191	2346
Repression	.444	1.259	2813
Log GDP per capita	8.157	1.142	3149
Log population	.884	1.813	3149
Independent	.676	.468	4503
British / Dutch colony	.470	.499	3835
French colony	.303	.459	3835
Africa	.639	.480	3835
Latin America / Caribbean	.144	.351	3835
Colonial representation	.481	.499	4503
Colonial democracy	.443	.498	4503