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**CITIZENS' WELLBEING IN  
COMPETITIVE AUTHORITARIAN  
REGIMES**

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## Introduction

The idea that living in countries ruled by different political regimes matters beyond the political sphere is a fascinating one. It echoes in the words of politicians, international agencies' practitioners, non-governmental organizations' activists, journalists. Recently the issue has also become object of thorough academic research. In both cases, however, the debate has been characterized by a marked 'democratic bias'. We naturally tend to associate improvements in citizens' material living conditions with democracy. We thus tend to focus, exclusively or so, on democratic reforms. In doing so, we are implicitly consigning about half of developing world to neglect and hopelessness at once. In a even more superficial way, we are overlooking the complexity of the processes of political transition occurred in the past three decades. Democracy is only part of the story. The present research aims to start filling this void, by studying the consequences of political change short of democratization on the wellbeing of citizens.

*(re-)Introducing competitive authoritarianism.*

Between the mid 1970s and the first half of the 1990s, a sensational number of transitions from authoritarian rule took place in close sequence all over the globe. One after the other, a wave of democratization overwhelmed Mediterranean Europe, Latin America, Eastern Europe, part of Asia, and finally reached the shores of Africa. Beyond that evocative image reality was much more varied. Many of these processes of regime change effectively resulted in the introduction of political democracy. For several others the outcome was less certain. Often the crisis of an existing authoritarian regime caused its collapse, started a phase of transition typically accompanied by the partial opening of the political system, yet it did not lead to democracy. Not always the call of free multi-party elections, nor their

institutionalization as the main instrument to gain political power corresponded to the democratization of a country.

Contrary to the sequence theorized by Huntington, however, the partial failure of these democratic experiments did not represent an *ebb*. Rather than getting reversed, many of the new multiparty systems survived. The explanation of the non-linear trajectory of political change followed by these regimes differed from one case to another. Scholars focused either on the absence of economic, social, cultural prerequisites (Diamond et al., 1989 and 1995), on political elites' merely instrumental commitment to democracy, the lack of linkages to the West (Levitsky and Way, 2010), or on a combination of them. Invariably, however, the result was the institutionalization of some hybrid form of political regime, characterized by co-existence of formally democratic institutions with persistently authoritarian practices of governance. The side-effect of this wave of democratization has been the formation of a "gray zone" between democracy and autocracy (Carothers, 2002).

By the end of the 1990s, hybrid regimes became the predominant institutional setting of the developing world (Schedler, 2006), although they took different configurations. In several cases multi-party elections failed to reduce the ruling party's hegemony and its control of political power, In Kazakhstan, for instance, President Nursultan Nazarbayev postponed multi-party presidential elections until 1999, while his People's Unity party won 1994 and 1995 legislative elections virtually unchallenged. In many others, a larger degree of political competition was allowed. Sometimes this corresponded to replacement of the old ruling elite, as it happened with the victory of Sali Berisha's Democratic Party in 1992 Albanian elections. Typically, however, this took place under the medium-to-long term reign of the same party, be it the Movement for Multi-party Democracy in Zambia or the Kenya African National Union in Kenya.

These latter competitive variants of authoritarianism are regimes in which "formal democratic institutions are widely viewed as the principal means of obtaining and exercising political authority. Incumbents violate those rules so often and to such an

extent, however, that the regime fails to meet conventional minimum standards for democracy” (Levitsky and Way, 2002: 52).

*Research goals and relevance.*

Despite initial scepticism about its non-ephemeral nature, competitive authoritarianism has triggered a lively academic debate. The relative novelty of this political phenomenon challenged most consolidated theories of democratization and raised many new questions. Researchers studied the origins of these regimes, theorized about their functioning, and analyzed their ability to endure. These works made a valuable contribution to our understanding of the phenomenon. We learned about the causes of its recent spread in conjuncture with the end of the Cold War. We discovered that, rather than a source of fragility, the interaction of democratic and autocratic institutions may even strengthen incumbents’ hold on power.

To date, however, relatively little attention has been paid to another relevant issue: the consequences of this form of political regime on the wellbeing of citizens living under its rule. The reversal of the usual perspective – treating competitive authoritarianism as the explanatory factor of something else, rather than the object to be explained – represents a new ramification of the debate. It may improve the comprehension of the phenomenon by providing insightful feedbacks for the study of both the functioning and the future prospects of these regimes. More generally, it has been anticipated, research on the topic also adds to the debate on the consequences of democratic reforms. Given its hybrid nature, competitive authoritarianism represents the ideal place where to compare the effects of the fundamentally different institutions – democratic and authoritarian – that within it coexist, to evaluate the consequences of their interaction, to weigh their respective impact.

Beyond the academic debate, studying the consequences of competitive authoritarianism on citizens’ wellbeing sheds light on issues of even more substantive interest. First, the phenomenon currently affects about one-fourth of people living in so-called developing countries. To study the socioeconomic impact of this form of political regime means to evaluate how the living conditions of a



remarkable share of world population have been changing during the last two/three decades as a consequence of recent political transitions. Has political change, albeit limited, brought any meaningful improvement in people's material quality of life? Specifically, is the introduction of some degree of political competition in a context of persistently authoritarian governance enough to determine a change in power relationships between rulers and ruled, so as to make the latter's need more important? Has it merely represented a new dress for old settings? Or did the incomplete nature of the political changes recently occurred even produce more losses than gains for citizens?

Second, an in-depth analysis of the topic offers the opportunity to reconsider the normative dimension more or less explicitly attached to any discourse on democracy and democratization. Newly democratic and competitive authoritarian regimes share a common background: they emerged from the political and economic failure of repressive dictatorships. Likewise, the early days of their respective lives were invariably accompanied with the same aspirations and demands for a 'better future': freedom, self-determination, human rights, prosperity, development. For citizens of competitive autocracies established in the past three decades some of these aspirations have already been betrayed. They asked for more democracy, they obtained less authoritarianism at best. Were these aspirations a single package, an all or nothing? Is democracy and citizens' empowerment a necessary condition to solicit rulers' commitment to social welfare? Or is it possible to conceive that other political dynamics, only distantly related to a genuine democratic process, may have positive spill-over effects in terms of citizens' wellbeing? Is there any bright side of this story? Even more blatantly, is there any reason to see the transition from closed to competitive authoritarianism (rather than to democracy) as a glass half full?

For number and complexity, these are way more questions that can be possibly answered in a single work. For this reason, the research reported by the present manuscript focused on more circumscribed issues, namely *whether*, *how*, and *to what extent* competitive authoritarianism influences citizens' wellbeing. These questions have been addressed from both a theoretical and empirical point of view.

To do it, the research has followed a comparative approach. Competitive authoritarian regimes, and their socioeconomic consequences, have been contrasted with their respective full authoritarian and democratic counterparts.

*Outline.*

The manuscript consists of three main chapters.

Chapter 1 delves into a few preliminary issues: the conceptualization, classification, and measurement of the notion of competitive authoritarianism. To be sure, the point is not to re-define the concept. Levitsky and Way (2010), the authors who coined the term, have already handled the issue in a perfectly satisfactory way. The concept however has been originally conceived within the framework of a comparative multiple case-study research design, while in the present analysis econometrics techniques have been preferred. The aim here is thus to adapt the concept and its measurement to the exigencies of a different research strategy. To maximize the transparency of this operation, the analysis proceeds in a rather systematic way. Beyond the obvious imperfections that the translation entails, this effort could favour the future advancement of research on the topic by bridging the gap between qualitative and quantitative analysis.

Chapter 2 brings the discussion to a more substantive level and lays the theoretical foundations on which the subsequent empirical analysis will rest. The main argument is that, despite their apparent incompatibility, democratic and authoritarian institutions may interact in ways that elude conventional wisdom. These institutions tend to mitigate their respective effects. Specifically, the democratic dimension – as represented by institutionalization of multiparty elections for both executive and legislative office and, more generally, the opening of political arena to opposition participation – may compensate for some of the failures caused by the authoritarian component. The discussion then proceeds to evaluation of the reach of competitive authoritarian institutions effects. Attention is focused on two ‘interferences’, or mediating factors, namely the consolidation of a competitive autocracy and the

regional context to which it belongs. Each segment of the theoretical analysis leads to the formulation of a testable hypothesis.

Chapter 3 presents the research empirical results. The four hypotheses have been tested by means of a time-series cross-sectional analysis conducted on a sample of 132 developing countries observed from 1980 to 2008. As dependent variable twenty alternative indicators of human development, referring to the sectors of education and health care, have been selected.

The last section of the manuscript (Chapter 4) draws conclusions. The empirical findings illustrated in previous chapter are commented from a more substantive point of view. Their interpretation will lead to evaluate the explanatory potential of the theory that has been set out in second chapter. In the light of empirical evidence, in particular, a few indications concerning how the theory could and should be refined are outlined. These may represent as many recommendations to orient future research on the topic.

# Chapter 1

## **Competitive Autocracies: A definition, their classification, and measurement.**

To study whether, how and to what extent competitive authoritarian regimes influence the wellbeing of citizens, we should know exactly what we are talking about in the first place. Starting a research without having clear the actual nature of the object of our interest prevents us from reaching any meaningful conclusion. The notion of competitive authoritarianism makes no exception. Indeed, we will see, it represents one of those *essentially contested* concepts that not infrequently hamper the accumulation of knowledge in social sciences.

This is essentially the goal of this preliminary phase: to analyze this specific form of political regime, thus laying solid foundations for its subsequent study. Specifically, in this chapter competitive authoritarianism will be (1) defined as a regime type, (2) distinguished from other, more or less similar, types of political regime, (3) measured empirically.

The chapter is organized as follows. The first section (1.1) briefly reviews what the operations of defining, classifying, and measuring a political phenomenon consist of. The discussion is meant to outline a few guidelines that in the following sections (1.2-1.4) are followed when dealing with the concept of competitive authoritarianism. As a validation test of the measurement phase, finally, the last section (1.5) concludes by presenting the results of a descriptive analysis of the phenomenon of competitive authoritarianism.

## **1.1 How to define, classify, and measure competitive authoritarianism.**

Studying a given political regime requires the prior definition of what it is. Studying it following a comparative approach requires the enlargement of our perspective and an in-depth scrutiny also of what this regime is not. We should include it in a broader analytical framework. We should clarify how this specific political regime relates to others, seize differences and similarities, because they may prove essential for the understanding and assessment of the relationships under examination. Since in the next chapters these two goals will be pursued from both a theoretical and empirical point of view, this early stage of research requires also the measurement of competitive authoritarianism and the identification of a sample of such cases.

### **1.1.1 Conceptualization.**

Concepts represent the abstraction of empirical phenomena and are essential instruments for the acquisition of knowledge about the latter. Conceptualization is the process whereby a specific definition, or systematization, of a concept is formulated. Definitions are “conveyances of meaning expressed as an equivalence between a *definiendum* (what has to be defined) and a *definiens* (what serves to define)” (Sartori, 1984: 75). The starting point of this procedure is the background concept, or “the broad constellation of meanings and understandings associated with a given concept” (Adcock and Collier, 2001: 531). In very practical terms, the analysis of the background concept provides an overview of the range of alternatives available with reference to two main kinds of decision that have to be taken when defining a given object.

The first issue has to do with the identification of the properties that together form the intension (Sartori, 1984: 24) of the concept under examination. Here, the rule of thumb is to be minimal but not minimalistic, i.e. to “avoid the extremes of including too much or too little” (Munck and Verkuilen, 2002: 8-9). Minimal definitions focus

on what is important about a given entity, and treat as accompanying variables all those characteristics that are not strictly necessary for its identification. This is not to play the import of this phase down. Indeed while selecting a concept's secondary-level dimensions, its core attributes, researchers are actually working on "a theory of the ontology of the phenomenon under consideration" (Goertz, 2003: 27). Their identification, moreover, proves crucial in the subsequent phases of research. They orient the study of how a given phenomenon relates and interacts with others (ibidem: 28).

The second stage of this ontological effort refers to the clarification of the internal logical structure of a concept, or how its defining attributes are combined. The standard options, in this case, are essentially two: either a classic necessary and sufficient condition structure, or a family resemblance one. The ultimate point is to fix the rules to identify the referents forming the concept's extension (Sartori, 1984: 77). While the former approach suggests a crisp view of the concept, "where membership is all or nothing" (Goertz, 2003: 29), the latter is more flexible. The only prescription is one of "sufficiency without necessity" (Goertz and Mahoney, 2005: 504); the concept applies to a given empirical object insofar as "m of n characteristics are present" (Goertz, 2003: 36). In the absence of an ultimate best option, of alternatives that are intrinsically correct or wrong, Collier and Adcock's (1999) pragmatic approach is recommended: choose in the light of the research goals and make your point as explicit as possible.

### **1.1.2 Classification.**

Concepts do not just enable to seize a given object intellectually. Consider two standard situations. Two or more concepts may refer to different levels of generality: while sharing the same core set of properties, one of them owns an additional attribute that makes it more specific. In this case, the more general concept is also said the "overarching concept" (Collier et al. 2008: 156). Otherwise, two or more

concepts may lie at the same level of generality, while referring to the same overarching concept. Here, they represent two alternative specifications of the latter. In both situations, concepts are also describing, mapping, or classifying a given phenomenon and its variations. Classifications simplify reality. They preserve the researcher from being “inundated by complexity and unable to see the patterns underlying it” (Geddes, 2003: 50). More precisely, classification is the operation whereby objects are assigned to different classes on the basis of some properties, or *fundamenta divisionis* (Marradi, 1990). Depending on their number, we distinguish between generic classifications and typologies. Types, in particular, derive from the intersection between two or more dimensions.<sup>1</sup> If one or more of these dimensions are applied hierarchically, we create subtypes.

The standard requirements for a good classification are two. Its classes, or types, should be mutually exclusive and collectively exhaustive. Given  $n$  objects, “there must be one class (but only one) for each” (Bailey, 1994: 3), although – especially in social sciences – residual categories are typically admitted. The fulfilment of these requirements makes a classification well structured, but not necessarily useful. Usefulness refers to the extent that a classification “captures differences that are essential to the argument being made” (Geddes, 2003: 51).

### **1.1.3 Operationalisation.**

The ultimate assessment of the usefulness of a classification, however, is empirical. The identified classes/types should be applied to reality and filled in with empirical observations, or cases. To do it, the concept referring to each class should be operationalised. Operationalisation is the procedure whereby a given concept “is disaggregated into one or more indicators for scoring/classifying cases” (Adcock and Collier, 2001: 531).

An operational definition is valid to the extent that it adequately reflects “the concept we want to measure” (Jackman, 2010: 121). The choice of indicators is a primary

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<sup>1</sup> Other authors distinguish between uni- and multi-dimensional typologies (Collier et al., 2010: 153).

source of validity of an operational definition, which should neither omit any key element nor include inappropriate ones (Adcock and Collier, 2001: 538). Validity, however, also depends on the observance of the logical structure of the corresponding concept. To avoid concept-measure inconsistency, the rules according to which the selected indicators are re-aggregated should replicate as accurately as possible the theory of the concept, its original structure (Munck Verkuilen, 2002; Goertz, 2003; Coppedge et al., 2008).

Other important guidelines to be followed in the operationalisation of a concept are reliability, parsimony, and replicability. The operational definition of a concept is reliable to the extent that the “knowledge of the rules and the relevant facts is sufficient to lead different people to produce identical readings” of a given case (Cheibub et al., 2010: 74). The reliability of a measure is its precision (Jackman, 2010: 123). While validity avoids systematic errors (i.e. errors that take always the same direction), the more reliable an operational definition, the lower the risk of a random error. Parsimony refers to the number of indicators used to translate a single attribute of a concept, and to the related risk of redundancy. Replicability, finally, has to do with the possibility to access the material (information, data, etc.) necessary to replicate the measurement. It only indirectly affects the choice of the indicators.

## **1.2 Defining competitive authoritarianism.**

The goal of this section is to accomplish the first task of the above agenda. Competitive authoritarianism is a specific form of political regime. The latter concept is thus characterized by a higher level of generality and represents the overarching concept with respect to the former. Accordingly, defining competitive authoritarianism requires the prior clarification of what a political regime is. Starting from the notion of political regime, a few relevant dimensions are highlighted. This is the basis on which competitive autocracies will be defined, just after the identity of these regimes will be clarified through to the analysis of their background concept.



### **1.2.1 Political regime.**

Following Munck's (1996) analysis of the concept, a political regime consists of a procedural and a behavioural dimension. From a procedural perspective, political regimes are defined mainly by their institutions, both the formal and the informal ones. The behavioural dimension, in turn, refers to the political actors whose acceptance of the above mentioned procedures is necessary for the very existence of a political regime.

The legitimization of the rules of the game is unquestionably instrumental to the effectiveness – the very existence, indeed – of a political regime. Yet the inclusion of the behavioural dimension as a definitional attribute of political regime raises some practical concerns. How widespread among the citizens should the acceptance of the rules be? How deep and genuine should this sentiment of legitimacy be? Similar questions recommend the adoption of a minimum standard. The literature, in particular, generally agrees that a sufficient level of legitimization corresponds to a “self-interested strategic compliance” with the rules of the game (Przeworski, 1991: 24-26).

A second relevant issue has to do with the internal structure of the concept of political regime. Here the point is to decide “which logical treatment is appropriate for what purpose” (Sartori, 1987: 185). If one considers political regimes – i.e. specific combinations of institutions – to be qualitatively different from each other, these should be treated as bounded-wholes, thus using mainly a necessary and sufficient structure. If on the contrary political regimes are expected to differ from each other in the extent they display a given property, they could be thought of as different gradations along a continuum. In this case, one can more appropriately follow a family resemblance approach, since the focus is not on a regime's institutions *per se*.

The object of our interest are the consequences of a specific form of political regime, which is to say of the specific institutional setting that characterizes it. Given the focus of the present research, therefore, political regimes are defined, and

distinguished, primarily in terms of their institutional attributes. Accordingly, following Munck, a political regime is defined as a set of rules whose primary aim is the regulation of three main aspects of the political life of a country: (1) the number and type of actors allowed to take part to the selection of the individuals who fill the principal governmental offices, namely the position of chief executive and the membership of the legislative body, if any; (2) the methods of access to such positions; (3) how power is exerted. While the cross-tabulation of the first and second dimensions leads to a basic four-entry typology, the relevance of the third varies from case to case. As we will see in the next section, however, it may also prove essential to further specify the regime typology.

Other potential sources of confusion refer to the absence of a state authority, the consolidation of a political regime, and the transition from a regime to another. Although formally a state is not a necessary condition for a political regime to be in place, we should not forget that a regime is essentially the form of governance of a state (Linz and Stepan, 1996: 7). Hence, situations of colonial domination, occupation and/or control of the territory by a foreign army (or multi-national coalition), state failure, and contested sovereignty (e.g. disputed territories) inevitably cast doubts on the actual empowerment of a political regime. Regime consolidation is a rather complex notion. Since the issue will be treated more extensively in the next chapter (section 2.4.1), suffice it to say here that consolidation is better analyzed as a variable, rather than a definitional attribute of a political regime. Finally, the end of a regime and the beginning of a new one should be distinguished by other “temporary changing situations” (Morlino, 2009: 276). Regime transitions are intervals “between one political regime and another” (O’Donnell and Schmitter, 1986: 6) and are characterized by a high degree of institutional fluidity. In practice, however, to distinguish similar situations is a rather tricky task.

### **1.2.2 In the background of competitive authoritarianism: The identity question.**

Competitive authoritarianism is a hybrid form of political regime. The extension of this latter concept is broad and tends to encompass any form of political regime in which institutions that are generally associated with democracy co-exist with other institutional traits, or practices, that are typical of an authoritarian mode of governance. The notion of competitive authoritarianism is part of this conceptual “gray zone” between democracy and autocracy (Carothers, 2002).

Since the mid-1990s, the notion of hybrid regime has entered the debate on democratization. In spite of the lively academic debate triggered by these regimes, however, the concept has maintained most of its intrinsic ambiguity. A review of the debate, in particular, may easily show the lack of consensus in the analysis of the very identity of these regimes. What are hybrid regimes? Virtually every conceivable answer has been offered during the past years. Five broad alternative positions can be identified. Scholars defined hybrid regimes as either: a diminished type of democracy; a diminished type of authoritarianism; a third intermediate type of regime; an outright instance of authoritarianism; or a specific subtype of autocracy.

A diminished type represents a radial category anchored to a root concept, where the full complement of attributes possessed by the latter is not necessarily shared by the former (Collier and Mahon, 1993: 848). During the 1990s, diminished types of democracy – such as *delegative* (O’Donnell, 1994) and *illiberal* (Zakaria, 1997) – proliferated (for a discussion, see Collier and Levitsky, 1997). More recent instances are Merkel’s (2004) four types of *defective* democracy, Morlino’s (2009) categories of *protected* and *limited* democracy, and the concept of *flawed* democracy (The Economist, 2011). As Linz (2000: 34) put it, however, the idea of a diminished form of democracy derived from a biased perspective: the desire that these regimes would soon remedy their imperfections. Similar considerations prompted adoption of an opposite approach, taking authoritarianism as the root. An *electoral* authoritarian regime plays “the game of multiparty elections (...) yet it violates the liberal-democratic principles (...) so profoundly and systematically as to render elections

instruments of authoritarian rule” (Schedler, 2006: 3). This and similar concepts, such as *liberalised* authoritarianism (Brumberg, 2002), differ from diminished types of democracy in one important point: they stressed the attributes these regimes possess, rather than what they lack. In theory, diminished types were coined to pursue “analytical differentiation while avoiding conceptual stretching” (Collier and Levitsky, 1997: 430). In practice, because of the difficulties related to setting their respective boundaries (cf. Bogaards, 2009), in empirical research they often proved unfruitful and generated “radial delusion” (Møller and Skaaning, 2010). With few exceptions (Brownlee, 2009; Howard and Roessler, 2006), as a consequence, diminished types have mainly been used in case-study analysis (Baeg Im, 2004; Beichelt, 2004; Bunce and Wolchik, 2010; Case, 2011; Croissant, 2004; Henderson, 2004; Langston and Morgenstern, 2009).

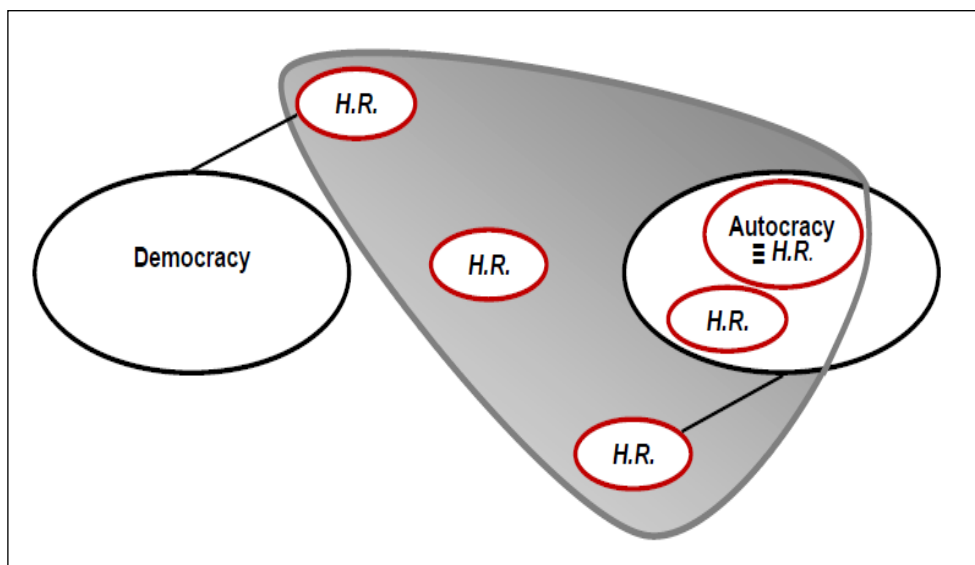
Coining intermediate types between democracy and autocracy is the most natural way to conceptualise hybrid regimes. In its original formulation, the notion was meant to identify a set of regimes occupying “some middle hybrid terrain” between consolidated democracy and frank authoritarianism (Karl, 1995: 73). The opportunity of breaking the democracy-versus-autocracy dichotomy attracted several authors. This resulted in the proposal of some refreshing new typologies of political regimes (Gilbert and Mohseni, 2011; Wigell, 2008). Many others stuck with a simpler trichotomy, the new intermediate type being variously labelled either *hybrid* (Ekman, 2009; Gerschewski and Schmotz, 2011; Zinecker, 2009), *mixed* (Bunce and Wolchik, 2008), *semi-democracy* (Bowman et al., 2005; Mainwaring et al., 2001; Reich, 2002), or *partial* democracy (Epstein et al., 2006). The third type, however, tends to lose its analytical usefulness and become a residual category including a variety of regimes that differ from one another in a number of features, while sharing the sole property of being neither democratic nor autocratic.

A sharper, parsimonious approach is to consider hybrid regimes as outright instances of authoritarian rule. The process of hybridization – that is, the “choice of nominally democratic institutions” (Gandhi, 2008: 41) – has recently characterised a variety of dictatorships. Accordingly, the class of regimes featuring institutions such as

periodic elections (Geddes, 2005), multiple parties (Gandhi, 2008; Geddes, 2005), and legislatures (Boix and Svobik, 2008; Gandhi, 2008) cross-cuts the universe of non-democratic regimes. Military, single-party, personalistic, hereditary regimes may all “get hybrid” by introducing democratic institutions. Yet, this process does not alter their nature, it does not redefine identity, and its relevance is inevitably downplayed.

A similar, but less stark solution is to conceptualise hybrid regimes as a *sui generis* subtype of authoritarianism. The idea of introducing a further distinction among authoritarian party-based regimes is not new and has its origins in the notion of a non-competitive *hegemonic-party* system (Sartori, 1976: 230–237). Albeit dated, a few authors have recently reintroduced this notion (Magaloni, 2006; Greene, 2010; Reuter and Gandhi, 2011). Another recent example is Hadenius and Teorell’s (2006) type of limited *multi-party* regime. This approach seeks a balance between parsimony and accuracy. It preserves the basic dichotomous division between democracy and autocracy, while paying attention to the transformative potential of the institutions of a hybrid regime. Yet, an additional subtype of autocracy challenges most of the traditionally acknowledged typologies.

**Figure 1. Conceptual gray zone.**



### **1.2.3 Defining competitive authoritarianism.**

Preliminary evidence drawn from the literature highlights the extent of the conceptual divergences affecting the analysis of hybrid regimes. Figure 1 illustrates the consequences of the proliferation of alternative conceptualizations. This stretching of the borders of the gray zone hampers our ability to seize the object of our interest, competitive authoritarianism.

Levitsky and Way, the authors who coined the term, define competitive authoritarianism as follows. A competitive authoritarian regime is a hybrid regime “in which formal democratic institutions exist and are widely viewed as the primary means of gaining power” and in which “opposition parties use democratic institutions to contest seriously for power”. Yet “the playing field is heavily skewed in favour of incumbents”, thus making political competition “real but unfair” (2010:5).

With reference to the previous analysis, competitive autocracies qualify as non-democratic political regimes, which nonetheless are distinct from others. This ontological interpretation of the phenomenon is faithful to the original (cf. Levitsky and Way, 2010: 4 and 13), and should be preferred to existing alternatives, including the main competing approach, the diminished type one. Although the term competitive authoritarian could also be thought of as indicating a ‘deviation’ from full/closed authoritarianism, that would be misleading. Competitive authoritarianism entails a paradox: the introduction and practice of democratic institutions does not democratize the regime of a country. To the extent that competition is limited and ultimately ineffective, competitive autocracies are not less authoritarian than others. They are ‘otherwise authoritarian’. Given the goals of the present research, moreover, it is important to highlight how the presence of a specific attribute, political competition, makes these regimes different. Whether or not it does soften their degree of authoritarianism – if ever it could be measured – is relatively irrelevant.

By re-examining Levitsky and Way's notion of competitive authoritarianism in the light of previous discussion of the concept of political regime, it is also possible to identify the core institutional attributes that define the former and to deepen their analysis. Competitive autocracies are inclusive regimes, in that there are no major restrictions to the participation of citizens to the procedure of leadership selection, by means of periodic elections with extensive suffrage. Inclusiveness refers to the "proportion of the population entitled to participate on a more or less equal plane" (Dahl, 1971: 4), or having a "granted say in the selection of leaders" (Bueno de Mesquita et al., 2003: 41). Elections, in turn, simply refer to the call, at regular intervals of time, to vote for a candidate standing for either the executive or the legislative office, no matter how many alternative candidates are present. Following Doorenspleet, suffrage is extensive as long as less than 20% of the adult population is excluded (2000: 391; see also Coppedge and Reinike, 1985).

These regimes are competitive, since they formally abide by the rules of political competition. Political competition is primarily electoral competition, i.e. a "competitive struggle for the people's vote" (Schumpeter, 1976: 269). A political regime is competitive if both the main governmental offices – executive and legislative – are filled in by means of competitive elections. Elections, in turn, are competitive if they are characterized by *ex ante* uncertainty. In theory, *ex ante* uncertainty is in place when opposition "has some chance of winning office" (Przeworski et al. 2000: 16) or, from a slightly different perspective, competitors are "truly independent antagonists" and "candidates of the predominant party are opposed without fear" (Sartori, 1976: 217). In practice, this is a rather loose standard and, to avoid confusion, a procedural focus should be preferred. Following Hyde and Marinov, electoral competition (its result) is uncertain as long as "opposition is allowed, multiple parties are legal, and more than one candidate is allowed on the ballot" (Hyde and Marinov, 2011: 195; on the latter requirement see also Sartori, 1976: 217). This is a minimum standard for political competition, yet it is more demanding than the notion of free elections, defined as the mere presence of "multiple options on ballots" (Boix et al., 2012: 1531).

Competitive autocracies, finally, are invariably characterized by an uneven playing field. This attribute refers to the third dimension of the concept of political regime. The asymmetry essentially derives from the persistence and prevalence in this form of political regime of authoritarian practices of governance. Competitive autocracies are regimes in which rulers enjoy few limits to the exercise of their arbitrary power, commit frequent violations of political and civil rights of citizens in general, and of opponents in particular. Incumbents' arbitrariness results in abuse of state institutions for partisan ends, in a preferential access to resources and media, in the politicization of electoral and judicial institutions, and not infrequently in electoral manipulation. The violation of political and civil rights, in turn, results in surveillance, harassment, intimidation, and occasional violence against opposition parties. The informal institutionalization of similar practices impoverishes the quality of political competition. Competition in these regimes is limited, controlled, ineffective and ultimately unfair. All this hampers "opposition's ability to organize and compete" (Levitsky and Way, 2010: 9), spoils its chances of victory, thus making government turnover an unrealistic option.<sup>2</sup>

How institutions, so different and apparently incompatible with each other, may coexist within the same regime is illustrated by one of the most longstanding and 'borderline' existing cases, the Republic of Zimbabwe. Since the recognition of independence in December 1979, the ZANU-PF has ruled the country winning eight consecutive legislative multi-party elections in which the opposition has always been allowed to compete. Its leader Mugabe first served a seven year term as Prime Minister, then became the first Head of State and has retained the post to the present day, having been reconfirmed in office five times in as many presidential elections in which one or more challengers from opposition parties run. Earlier successes might be explained by personal prestige of the former leader of the Patriotic Front, lack of

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<sup>2</sup> The notion of playing field used here is admittedly looser than the definition formulated by Levitsky and Way. Specifically, in the appendix of the book they treat the playing field as a factor distinct from elections fairness and civil liberties protection (2010: 365-368). However, the authors themselves agree that "many characteristics of an uneven playing field could be subsumed into the dimensions of 'free and fair elections' and 'civil liberties'" (2010: 6).



credible alternatives, and the approval in 1990 of constitutional amendments that increased the President's discretionary power. During the second half of the decade, however, opposition organized. Although this second phase of the regime corresponds to the tightening of repression, the newborn Movement for Democratic Change has been allowed to compete in all subsequent legislative and presidential elections and, in more than one occasion, to seriously challenge the ruling party's tenure.

A few potential sources of confusions within the competitive authoritarian regime category may derive from the presence of non-elected actors, and the concentration of power in the hand of the ruling party. The presence of a small share of non-elective seats in a legislature, assigned by appointment, does not disqualify a competitive autocracy. Reserved domains and/or unelected tutelary bodies that enjoy veto power, on the contrary, do. Following Sartori (1976: 218), competitive autocracies are defined by the presence of political competition as a structure, and not by the competitiveness of a given election and its outcome. Accordingly, competitive authoritarian regimes may display different degrees of competitiveness. Other sources of variation within the category, finally, have to do with the degree of personalism (Geddes, 1999), the ability of the ruling party to penetrate the civil society, and the level of coercion.

### **1.3 Classifying competitive authoritarianism.**

A definition of competitive authoritarianism is not exhaustive as long as it has not been clarified also what the phenomenon is not. Given its hybrid nature, in particular, it is important to highlight differences and similarities between competitive autocracies (CAs) and those regimes with which it shares one or more institutional attributes, namely democracy and other forms of authoritarian rule. The goal is to specify the relative position of the competitive authoritarian category within a broader classificatory framework of political regimes. I start from the cross-tabulation of the first and second regime dimensions. Although I agree that both

political inclusiveness and competition can be thought of as continuous concepts, I suggest to consider them in dichotomous terms here, with no loss of analytical power. Accordingly, the following discussion relies on a basic four-entry regime typology (Table 1).

**Table 1. Basic regime typology.**

		Inclusion	
		No	Yes
Competition	No	Closed	Mass-based
	Yes	Exclusionary	Open

### 1.3.1 CA vs. Democracy.

Competitive authoritarian and democratic regimes are both *open* – i.e. inclusive and competitive – regimes. In both cases, multi-party, multi-candidate, universal suffrage elections for the main governmental offices in which the opposition is allowed to run, gain seats in the legislature and, in principle, to win, formally are the primary means of leadership selection. It is the “centrality of informal institutions” (Levitsky and Way, 2010: 27) in competitive autocracies, namely how power is effectively exerted, that makes the difference. The unevenness of the playing field, as determined by incumbents’ abuse of power and violation of civil and political rights, the unfairness of political competition is what distinguishes competitive authoritarianism from democracy.

From a slightly different point of view, democracy differs from competitive authoritarianism since it is something more than an open political regime. To clarify this point, let me quote a classic. Democracy is a regime “highly inclusive and extensively open to public contestation” (Dahl, 1971: 8). The definition goes beyond the formal institutionalization of political competition. It also underlines how

competition in a democratic regime is. Democratic regimes are *extensively open* to public contestation. In principle, political competition in a democratic regime is not limited or constrained. Contrary to competitive authoritarian regimes, in a democracy there are no informal practices that hamper the ‘normal’ functioning of competition in a systematic way. Democratic regimes, therefore, differ from competitive autocracies since political competition is not only formally institutionalized but effectively in place.<sup>3</sup>

Effectiveness is the difference between political competition in a democratic and in an authoritarian regime. To make political competition effective, democratic regimes remove most of the barriers that, in a competitive autocracy, the ruling elite builds and/or maintains against the opposition. They strengthen the institutional constraints to the exercise of the executive power, thus reducing the margin of abuse. They enforce citizens’ political and civil rights, thus promoting opposition parties’ activity beyond the mere participation to the electoral contest. In doing so, democratic regimes level the playing field in which the ruling and the opposition parties contend for power, thus making competition fair. This is exactly the opposite of what happened in Venezuela following Hugo Chavez elections in 1999. During his three-term presidency (the fourth term being suddenly ended by his death in 2013), the country experienced a progressive deterioration in the quality of political competition. Especially in the aftermath of 2002 short-lived coup, freedom of expression was severely undermined, press and media independence restricted, while the distribution of resources between the ruling and the opposition party grew increasingly asymmetric.

To be sure, achieving and guaranteeing the evenness of the playing field does not necessarily imply government turnover to happen. Democracy, as Przeworski famously put it, “is a system in which parties lose elections” (1991: 10). From a theoretical point of view, government turnover could be thought of as the ultimate

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<sup>3</sup> From this perspective, competitive autocracies roughly correspond to a ‘fake predominant-party system’ in which alternation is not ruled out, opportunities for open dissent exist, but the ruling party “de facto impedes effective competition” (Sartori, 1976: 237).

fulfilment of a fully democratic process. It is what makes democracy extra-ordinary: in a democracy, and in a democracy only, the winners of elections rule under the realistic threat of being voted out of office in the next round; and the losers accept the defeat, since their victory is plausibly only postponed. From an empirical point of view, moreover, an opposition party that after winning elections takes office has often been seen as the ‘smoking gun’ ratifying the successful democratization of a country.

As a piece of evidence, however, alternation in power might be less informative than expected. On the one hand several reasons may justify why, especially in a relatively young democratic regime, government turnover has not happened yet. Among others, opposition may be too fragmented, disorganized, and inexperienced to represent, from the voters themselves’ point of view, a credible alternative for ruling the country. On the other hand, the opposition’s takeover in a competitive authoritarian regime, as a consequence of the electoral defeat of the incumbent party, may not correspond to a transition to democracy. In her pioneering work, Ottaway argued that similar critical junctures “can lead equally easily to greater democracy, renewed semi-authoritarianism, or even greater authoritarianism” (2003: 157). Levitsky and Way found evidence of similar episodes from their cases-study analysis of unstable competitive autocracies: Zambia (Kaunda vs. Chiluba, 1991), Belarus (Kebich vs. Lukeshenka, 1994), Malawi (Banda vs. Muluzi, 1994), Albania (Berisha vs. Meidani, 1997), Senegal (Diouf vs. Wade, 2000), Moldova (Snegur vs. Lucinschi, 1996; Lucinschi vs. Voronin, 2001), Kenya (Moi vs. Kibaki, 2002), Madagascar (Ratsiraka vs. Ravalomanana, 2002). Likewise, Wahaman recently demonstrated that “there is not a one-to-one relationship between democratization and electoral turnovers” (2012: 5). Svobik, finally, notes that, even if turnover took place in one or more past elections, the actual willingness of a given (re-)elected incumbent government to step down in case of defeat cannot be known *ex ante* (2012: 24).

To conclude, effectiveness of political competition, guaranteed by a relatively even playing field, is what makes democracy substantively different from competitive authoritarianism, and any other form of political regime. Effective political

competition refers to a concrete possibility of alternation in power. The actual occurrence of this event, however, is neither necessary nor sufficient.

### **1.3.2 CA vs. Mass-based regimes.**

The institutionalization of political competition – albeit unfair and largely ineffective – is what distinguishes competitive authoritarianism from most other forms of non-democratic rule. These authoritarian regimes are invariably characterized by the absence, or severe limitation, of constitutional channels through which opposition parties may operate above ground. So defined, however, the latter group is quite heterogeneous, little more than a residual category. By paraphrasing Barbara Geddes, these full-scale autocracies differ from each other, as much as they differ from competitive autocracies (Geddes, 1999: 121).<sup>4</sup> These institutional variations are as relevant as those already highlighted. As long as they are not analyzed, we are unable to study the phenomenon of interest with the due accuracy. When comparing competitive autocracies with other non-democratic regimes, we would be likely to miss important nuances that may contribute to explain our findings and refine our theory.

Taken as a whole, the universe of full authoritarianism ranges from non-inclusive regimes, and their variations, to regimes that are inclusive but non-competitive. From an institutional point of view, these *mass-based* regimes are perhaps the closest to competitive autocracies. Their analysis, therefore, should be given priority.

Mass-based regimes hold periodic elections for either the executive, the legislative or both. The authority and legitimacy of these offices formally rely on people's vote. Yet while citizens' participation is promoted, major restrictions – either formal or informal – to opposition parties' activity and/or existence nullify political competition. So defined, the category of mass-based regimes encompasses a

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<sup>4</sup> I use the term full (or full-scale) authoritarianism for mainly practical reasons, since it is common in the literature and captures what in table 1 are labelled as mass-based, exclusionary and closed regimes in a word. Yet it echoes a rather old-fashioned teleological approach according to which competitive authoritarianism is better than other forms of dictatorships. As already clarified, I consider CAs just as a different form of authoritarian rule. Any other evaluation should rely on empirical assessment.

relatively homogeneous array of cases. Generally speaking, inclusive non-competitive regimes are single-party regimes. A single ruling party occupies the centre of the political arena and dominates politics. The single party control in a monopolistic way the “access to political office and (...) policy” (Geddes, 1999: 6; see also Magaloni, 2008: 17). This position of supremacy may be sanctioned either *de jure* or *de facto*. Likewise, unipartitism does not prevent some degree of intra-party pluralism (Sartori, 1976: 48) to exist, and some form of “competition between candidates (...) may also obtain” (Hadenius and Teorell, 2006: 6-7). In both cases, however, there’s “only one effective party, any other party that might exist having little effect on the course of events” (Huntington and Moore, 1970: 5).

The most relevant source of variation within the single-party category derives from the specific configuration of the party system, rather than with how power is exerted. In particular, we may want to distinguish a pure form of one-party regime from other cases formally characterized by a multi-party system (Geddes, 2003 and 2012). In one-party regimes elections result “in the allocation of all seats in the legislature to one and the same party” (Sartori, 1976: 221; cf. Magaloni, 2008: 18). Even if, legally, other parties are allowed, these are either “satellite parties which are autonomous in name, but which cannot take an independent position” (Hadenius and Teorell, 2006: 6), or forbidden from taking part to elections. In one-party regimes, *de facto* only one party exists.

Other single-party regimes are characterized by substantive unipartitism in formally multi-party system. These are regimes that are “one-party centered and yet display a periphery of (...) second class minor parties (Sartori, 1976: 230). These parties “may exist and compete as minor players” (Geddes, 2003: 51), but “they are not permitted to compete (...) in antagonistic terms” (Sartori, 1976: 230). Their presence in the electoral arena, therefore, neither challenges the ruling party’s hegemony, nor leads the ruling party to modify its own strategy. Even when they gain some fraction of seats in the legislature, they hardly play the role of opposition and tend to align with the government coalition, in the attempt to have some influence on the policy-making or to receive some sort of benefit. Contrary to the pure one-party category,

these regimes should not be considered as an actual sub-type of mass-based regime and, with respect to the former, qualify as a sort of residual category within the single-party type. Although I prefer not to use or establish precarious links with other concepts, in order to avoid confusion, these regimes could be easily associated with labels such as electoral authoritarian, or hegemonic regimes (Schedler, 2002 and 2006, Diamond, 2002, Magaloni, 2008).<sup>5</sup>

The difference between pure one-party and competitive authoritarian regimes is manifest and well illustrated by the several cases of transitions occurred after the end of Cold War in post-communist countries – among others Russia, Moldova, Ukraine, Armenia. To seize what makes competitive autocracies and non-pure forms of single-party regime the example of Egypt might help. Since its founding in 1978 by Sadat, the National Democratic Party wielded a virtually uncontested hegemony on national politics, despite the formal existence of other minor parties allowed to run legislative elections. Similarly, since Mubarak came to power in 1981, he ruled for more than twenty years and won four consecutive plebiscitary elections at regular six-year intervals in which he run as the only candidate. Only in 2005, as a consequence of the constitutional amendments approved by a referendum, presidential elections became contested.

Other potential sources of variations within the single-party regime type have more directly to do with the third defining dimension of the concept of political regime. Among them are the ability of the single-party to penetrate the civil society, the level of coercion, and the balance of power between the leader and the party. Single-party regimes may be either leader- or party-centred. In the former case, the leader enjoys a high degree of autonomy and uses the party, typically characterized by a low level of institutionalization, as an instrument for gaining, maintaining and exerting his power. In many cases, the party is founded by the leader himself – not infrequently a civilianized former member of the military – after the seizure of power. In party-

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<sup>5</sup> My reluctance is due to the minimal definition of political competition here embraced. So defined, in other words, the competitive authoritarian category might include cases that other authors would have classified as electoral hegemonic-party autocracies.

centred regimes, the party is a well structured organization which exerts also some control over the leader (Geddes, 2003: 53). Another instance of mass-based regime, that does not enter the single-party type, is the no-party regime. These cases are rare – the most famous ‘experiment’ being Uganda from 1986 to 2005 under Museveni (cf. Carbone, 2008) – they are generally characterized by an explicit anti-partitism (Huntington, 1968: 407), and frequently represent a variant/evolution of military regimes.

### **1.3.3 CA vs. Non-inclusive regimes.**

The institutionalization of periodic elections open to participation of citizens as the primary means to assign the main governmental offices is what distinguishes competitive autocracies and mass-based regimes from non-inclusive regimes. In non-inclusive regimes the power to govern the country is assigned in the absence of a formal mechanism for the consultation of the majority of citizens. Non-inclusive regimes are invariably characterized by a small *selectorate* (Buono de Mesquita et al., 2003).

From a historical point of view, this broad category of non-democratic regimes represents the modal one. During the twentieth century and especially its second half, on the contrary, the category of non-inclusive regimes experienced a significant reduction in the number of cases. Although to a lesser extent, the same holds true in terms of the variety of the regimes included.

This is especially the case of those regimes in which periodic elections exist, some multi-party competition is in place, but suffrage is restricted. These *exclusionary* regimes correspond to what Dahl defined “competitive oligarchy” (1971: 7): a regime in which political competition exists but significant sectors of the society are not allowed to participate, based on either socioeconomic status, gender, or race. Although it currently represents an empty cell, in the past this regime type characterized the early phases of the process of democratization followed by many Western countries, in which the introduction of competition preceded the extension



of political rights. The most recent example was South Africa during the period of apartheid legislation.

Nowadays, non-inclusive regimes are in most cases *closed*. A regime remains closed as long as the effective holder of the executive power is not elected. This condition provided, one of the following situations may obtain: a legislature exists, is elective, but does not enjoy autonomous power of government; a legislature exists, but is non-elective; there's no legislature at all. These second-order variations notwithstanding, closed regimes are characterized by two main alternative methods of leadership selection: hereditary succession, and military designation.

A political regime is hereditary if the effective head of the government is a monarch selected by ascription, i.e. throughout a process of succession which is dynastic and based on lineage. Both the potential candidates to the succession – primogeniture is not a sine qua non condition – and those people who influence the decision are typically members of the reigning family (Cheibub et al., 2010: 84-85). The procedure of hereditary succession, the 'passing of the throne' to an heir, should be established either by the constitution or as a consolidated practice: "one cannot proclaim oneself a monarch" (Hadenius and Teorell, 2006: 5). The ruler usually holds the title of king, or a similar and equivalent qualification, such as prince, emperor, emir, sultan, tsar. In a hereditary regime, finally, the monarch must be the chief executive de jure and de facto, i.e. he/she cannot be just the formal head of the state.

The historical relevance of this regime type is somehow confirmed by its ability to escape extinction, to adapt by modifying the modality according to which power is exerted. In most cases, the absolute monarchy ideal-type gave way to limited forms of power-sharing. Most contemporary hereditary regimes, in other words, qualify as "broadened dictatorships" (Ghandi, 2008: 74). They are frequently characterized by the presence of a parliamentary assembly with consultative functions and legislative initiative. In many cases, the majority of the members of this body are elected in multi-party elections. When a prime minister exists, however, he/she (as well as the other members of the cabinet) is typically appointed, or approved, by the monarch

who also maintains a veto power on legislation. The political reforms launched by Jordanian King Hussein in 1991 are a case in point. Since “the locus of power remains within the royal or dynastic family and (...) the dictator’s seat is not opened to political contestation” (Magaloni, 2008: 731), in conclusion, these contemporary forms of hereditary regime are neither inclusive nor competitive.

A military regime is “a system of managing government by the military” (Perlmutter, 1980: 96). The legislative and executive powers are under the control, either direct or indirect, of a junta formed by top-ranked officers of the armed forces. The head of government is typically a member of the military himself; even when it is not the case, however, it is only because the military junta so decided (Geddes, 2003: 51; Cheibub et al., 2010: 85-96). Likewise, if a military officer, after being appointed, resigned and present himself as a civilian leader, the regime remains military as long as the supporting elite is the military junta. Other positions of government, on the contrary, are frequently assigned to civilian personnel – bureaucrats, managers, politicians, and technocrats (Perlmutter, 1980: 97).

Between the end of the second World War and the end of the 1980s, military dictatorships represented one of the most common forms of authoritarian rule (Brooker, 2000: 59). This is reflected by the considerable amount of studies published during the 1970s on the topic (Schmitter, 1971; Stepan, 1971; Finer, 1975; Jackman, 1976; Perlmutter, 1977; Nordlinger, 1977). The main achievement of this body of literature is the analysis of the plurality of forms that the military intervention may take.

When the army intervenes into domestic politics, it carries out a coup d’état to overthrow the incumbent government. This decision is generally conceived as a temporary solution, Myanmar being one of the rare exceptions, but might be justified by very different motivations (Finer, 1975; Nordlinger, 1977) – to mediate political conflicts, to guard the national interest (e.g. Turkey in 1980), to substitute an incompetent political elite (e.g. Pakistan in 1999), to defend particular corporate interests (Brazil in 1974). Likewise, scholars distinguish military regimes according to how power is exerted. The army exercises political power either in a direct way, or

‘behind the scenes’, i.e. by indirectly controlling the activity of a civilian government (Finer, 1975). For instance, we have an indirect control when “formal political leaders are chosen through competitive elections, but the military either prevents parties that would attract large numbers of votes from participating or controls the selection of important cabinet ministers” (Geddes et al., 2012: 8; see also Hadenius and Teorell, 2006: 6). If, on the contrary, the interference of the armed forces is either limited or only intermittent, the regime should not be considered as military. When the Turkish military forced Prime Minister Erbakan to resign in 1997, for instance, a regime change did not occur since executive power was directly transferred to ANAP’s leader Mesut Yilmaz and officers returned to the barracks.

## **1.4 Measuring competitive authoritarianism.**

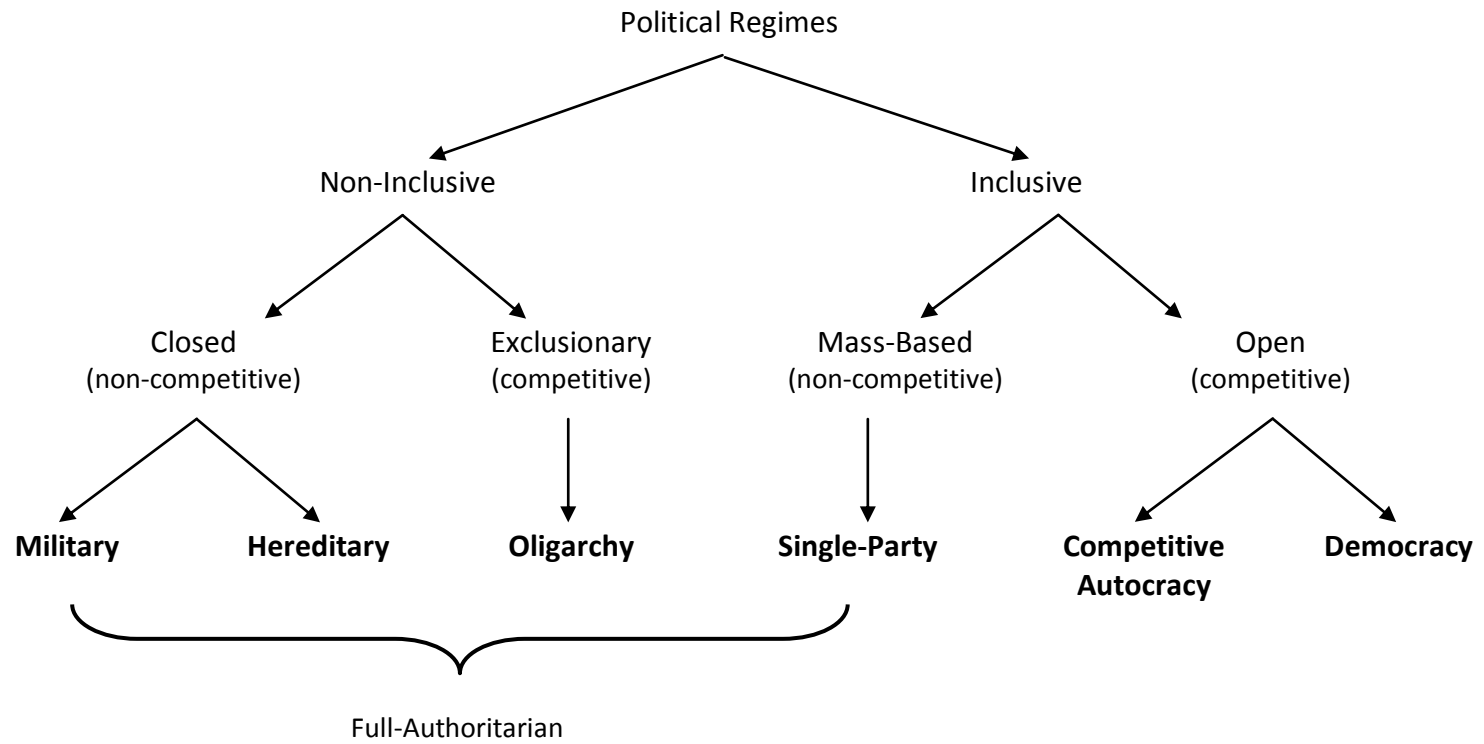
Figure 2 illustrates the resulting typology of political regimes, as it has been derived from the basic one (see Table 1) and described in previous section. The goal of this section is, for each regime type, to formulate an operational definition and, on its basis, to measure it.

### **1.4.1 Periods of no authority.**

The operationalisation and measurement of any regime type requires the prior distinction between actual political regimes and periods of no independent authority as well as other situations which, for any reason, cast doubts on the actual existence of a functioning political regime.

As regards former colonies and countries that gained independence following the collapse of a larger political entity or as a consequence of a secession, the analysis takes these cases into account starting from the year of their international recognition as independent countries. Disputed territories, such as Palestine, on the contrary, are excluded from the analysis.

Figure 2. Full typology of political regimes.



The Polity IV project classifies as ‘interruptions’ periods of occupation by foreign powers following a war and preceding the reestablishment of an independent polity, periods during which foreign powers intervene to provide assistance and re-establish political order, and short-lived attempts at the creation of ethnic, religious, regional federations. A period of ‘interregnum’, in turn, corresponds to a situation of state failure, during which central political authority is collapsed. Accordingly, any time the occurrence of similar situations is recorded, as indicated by a score equal to -66 or -77 in the Polity scale, a given cases is classified as a non-authority period.

Although sharing a similar concern, this approach differs from the one illustrated by Svoboda (2012). The author, in particular, classifies as periods of non-authority also situations of civil wars (over the territory and/or the government). Here, similar situations are taken into consideration as relevant only if they lead to the full collapse of the state.

#### **1.4.2 Open regimes: Competitive authoritarianism and democracy.**

Competitive autocracies are inclusive regimes characterized by the institutionalization of political competition. A regime is inclusive if either the executive office, the legislative, or both are formally assigned by means of periodic elections with extensive suffrage. Operationally, inclusive regimes can be easily identified by the indicators referring to the elective nature of the executive and the legislative available from Cheibub et al.’s Democracy and Dictatorship dataset (2010), an updated versions of the indicators S21F6 and S22F5 included in Arthur Banks’ Cross National Time Series dataset (2006). I checked for the presence of extensive suffrage – meaning less than the 20% of the population excluded from vote – by relying primarily on Paxton’s data (Paxton et al., 2003) and using, as secondary sources, the Political Discrimination Index from the Minorities at Risk project (2009), and the Women Political Rights indicator from the Cingranelli and Richards’ Human Rights Data Project (2008).

Following the analysis in section 1.2.3, a political regime is competitive if (1) the executive office is assigned by means of periodic multi-party and multi-candidate elections, (2) a legislature exists, is not closed, and is elected under similar rules, (3) opposition parties are allowed to run and at least to gain seats in the legislature. Operationally, these criteria are met when Cheibub et al. (2010) classify a given case as follows: de-facto multi-party system (in which parties do not belong to the same regime front); executive selected through direct or indirect elections; legislature elected, non-closed and with multiple parties. The application of an additional operational rule allows for a more precise identification of the beginning of a competitive regime: (4) a competitive regime starts only when at least one election for the executive and one election for the legislative, that fulfil the above requirements, have been held.<sup>6</sup>

The above four operational rules, however, identify open regimes, while the difference between competitive authoritarian and democratic regimes is still to be seized. To do so, two additional criteria are needed. Competitive autocracies differ from democratic regimes because of the asymmetry of the playing field in which the ruling and the opposition parties confront each other. The playing field is uneven as long as (5) there are only few constraints to the arbitrary power of the chief executive, or (6) violations of the citizens' political and/or civil rights are frequent. Conversely, a democracy is an open regime where both executive constraints and civil and political rights are enforced. This is the case when the Polity IV's executive constraints index is equal to 3 or better, and Freedom House assigns a score equal to 3 or better in both the political rights and the civil liberties scales. According to Polity IV's manual, the selected threshold indicates 'slightly to moderate limitation on executive authority'. According to Freedom House's online methodology page, the chosen threshold corresponds to 'moderate protection of almost all political rights and/or civil liberties'.

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<sup>6</sup> In spite of the apparent redundancy, it should be noted that criteria 1 and 2 refer to rules, whereas the fourth refers to their implementation.

To be sure, the operational distinction between democratic and competitive authoritarian regimes entails a slight departure from a strict necessary and sufficient condition structure. Specifically, the fulfilment of one out two criteria is enough to determine the unevenness of the playing field. As regards the concept of competitive authoritarianism, however, this (hybrid) structure, combining necessary conditions (1-4) with only sufficient ones (5-6), does not result in low concept-measure consistency. The latter two criteria refer to the attribute ‘uneven playing field’, which is necessary – and jointly sufficient with the other attributes – to define a competitive autocracy. At this stage of analysis, it is also possible to represent the concept of competitive authoritarianism, as it has been described in previous pages, graphically. Following Goertz (2003), figure 3 illustrates the three-level structure of the concept.

#### **1.4.3 Full authoritarian regimes: Single-party, hereditary, and military regimes.**

Single-party regimes can be easily identified *a contrario*, based on previous operational rules. They are inclusive regimes that fail to fulfil the requirements to qualify as competitive. They are invariably characterized by the presence of a party system, but the actual number of parties that exist may vary. A pure one-party regime, in turn, is a single-party regime in which only one party *de facto* exists.

Following Cheibub and colleagues, a regime is classified as hereditary if the effective head of the government is a monarch, as reflected by his/her title, and has been preceded or succeeded by a relative (Cheibub et al., 2010: 84). Their coding rules lead to identify a set of regimes that overlaps almost perfectly with those identified by Banks (see field S21F5 of the Cross National Time Series data archive), and, more recently, by Geddes, Wright, and Frantz’s Autocratic Regime dataset (Geddes et al., 2012).

A military regime, in turn, is recorded any time the government of a country is either directly ruled by a military junta, or by civilians who are under the influence and control of a military elite (see field S20F7 from Banks’ CNTS data archive). This coding differs from the one set by Cheibub et al. (2010: 85-86) who classify as

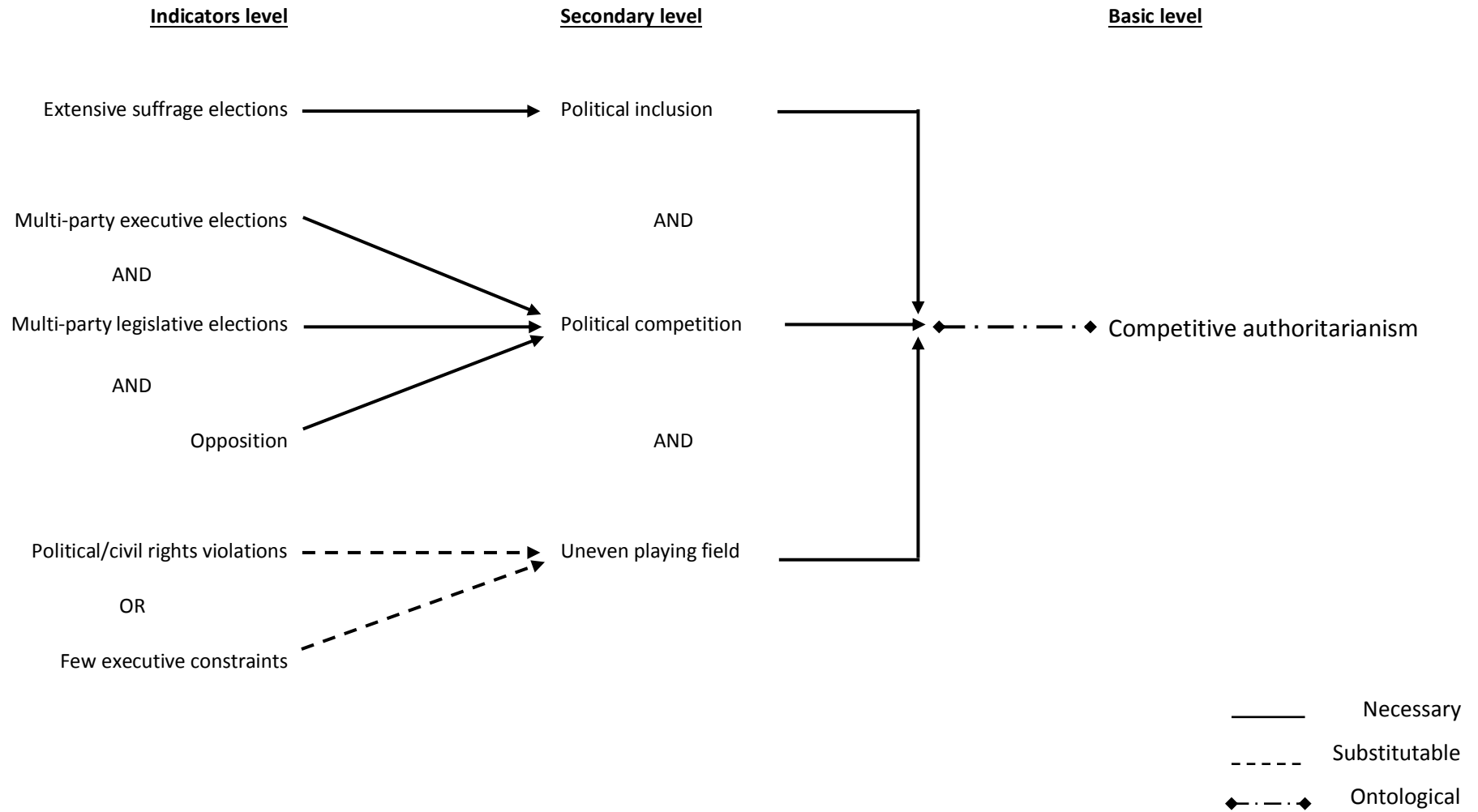
military any non-democratic regime in which the effective head of the government is or ever was a member of the military by profession (guerrilla movements excluded). The remaining cases of inclusive regime – neither democratic, competitive authoritarian, nor single-party – as well as those non-inclusive regimes that do not fit the hereditary and the military types enter a residual category ‘other regimes’. This latter category lumps together a very heterogeneous array of cases. Among the inclusive residual cases we may find post-revolution Iran, that fails to qualify as competitive because of the presence of tutelary authorities such as the Supreme Leader and the Guardian Council. Among the non-inclusive residuals, in turn, are cases as different from each other as pre-1994 South Africa and other civilian (or civilianized) regimes such as Syria and Libya under Gaddafi. The residual category is also likely to include transitional periods from a full-scale authoritarianism to some form of open political regime.

### **1.5 Checking validity.**

The above operational rules have been applied to a sample of 161 countries, observed from 1980 to 2008. As a check of their validity, especially with reference to the rules that identify competitive authoritarian regimes, two different tests have been performed. First, these rules have been compared with alternative measures, in order to evaluate the degree of convergence. This is what Adcock and Collier (2001) refer to as convergent validation. Second, the set of empirical cases of competitive authoritarianism identified by the above operational rules has been examined by means of a ‘construct validation test’ (ibidem), in order to assess whether the identified cases conform to a few expectations drawn from the literature.



**Figure 3. Competitive authoritarianism's three-level structure.**



### 1.5.1 Comparing alternative measures.

One of the major concerns regarding the proposed operational definition of competitive authoritarianism derives from the mainly procedural criteria that are used to ascertain the presence of political competition. The risk is of an excessive minimalism. To evaluate the extent to which the described operational rules may lead to the inclusion of controversial cases, the competitive autocracies so identified have been compared with those identified by Levitsky and Way and by other alternative measures, namely Hadenius and Teorell (2006), Brownlee (2009), Hyde and Marinov (2011).

Levitsky and Way, identifies 35 competitive authoritarian regimes. By ‘translating’ these cases in a panel data language, we obtain 557 country-year observations. The comparison initially focused only on this sub-sample. My indicator for competitive authoritarianism correctly classifies 67% of the cases identified by the two authors. The main divergences (24% of total cases) derive from cases that, based on the operational rules described in the previous section, are democratic. With reference to a larger sample of countries (161) and the sole 1990-1995 period, in turn, my indicator records 30 additional cases of competitive authoritarianism.<sup>7</sup>

Hadenius and Teorell consider their ‘limited multi-party’ regime type “the category in our schema that corresponds most closely to competitive authoritarianism” (2006: 7). To measure competitive authoritarianism, on the contrary, Brownlee uses the competitiveness of elections, i.e. the relative distribution of seats in the parliament (2009: 524). By comparing these indicators and Levitsky and Way’s sample, the conclusion is the same as above: with respect to the 1990-1995 period, they both identify way more than 35 cases of competitive authoritarianism. By comparing these indicators and mine, Hadenius and Teorell identify a larger number of cases,

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<sup>7</sup> The comparison cannot go deeper than this, since the cases identified by Levitsky and Way correspond to regimes that were or became competitive authoritarian between 1990 and 1995 (2010: 32). We cannot say what other cases, the authors would have included in their sample by enlarging the temporal spectrum – e.g. competitive autocracies either collapsed before 1990 or established after 1995.

while Brownlee tends to underestimate the relevance of the phenomenon of competitive authoritarianism, as my indicator captures it.

Finally, the cases of competitive authoritarianism identified by my indicator have been compared with the data on political competition available from the NELDA dataset compiled by Hyde and Marinov (2011). They are the same authors from whom the definition of the concept of competition given in section 1.2.3 has been borrowed. The analysis showed that 99% (i.e. 551) of the 556 legislative and executive elections that, according to my indicator, have been held during a period of competitive authoritarianism fulfil the necessary conditions to be classified as competitive.

To conclude, the first stage of the validation analysis led to the following considerations. First, although my indicator correctly predicts most of the cases of competitive authoritarianism identified by Levitsky and Way, it also tends to record a potentially large number of cases that the two authors would classify either fully authoritarian or democratic. Second, a similar tendency has been observed in both the main existing alternative indicators suitable for quantitative analysis. Third, my indicator proved a valid instrument to identify cases of non-democratic regimes holding elections that can be defined competitive according to the same notion of competition used to conceptualize competitive authoritarian regimes. Therefore, my indicator suffers from the same limitations affecting other attempts to translate in 'quantitative language' a concept that was originally conceived within the framework of a qualitative research. Yet this does not necessarily imply it to be flawed. Indeed, there's some ground to consider the indicator proposed as a positive contribution to the advancement of research on competitive authoritarianism, by taking advantage of the potential of quantitative analysis.

### **1.5.2 Competitive autocracies: Origin, diffusion, duration.**

In a construct validity test, the measure under examination is used to replicate the analysis of a widely accepted hypothesis concerning the corresponding political

phenomenon. The underlying idea is that if the measure is valid, empirical evidence will confirm expectations. The usual perspective, in other words, is reversed: we “assume the hypothesis, and evaluate the measure” (Adcock and Collier, 2001: 542). While this is a rather common practice with measures of democracy (Elkins, 1999; see also Bogaards, 2010 and 2011), in the case of competitive authoritarianism – hybrid regimes, in general – this exercise faces two major obstacles. First, since the field of research is relatively young, there’s little consolidated knowledge. Second, these regimes have always represented a challenging object of study, and empirical research often proved inconclusive. What we can be reasonably confident about is: (1) the relative novelty of the phenomenon, (2) its geographical diffusion, and (3) the non-ephemeral nature. The robustness of these (non-causal) expectations has been tested by means of simple descriptive and bivariate analyses – cross-tabulations and graphs. The results of the validation assessment are presented below.

**Figure 4. Political regimes’ trends 1974-2008.**

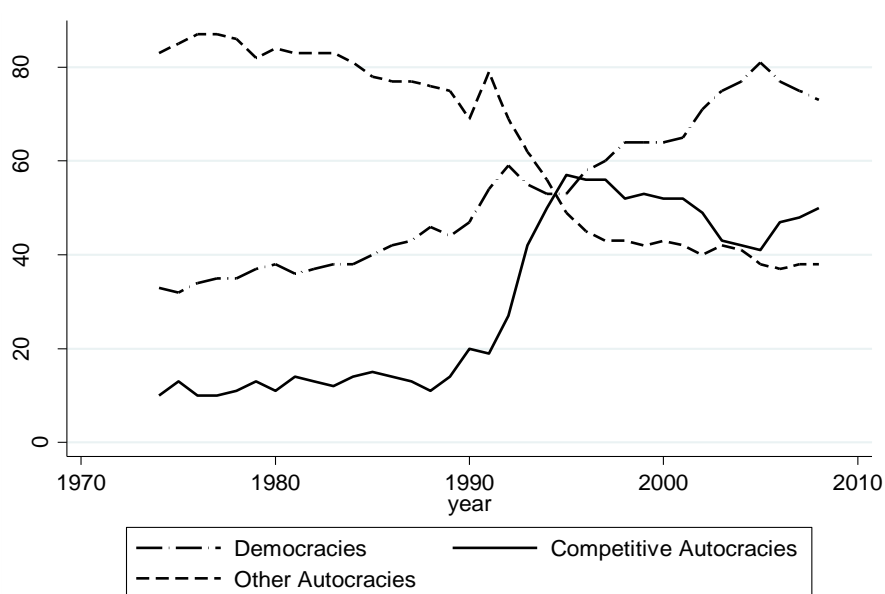
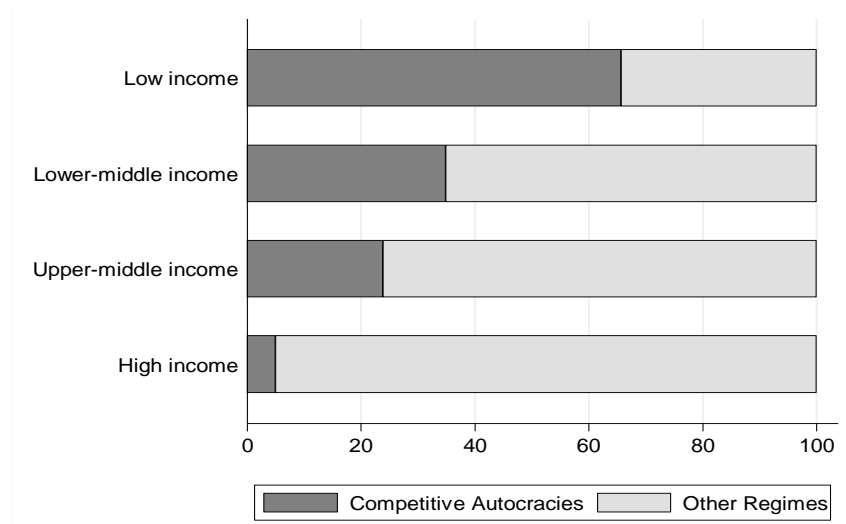


Figure 5. Competitive autocracies (2008).



Competitive authoritarianism has often been described as a side-effect of the third wave of democratization. Figure 4 illustrates the diffusion of competitive authoritarianism during the past three decades. It shows that the rise in the number of competitive autocracies is symmetrical to the decline in the number of other dictatorships. Likewise, it confirms that, although they “are not new” (Diamond, 2002: 23), competitive autocracies “have clearly proliferated in recent years” (Levitsky and Way, 2002: 60). The diffusion of the phenomenon, in particular, received vigorous impulse from the end of the Cold War (Levitsky and Way 2010). The proliferation of competitive authoritarian regimes during the third wave, however, has not been homogeneous from a geopolitical point of view. The world map reported in figure 5 indicates that competitive authoritarianism is mainly a non-Western phenomenon. This is not really surprising, since Western countries are among the oldest and most consolidated democracies in the world. Three regions, in particular, proved a particularly fertile ground for the spread of competitive authoritarianism: sub-Saharan Africa, South-East Asia, and the post-socialist countries.

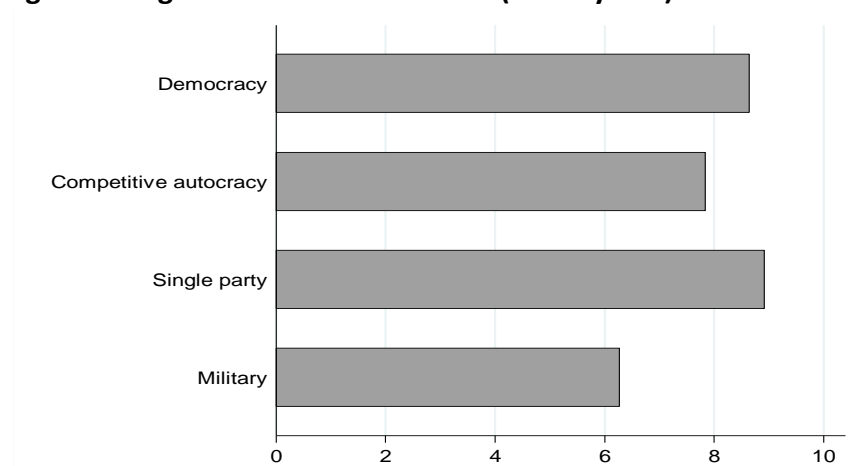
**Figure 6. Competitive autocracies by income group (2008).**



From a slightly different point of view, competitive authoritarianism has become “the modal type of political regime in the developing world” (Schedler, 2006: 3). According to figure 6, competitive authoritarian regimes not only tend to be associated with low/middle-low levels of wealth; they also represent about two-thirds of the poorest countries in the world.

The coexistence of democratic and authoritarian institutions which is typical of competitive authoritarianism has often been considered an “inherent source of instability” (Levitsky and Way 2002: 59; cf. Hadenius and Teorell, 2006). A closer examination of the mean years of duration of the new political regimes established since the beginning of the third wave, however, does not support similar considerations (Figure 7). Competitive autocracies do not appear particularly fragile.

**Figure 7. Regime duration 1974-2008 (mean years).**



This conclusion is corroborated by the analysis of the regime transition frequencies during the 1974-2008 period (Table 2). Competitive authoritarian regimes are less likely to fall down than military regimes, are about as stable as single-party regimes, and only a bit less than democracies. More precisely, transitions to competitive authoritarianism represent 34% of total transitions occurred during that span of time, whereas transitions from competitive authoritarianism only 22% (Table 3). Not surprisingly, competitive authoritarianism tends to emerge in the wake of the collapse of a dictatorship, rather than a democracy. Consistently with the more recent

literature on hybrid regimes' future prospects (Howard and Roessler 2006; Lindberg 2006; Brownlee 2009), finally, in most cases the collapse of a competitive authoritarian regime opened the way to the full democratization of the country.

**Table 2. Regime transition probabilities 1974-2008.**

t-1 \ t	Democracy	Comp autocracy	Single-party	Military	Hereditary	Total
Democracy	<b>93.97</b>	5.02	0	1.01	0	100
Comp Autocracy	5.73	<b>92.12</b>	0.41	1.64	0.1	100
Single-party	0.82	4.90	<b>92.1</b>	2.18	0	100
Military	1.38	11.38	3.10	<b>84.14</b>	0	100
Hereditary	0	0.00	0	0	<b>100</b>	100

Note: Based on frequencies, transition probabilities record the probability (%) that, between time t and time t+1, a change from the 1st column to the 1st row regime types occurs. The cells lying along the diagonal thus report the probability that the 1st column regime type does not change.

**Table 3. Transitions *to* and *from* competitive authoritarianism 1974-2008.**

from ..... to CA	Freq.	from CA to .....	Freq.
Democracy	46	Democracy	54
Single-party	31	Single-party	4
Military	24	Military	16
Hereditary	1	Hereditary	1
Other	27	Other	11
<b>Tot transitions to CA</b>	129 (34% tot transit.)	<b>Tot transitions from CA</b>	86 (22% tot transit.)



## Appendix 1.A Coding Rules

### ***No-Authority*** (0, 1)

Polity= -77 or -66

Note: the presence of political authority is a pre-requisite for any regime type.

Source: Polity IV project.

### ***Party-System*** (0, 2)

0 = there is not a party-system

1 = only one party de facto exists, or more than one party exist but they all belong to the regime front

2 = more than one party de facto exists

Source: Cheibub et al., 2010

### ***Party-Legislature***

0 = either no legislature or all the members are non-partisan

1 = legislature with only members of the ruling party/coalition

2 = legislature with multiple parties

Source: Cheibub et al., 2010; Keefer, 2010

### ***Legislature Status*** (0, 1)

Legislature is not closed.

Source: Cheibub et al. 2010

### ***Military regime*** (0, 1)

Gov. is directly ruled by the military            OR

Gov. is indirectly controlled by the military

Note: coding for 2007 and 2008 have been updated based on alternative sources.

Source: Banks CNTS

***Hereditary regime*** (0, 1)

Effective chief executive is a monarch           AND

[Predecessor is a relative                           OR

Successor is a relative ]

Source: Cheibub et al., 2010

***Civilian regime*** (0, 1)

Hereditary = 0                   AND

Military = 0

***Inclusive regime*** (0, 1)

Civilian = 1                                           AND

[ Executive = direct or indirect election       OR

Legislative = elected ]                           AND

Universal suffrage

Source: Cheibub et al., 2010; Paxton et al., 2003; Cingranelli and Richards, 2008; Minority at Risk, 2009.

***Other non-inclusive regime*** (0, 1)

Civilian = 1                   AND

Inclusive = 0

***Competitive regime*** (0, 1)

Executive = elected (directly/indirectly)   AND

Legislative = elected                           AND

Party-System = 2                               AND

Party-Legislature = 2                       AND

Legislature status = 1                       AND





## **Appendix 1.B List of Political Regimes**

### **Competitive autocracies**

Haiti 1996-2003; Haiti 2006-2008; Dominican Republic 1994-1995; Mexico 1980\*-1999; Guatemala 1980\*-1981; Guatemala 1985; Guatemala 1990-2008; El Salvador 1984-1987; El Salvador 1989-1991; Nicaragua 1985-1989; Nicaragua 1992-1995; Nicaragua 2008; Panama 1989-1992; Colombia 1989-2004; Colombia 2008; Venezuela 1999-2008; Guyana 1980\*-1991; Ecuador 1996; Peru 1989-1991; Peru 1995-2000; Brazil 1993-1999; Bolivia 1982; Bolivia 1995; Paraguay 1980\*-1990; Paraguay 1994-2002;

Poland 1989; Slovakia 1993; Slovakia 1996-1997; Albania 1991-2001; Macedonia 1994-1997; Macedonia 2000-2001; Croatia 1992-1999; Serbia 1992-2000; Cyprus 1980\*-1982; Bulgaria 1990; Moldova 1994-2008; Romania 1990-1995; Russia 1993-2008; Ukraine 1993-2004; Belarus 1995-2008;

Armenia 1991-2008; Georgia 1995-2002; Georgia 2004; Georgia 2007-2008; Azerbaijan 1992-2008; Tajikistan 1995-2008; Kyrgyzstan 1995-2008; Kazakhstan 1999-2006; Turkey 1987-2003;

Guinea-Bissau 1994-2008; Equatorial Guinea 1996-2008; Gambia 1981-1986; Gambia 1997-2008; Senegal 1980\*-2001; Mauritania 1992-2004; Mauritania 2007; Niger 1993-2003; Niger 2007-2008; Cote d'Ivoire 1990-1998; Cote d'Ivoire 2001; Guinea 1995-2007; Burkina Faso 1992-2008; Liberia 1997-2000; Liberia 2006-2008; Sierra Leone 1996; Sierra Leone 2002-2006; Ghana 1993-1996; Togo 1994-2008; Cameroon 1992-2008; Nigeria 1999-2008; Gabon 1993-2008; Central African Rep. 1993-2002; Central African Rep. 2005-2008; Chad 1997-2008; Congo Rep. 1994-1996; Congo Rep. 2002-2008; Congo D.R. 2006-2008; Uganda 1980-1984; Uganda 2006-2008; Kenya 1992-2002; Kenya 2007-2008; Tanzania 1995-2008; Burundi 2005-2008; Rwanda 2003-2008; Ethiopia 1995-2008; Angola 1993-1996; Mozambique 1994-2006; Zambia 1993-2007; Zimbabwe 1980-2008; Malawi 2001-2008; Madagascar 1993-2002; Madagascar 2006-2008; Comoros 1992-1994; Comoros 2004-2008; Algeria 1997-2008; Tunisia 1999-2008; Sudan 1986-1988; Egypt 2005-2008; Yemen 1993-2008;

Mongolia 1990; India 1991-1997; Pakistan 1990-1998; Pakistan 2008; Bangladesh 1980-1981; Bangladesh 1993-2006; Sri Lanka 1983-2002; Sri Lanka 2006-2008; Nepal 1990; Nepal 1993-2001; Korea South 1980\*-1987; Thailand 1980-1985; Thailand 1992-1995; Thailand 2008; Cambodia 1998-2008; Malaysia 1980\*-2008; Singapore 1984-2008; Philippines 1981-1986; Philippines 1993-1995; Philippines 2007-2008; Indonesia 1997-2004; East Timor 2006-2008;

Papua New Guinea 1993-1997; Papua New Guinea 2008-1998; Fiji 2001-2005

### **Democracies**

Dominican Republic 1980\*-2008; Jamaica 1980\*-2008; Trinidad and Tobago 1980\*-2008; Mexico 2000-2008; Guatemala 1986-1989; Honduras 1982-2008; El Salvador 1988-2008; Nicaragua 1990; Nicaragua 1991; Nicaragua 1996-2007; Costa Rica 1980\*-2008; Panama 1993-2008; Colombia 1980\*-1988; Colombia 2005-2007; Venezuela 1980\*-1998; Guyana 1992-2008; Ecuador 1980-2008; Peru 1980-1988; Peru 2001- 2008; Brazil 1985-2008; Bolivia 1983-2008; Paraguay 1991-1993; Paraguay 2003-2008; Chile 1990-2008; Argentina 1983-2008; Uruguay 1985-2008;

Poland 1990-2008; Hungary 1990-2008; Czech Rep. 1993-2008; Slovakia 1994-1995; Slovakia 1998-2008; Slovenia 1992-2008; Albania 2002-2008; Macedonia 1998-1999; Macedonia 2002- 2008; Croatia 2000-2008; Serbia 2001-2008; Cyprus 1983-2008; Bulgaria 1991-2008; Romania 1996-2008; Estonia 1991-2008; Latvia 1993-2008; Lithuania 1992-2008; Ukraine 1991-1992; Ukraine 2005-2008;

Georgia 2005-2006; Turkey 1989; Turkey 2004-2008;

Gambia 1980\*; Gambia 1987\*-1993; Mali 1992-2008; Senegal 2002-2008; Benin 1991-2008; Niger 2004-2006; Sierra Leone 2007-2008; Ghana 1980; Ghana 1997-2008; Nigeria 1980-1982; Congo Rep. 1992-1993; Kenya 2003-2006; Mozambique 2007-2008; Zambia 1991-1992; Zambia 2008; Malawi 1994-2000; South Africa 1994-2008; Namibia 1990-2008; Lesotho 2002-2008; Botswana 1980\*-2008; Madagascar 2003-2005; Mauritius 1980\*-2008; Mongolia 1991-2008; Taiwan 1996-2008; India 1980\*-1990; India 1998-2008; Pakistan 1988-1989; Bangladesh 1991-1992; Sri Lanka 1980\*-1982; Sri Lanka 2003-2005; Nepal

1991-1992; Korea South 1988-2008; Thailand 1986-1990; Thailand 1996-2005; Philippines 1987-1992; Philippines 1996-2006; Indonesia 2005-2008; East Timor 2002-2005; Papua New Guinea 1980\*-1992; Papua New; Guinea 1998-2007; Fiji 1980\*-1986; Fiji 1999

### **Single-party regimes**

Cuba 1980\*-2008; Haiti 1980\*-1985; Panama 1980\*-1982; Peru 1992-1994; Poland 1980\*-1988; Hungary 1980\*-1989; Albania 1980\*-1990; Bulgaria 1980\*-1989; Moldova 1991-1993; Romania 1980\*-1989; Georgia 1992-1994; Azerbaijan 1991; Turkmenistan 1991-2008; Tajikistan 1991-1994; Kyrgyzstan 1991-1994; Uzbekistan 1991-2008; Kazakhstan 1991-1998; Kazakhstan 2007-2008; Guinea-Bissau 1984-1993; Guinea-Bissau 1999; Equatorial Guinea 1987-1995; Mali 1980\*-1990; Benin 1980\*-1989; Cote d'Ivoire 1980\*-1989; Guinea 1980\*-1983; Liberia 2001-2002; Sierra Leone 1980\*-1991; Togo 1980\*-1990; Cameroon 1980\*-1991; Gabon 1980\*-1992; Congo D.R. 1980\*-1990; Uganda 1996-2005; Kenya 1980\*-1991; Tanzania 1980\*-1994; Burundi 1982-1986; Rwanda 2000-2002; Somalia 1980\*-1990; Djibouti 1980\*-2008; Eritrea 1994-2008; Angola 1980-1991; Mozambique 1980\*-1993; Zambia 1980\*-1990; Malawi 1980\*-1993; Lesotho 1980\*-1985; Lesotho 1993-2001; Madagascar 1980\*-1992; Comoros 1990-1991; Comoros 1996-1998; Tunisia 1980\*-1998; Sudan 1980\*-2004; Iraq 1996-1999; Iraq 2000-2002; Egypt 1980\*-2004; Lebanon 2005-2008; China 1980\*-2008; Mongolia 1980\*-1989; Taiwan 1980\*-1995; Korea North 1980\*-2008; Pakistan 2002\*-2007; Cambodia 1988-1997; Laos 1989-2008; Viet Nam 1980\*-2008; Singapore 1980\*-1983; Philippines 1980\*

### **Military regimes**

Haiti 1986-1993; Guatemala 1982-1984; Honduras 1980\*-1981; El Salvador 1980\*-1981; Nicaragua 1981-1984; Panama 1983-1988; Brazil 1980\*-1984; Bolivia 1980-1981; Chile 1980\*-1989; Argentina 1980\*-1982; Uruguay 1980\*-1984;

Georgia 1991; Turkey 1980-1986;

Guinea-Bissau 1980-1983; Equatorial Guinea 1980\*-1981; Gambia 1994-1995; Mali 1991; Mauritania 1980\*-1991; Mauritania 2005-2006; Mauritania 2008; Niger 1980\*-1990; Cote d'Ivoire 1999; Guinea 1984-1994; Guinea 2008; Burkina Faso 1980-1991; Liberia 1980-1989; Liberia 2003-2005; Sierra Leone 1992-1995; Ghana 1981-1991; Nigeria 1983-1998; Central African Rep. 1981-1992; Central African Rep. 2003-2004; Chad 1984-1988; Chad 1990-1996; Congo Rep. 1980\*-1990; Congo Rep. 1997-2001; Uganda 1986-1995; Burundi 1987-1992; Rwanda 1980\*-1999; Ethiopia 1980\*-1990; Ethiopia 1992-1993; Lesotho 1986-1992; Comoros 1999-2001;

Algeria 1980\*-1991; Algeria 1995; Sudan 1985; Sudan 1989-1997; Iraq 1980\*-1995; Yemen 1990-1992;

Afghanistan 1996-2000; Pakistan 1980\*-1987; Pakistan 1999-2001; Bangladesh 1982-1990; Bangladesh 2007; Myanmar 1980\*-2008; Thailand 1991; Thailand 2006-2007; Indonesia 1980\*-1996;

Fiji 1987-1991; Fiji 2006-2008

### **Hereditary regimes**

Swaziland 1980\*-2008; Morocco 1980\*-2008; Jordan 1980\*-2008; Saudi Arabia 1980\*-2008; Kuwait 1980\*-2008; Bahrain 1980\*-2008; Qatar 1980\*-2008; United Arab Emirates 1980\*-2008; Oman 1980\*-2008 ; Bhutan 1980\*-2006 ; Nepal 1980\*-1989; Nepal 2002-2007

\* Left-censored: the regime began before 1980.





## **Chapter 2**

### **Competitive authoritarianism and citizens' wellbeing: Theory and hypotheses.**

Competitive authoritarianism has been defined and a set of cases referring to the concept has been identified. The goal of this chapter is to bring the discussion to a more substantive level: to lay the theoretical foundations on which the subsequent empirical analysis will rest. With the present chapter, in other words, the analysis of the research actually question begins. Then, what are the consequences of competitive authoritarianism on citizens' wellbeing? Does the institutionalization of these regimes bring about substantive benefits to citizens in terms of social welfare, does it correspond to a worsening, or is citizens' quality of life barely influenced by the political processes triggered by competitive authoritarian institutions? And whatever the answer would be, why is it so?

As it has already been mentioned, the research approach is comparative. In order to understand whether, how and to what extent competitive authoritarianism influences citizens' wellbeing, this regime type is compared to other regimes, namely its democratic and full authoritarian counterparts. The theoretical argument, in particular, revolves around three key factors. The first refers to the hybrid nature of competitive autocracies – i.e. the co-existence of authoritarian and democratic institutions and their interaction – and represents the fulcrum of the whole argument. The second and third factors, in turn, refer to as many 'interfering' variables, namely the consolidation of these regimes and the influence of the regional context. Here the arguments respectively proposed are ancillary. Rather than standing alone, as two additional segments, they complement the main argument by weighing the reach of its conclusions. The analysis of each factor corresponds to the formulation of a testable hypothesis.

The chapter is organized as follows. The first part is devoted to a few somewhat preliminary issues. Section 2.1 offers an overview of the debate on competitive autocracies and hybrid regimes in general. Section 2.2 focuses on the dependent variable and clarifies what in the present research is meant by citizens' wellbeing. The discussion gets to the heart of the matter in the second part of the chapter. Sections 2.3 and 2.4 analyze the above three factors and conclude with the hypotheses that will be tested in the next chapter.

## **2.1 Literature review.**

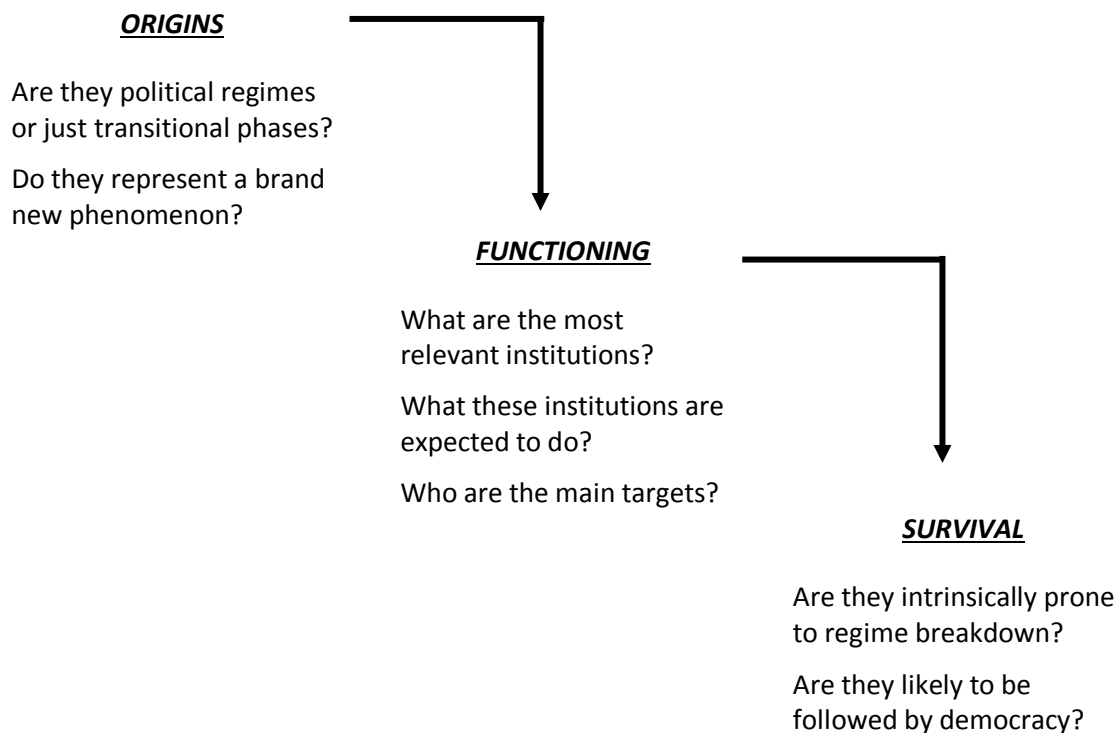
As an object of research, hybrid regimes in general, and competitive authoritarianism in particular, represent one of the most recent entries in the research agenda of comparative politics devoted to the study of political regimes and the processes of democratization. For years the image of the third wave of democratization (Huntington, 1991) obscured the actual nature of many processes of regime transition, whose direction toward democracy grew increasingly uncertain. To be sure, among the most attentive observers of the third wave of democratization and its progresses, the idea of a gray zone between democracy and autocracy (Carothers, 2002) is not new. By coining terms such as *dictablanda* and *democradura*, O'Donnell and Schmitter (1986) aimed to capture the existence of "half-way house" forms of political regimes (Huntington, 1991: 137) in which democratic and autocratic institutions coexist. In a similar vein, Schmitter and Karl (1991) warned against the "fallacy of electoralism", while Gills and Rocamora (1992) referred to low-intensity democracies.

The predominant approach, however, was to consider these regimes as transitional phases preceding democracy. As Diamond put it, "the presence of legal opposition parties that may compete for power and win some seats in parliament, and of the greater space for civil society that tends to exist in such systems" was expected to provide "important foundations for future democratic development" (1989: 25). Only recently has the notion of hybrid regime become widely accepted. In the middle of

the 1990s, scholars started questioning the future of the third wave (Sartori, 1995; Diamond, 1996); then depicted quite pessimistic scenarios (Kaplan, 1997); and finally the limitations of the transition paradigm became clear (Carothers, 2002).

As soon as they gained attention, hybrid regimes triggered a lively academic debate (see Figure 1). Researchers studied their origins (Levitsky and Way, 2002; Schedler, 2002; Ottaway, 2003), theorized about their functioning (Lust-Okar, 2004 and 2006; Geddes, 2005 and 2008; Magaloni, 2006; Gandhi and Przeworski, 2006; Schedler, 2002 and 2006; Brownlee, 2007; Gandhi, 2008; Greene, 2010; Boix and Svobik, 2012), and analyzed their endurance (Epstein et al., 2006; Hadenius and Teorell, 2006; Howard and Roessler, 2006; Lindberg, 2006; Gandhi and Przeworski, 2007; Brownlee, 2009). While the main questions related to the origins of hybrid regimes can be considered finally answered (see also section 1.5.2, and above), the second and third lines of inquiry currently correspond to the most prolific branches of the debate.

**Figure 1. Debate on hybrid regimes.**



Research on the functioning of hybrid regimes has focused on their institutional apparatus, i.e. the introduction of formally democratic institutions – namely periodic elections and a legislature – in a persistently authoritarian context of governance. The goal is to assess whether and how, despite their apparent inconsistency, the interaction of democratic and authoritarian institutions may influence politics. The expected ‘effects’ of the peculiar institutional structure of hybrid regimes range from a demonstrative role to the actual shaping of the strategies, preferences, and behaviours of the main actors of the political arena (Table 1). According to the former thesis, formally democratic institutions mainly represent a window dressing. The “democratic facade” (Linz, 2000: 34) is instrumental to “reap the fruits of electoral legitimacy without running the risks of democratic uncertainty” (Schedler, 2002: 37). The gains are reputation in the eyes of the international community and, in particular, access to the economic benefits associated with Western countries and international organizations’ policies of democratic promotion (Hyde, 2011). According to the latter group of theories, on the contrary, hybrid regimes’ institutions are used by incumbent leaders to consolidate their power by influencing domestic actors such as citizens, the opposition, and members of the ruling elite itself.

The natural continuation of the discussion about the functioning of hybrid regimes is the study of the long-term effects of the dynamics theorized, or the ability of these regimes to consolidate. Investigation into this third line of inquiry has moved in two main directions: analysis of their stability, and examination of their predisposition to democratize. As we already have seen (see Section 1.5.2), the idea of an “inherent (...) instability” (Levitsky and Way, 2002: 58) has been recently challenged by empirical evidence that found no “significant effect on regime breakdown” (Brownlee, 2009: 530). Likewise, as regards the prospects for democratization, there is no agreement on what is the most likely outcome of a hybrid regime’s crisis. On one hand, the presence and practice of democratic institutions may engender “moments of significant liberalization” (Howard and Roessler, 2006: 366), and “imbue society with certain democratic qualities” (Lindberg, 2006: 139). Conversely, others stress that the political fate of these regimes is “largely unpredictable”

(Epstein et al., 2006: 566). The assumption that competitive autocracies “are moving in a democratic direction”, they argue, “lacks empirical foundation” (Levitsky and Way, 2010: 4).

**Table 1. Hybrid regimes’ institutions.**

Target	Aim	Institution		
		Elections	Parties	Legislatures
<i>International</i>	Legitimization	✓		
<i>Community</i>	Foreign aid	✓		
<i>Citizens &amp; Civil Society</i>	National fiction	✓		
	Discontent valve	✓		
	Patronage channel	✓		
	Information gathering	✓		
	Mobilization		✓	
	Cooperation			✓
<i>Legal Opposition</i>	Co-optation		✓	✓
	Signalling commitment			✓
	Policy compromise			✓
	Fragmentation	✓	✓	✓
	Strength display	✓		
<i>Ruling Elite &amp; Military</i>	Control and management		✓	✓
	Cohesion		✓	✓
	Coups prevention	✓	✓	
	Power sharing	✓		✓

The three main strands of the debate largely complement each other. Yet, as we may note, an explicit debate on the socioeconomic consequences of this form of political regimes does not exist. With the present research, I aim to start filling this void. Studying the consequences of competitive authoritarianism on citizens’ wellbeing

will contribute to our understanding of the phenomenon in several ways. Not only treating it as an independent variable – the explanatory factor of something else – represents a new ramification of the debate. The reversal of the usual perspective may also provide new insights for the study of the phenomenon itself, notably its current functioning and future prospects.

## **2.2 Citizens' well-being: Concept and measurement.**

The focus of the present research on the consequences of competitive authoritarianism is not all-encompassing. It is confined to the more or less direct ability of this specific form of political regime to influence the wellbeing of the citizens living under its institutional apparatus. Albeit limited in its scope, however, the concept of wellbeing is a loose one, and some clarification is needed.

A first reason of concern derives from the plurality of terms referring to the notion. By skimming the literature, we may frequently come upon terms such as well-being (Dasgupta, 2000; Boarini et al., 2006), social welfare (Clarke and Islam, 2003; Fleurbaey, 2009), quality of life (Diener and Suh, 1997; The Economist Intelligence Unit, 2005), and several others of common usage such as living standards and living conditions. In theory, well-being is a broader and more inclusive notion. In practice all these terms are strongly interrelated and can be used in an almost perfectly interchangeable way hereafter.

A second, more relevant source of ambiguity has to do with the evolution of the concept of wellbeing. More precisely, during the past decades the debate on the topic has experienced a progressive move from the traditional utilitarian interpretation of wellbeing – focusing on either pleasure, desire-fulfilment, or choice – towards a commodity-holding view and, more recently, an approach focusing on the individual. Although ranking living standards in terms of commodity possession, rather than utility, represented a first important advancement, it still remains a poor account of wellbeing. Affluence, of course, does influence wellbeing; it is a means to that end. Yet this correspondence is not one-to-one, and in many situations it just does not

obtain. This holds true both in the case of measures such as most common national income accounts, and in the case of slightly more specialized economic indicators of fulfilment of people's 'basic needs'. The latter have the merit of going beyond the mere growth of a country's wealth, but they remain imprisoned in a commodity-centred view, since they typically focus on certain minimum amounts of essential goods such as food, clothing and shelter.

The limitations of previous approaches to wellbeing essentially derive from their failure to focus on what life individuals actually lead and what they actually can or cannot do. These limitations have been overcome by the so-called 'capabilities approach'. In the words of one of its most famous theorists, the capability approach to measurement of a person's quality of life "is concerned with evaluating it in terms of his or her actual ability to achieve various valuable *doings* and *beings*" (Sen, 1993: 30). The latter, also said *functionings*, represent states of a person and activities that a person can undertake during life. Capabilities, in turn, are a derived notion and refer to people's ability to achieve various combinations of functionings, or the freedom to choose between different ways of living. A functioning is an achievement, whereas a capability is the ability to achieve. Thus, while eating is a functioning, the opportunity to eat (or choosing not to do so) is the corresponding capability. In other words the difference is between "the realized and the effectively possible" (Robeyns, 2011).

The main contribution of Sen's reformulation of the whole discourse in terms of people's functionings and capabilities is to avoid confusion of means and ends. The evaluation of wellbeing, accordingly, takes the form of an assessment of these constitutive elements of a person, rather than being a matter of commodities, wealth, or utility. Yet the focus on the individual should not be confused as a preference for subjective measures. Although their quality is rapidly improving, these indicators of wellbeing, based mainly on surveys, are not suitable given the specific design of the present research.

Whenever the subjective dimension of the individual is taken into account, in particular, his/her preferences inevitably influence the perception of wellbeing.



Individual preferences are adaptive and “shaped by a process that pre-empt the choice” (Elster, 1982: 219). Put another way, the process of preference formation is likely to be conditioned by a number of factors, including those having to do with the economic and political context in which a person lives. If citizens “tend to adjust their aspirations to their possibilities” (ivi), and these aspirations influence their self-evaluation of wellbeing, then a comparative analysis of citizens’ wellbeing across countries characterized by different levels of development risks to be biased by endogeneity. Likewise, when the comparison is between countries ruled by different political regimes, the analysis might overlook the effects that different political contexts have in shaping citizens’ needs, expectations, goals. The risk is to downplay variations in citizens’ wellbeing and to miss important relationships.

Similar considerations suggest the use of objective, non-income based indicators of wellbeing. The task, therefore, is to identify, among the possibly infinite number of ‘doings’ and ‘beings’, a subset of elementary functionings and corresponding crucial capabilities (Sen, 1993: 43). A solution is represented by the approach followed by the United Nation Development Program in its annual report (<http://hdr.undp.org/en>). The core idea is that of *human development*, or the enlargement of “people’s choice” through the creation of “an enabling environment for people to enjoy long, healthy and creative lives” (Mahbub ul Haq in Human Development Report, 1990: 9).

To conclude, as regards the conceptualization and operationalization of the dependent variable, the present analysis of the consequences of competitive authoritarianism on citizens’ wellbeing relies on the concept of human development. In particular, postponing a more accurate presentation of the selected indicators of wellbeing until the next chapter (see section 3.2), priority is given to the non-strictly economical or socioeconomic dimension of the notion, as measured by the Human Development Index.

## **2.3 The consequences of competitive authoritarianism on citizens' wellbeing.**

The aim of this section is to delve into the hybrid institutional apparatus that characterizes competitive autocracies. The focus is on the coexistence of democratic institutions with persistently authoritarian practices of governance, and their consequences on the wellbeing of citizens living under this form of political regime. Because of its hybrid nature, competitive authoritarianism represents the ideal place where to compare the effects of these fundamentally different institutions, to evaluate the consequences of their interaction, to weigh their impact.

The main thesis is that in competitive authoritarianism the coexistence and interaction of democratic and authoritarian institutions tend to mitigate their respective effects. The democratic dimension, in particular, compensates for some of the *failures* caused by the authoritarian component. When the promotion of citizens' wellbeing is concerned, therefore, competitive autocracies lie in an intermediate position, somewhere in between democratic and full authoritarian regimes. The analysis digs into the respective effects of the two dimensions, and identifies the two main hypotheses that will be tested empirically in the next chapter.

### **2.3.1 A premise.**

As a premise, it should be clarified how exactly, here and elsewhere, the socioeconomic consequences of political regimes are studied. Political regimes have been defined as sets of institutions regulating the process of leadership selection and the exercise of leadership itself. So defined, a political regime should be evaluated primarily on the basis of its ability to achieve the above goals. In this sense, the socioeconomic consequences of a political regime, if anything, are at best a by-product (Carbone 2009: 127). Political regimes are not meant to provide for social welfare.

While political regimes have no direct effect on citizens' wellbeing, the governments selected according to the rules defined by the former and their public policies do. The

relevance of this point is not purely semantic. It clarifies what, when analyzing the consequences of political regimes on citizens' welfare, we are actually investigating. That is whether, how, and to what extent the routine functioning of a political regime may have either one or both the following interrelated effects: to influence, through the incentives and constraints it engenders, governments' commitment to promote and favour the achievement of certain socioeconomic outcomes; to provide governments with the actual capacity to do it.

In the remainder of this section, the existence of any systematic effect on citizens' wellbeing of this sort is investigated by comparing competitive authoritarian institutions with the institutional apparatus of other political regimes. The point of departure are four assumptions that have been drawn from the literature: in order to pursue his/her own interest (whatever it is) the leader of a government faces two interrelated priorities, that is (1) to hold office and (2) to gain the support, loyalty and cooperation of the society; (3) to meet citizens' needs is one viable strategy to achieve these goals; (4) the relative cost of this option depends on the institutions of a political regime.

### **2.3.2 Incentives.**

One of the most frequently recurring arguments on which, more or less explicitly, the literature on the consequences of democratization on citizens' welfare relies is the following. Whether they seek elections or confirmation in office, "elected officials (...) are conditioned, in their deciding, by the anticipation of how electorates will react" (Sartori, 1987: 152). Under democratic rule political leaders have thus a structural incentive to give special attentions to the needs of the less well-off. This is a simplified version of the logic underlying the so-called theorem of the 'median voter' (Meltzer and Richards, 1981). In short, in a democratic regime the decisive voter – the voter whose preferences need to be met in order to gain or hold on office – is the one "with the median income" (Meltzer and Richards, 1981: 921). Now, given the typically skewed distribution of domestic income – the contrast in a

country's population between relatively few rich households, and the majority that tends to concentrate in the lower-middle levels of the distribution of total gross domestic product – the median voter is likely to lie below the mean income voter. Therefore, his/her (decisive) preferences would be to be for a higher redistribution of state revenues and more social services.

The limit of this theoretical framework is that it tells little or nothing about authoritarian regimes. The only conclusion we are allowed to draw is that, since the latter are by definition *non*-democratic, they just do not engender similar incentives to promote social welfare. This however is quite a poor account of the complexity of authoritarian politics. To improve it we should revert the perspective and take authoritarianism, rather than democracy, as the object under examination.

As any government, authoritarian rulers do have an interest in promoting the wellbeing of citizens. Even if non-democratic leaders do not face the same incentives of democratically elected ones to provide for the less well-off, the former should not be thought of as absolute despots able to pursue their own egoistic goals independently. Autocrats need to interact with their subjects. Up to a certain extent, therefore, autocrats are forced, and even willing, to modify their own strategies and take also the interests of citizens into account. In more practical terms, they are ready to re-invest a portion of state revenues in social welfare. The origin of this necessity has to do with two basic and rather egoistic concerns: wealth and personal security.

According to the model theorized by Olson (Olson, 1993; McGuire and Olson, 1996), dictators could be thought of as bandits who settle down in a given territory. The longer time-horizon faced by the stationary bandit significantly shapes the priorities and strategies to maximize his own profit.<sup>8</sup> First, rather than preying everything as soon as possible, he has an interest in boosting the long-term productivity of his subjects. The higher the domestic product in every subsequent time periods, the larger the share that he will appropriate in the form of regular taxation (even when the tax rate is maintained fixed). Second, in order to maximize

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<sup>8</sup> The use of the masculine adjective form is by no means accidental. It is historically grounded. With virtually no exception authoritarian regimes, of any sort and type, have been ruled by men.

the productivity of the whole society the authoritarian ruler also needs the cooperation of its different segments. Rational autocrats, in other words, know the benefits deriving from investments in the human capital at their disposal, and more generally from policy concessions that solicit the cooperation of the citizens themselves.

Rather than the opportunity to increase his own revenues, according to Wintrobe (1998 and 2007) the dictator's strategies are shaped by an even more primordial feeling: fear. Authoritarian leaders are intrinsically insecure, they constantly fear to be overthrown. Threats may come from within – from actors such as allies, the components of the ruling elites, or the military. Yet, above all, they come from the masses: “The lack of popular consent – inherent in any political system where a few govern over the many – is the original sin of dictatorships” (Svolik, 2012: 10). The dictator has essentially two options in order to eliminate this permanent feeling of peril. He may intensify repression, in the rather vain attempt to eliminate any potential enemy and/or make all of them harmless. Alternatively, he may try to engender loyalty by means of a political exchange: to buy off the support of potential opponents, or at least a part of them, by rewarding them with a “loyalty premium” (Wintrobe, 2007: 366). Once again, therefore, autocrats do have an interest to promote the wellbeing of the population which they rule.

### **2.3.3 CA vs. Democracy.**

How the wellbeing of citizens is affected by living under a competitive authoritarian, rather than a democratic regime? In this respect, one important thing to keep in mind is that competitive authoritarianism is, first of all, a form of authoritarian rule. Competitive autocracies differ from democracies because of the presence of persistently authoritarian, albeit informal, practices of governance. Their authoritarian dimension is likely to reverberate in both governments' attitude toward welfare policies and their ability to achieve specific goals in this sector of policy-making. The government of a competitive authoritarian regime, in other words, is

likely to face incentives similar to other authoritarian governments. Therefore, previous question could be rephrased as follows: Are the discussed incentives as effective as those engendered by democratic regimes? The most obvious answer is no.

Whether it is about greed or paranoia, authoritarian leaders have good reasons to re-invest even a considerable share of state revenues in the wellbeing of their citizens, rather than predate them. Yet it seems that authoritarianism also houses in itself structural hindrances, opposite impulses that have the ultimate effect of distorting those incentives. These hindrances to the promotion of citizens' wellbeing have to do both with what authoritarianism is – since they are directly connected with peculiar traits of authoritarian rule – and what it is not – because of the lack of other traits typical of a democratic regime. More precisely, authoritarianism hampers the communication between the government and the citizens and, regardless of formal method of leadership selection, it invariably qualifies as the rule of the few over the many.

#### *Communication gap.*

The problem of communication between government and society in an authoritarian regime is mutual (Wintrobe, 1998: 20) and derives from two distinctive features of authoritarian politics (Svolik, 2012: 2 and 14). First, in a dictatorship there is not an independent authority entitled, and empowered, to enforce agreements among different political actors, including the ruler and the citizens. Second, authoritarianism is founded on the possibility for the ruler to easily resort to violence as the ultimate instrument for conflict resolution.

Together, these structural conditions of authoritarian politics are responsible of the lack of a (more or less institutionalized) channel through which rulers may signal their true willingness to meet citizens' needs and the latter reveal these needs. Because of the absence of a third authority, authoritarian leaders cannot credibly signal their 'good intentions', their commitment to promote citizens' wellbeing, even if only for an egoistic interest. Citizens cannot trust the dictator, given the

arbitrariness of his power, and they are likely to refuse to cooperate. Moreover, under the constant (and realistic) threat of a punishment, citizens are reluctant to reveal their preferences and/or dissatisfaction with the current state of affairs.

As regards the initial incentives to promote citizens' wellbeing, the most relevant consequence of a communication gap between the rulers and the ruled is an increase in the relative cost of that option. From an autocrat's point of view, to invest in human capital or, more generally, in citizens' quality of life is less attractive, even considered the potential returns we examined. The reason is twofold. On the one hand, if society refuses to cooperate anyway, there's just no point in enhancing its productivity. The other reason lies in the information deficit caused by the problems of communication. Authoritarian governments do not have the necessary information to invest state revenues in the sector of social welfare in an efficient way. The risk of wasting money in welfare programs 'out of target' further inhibits autocrats' propensity to re-invest state revenues in public goods.

*Small winning coalition.*

Another condition shared by any authoritarian incumbent leader is the relatively small number of actors that actually enjoy the power to cast a credible threat to his hold on power. According to Bueno de Mesquita and colleagues (1999 and 2003), the raw size of the incumbent's winning coalition is the main difference between democratic and non-democratic regimes. While democratic governments need the support of 'a majority', although its exact size may vary depending on the electoral system, non-democratic regimes are invariably characterized by a relatively small winning coalition.

Variations along this dimension are the key to explain the fundamentally different strategies of democratic and authoritarian rulers to minimize the risk that members of the current winning coalition defect in favour of a challenger. These strategies, in turn, shape democratic and authoritarian rulers' commitment to promote social welfare. When they need to maintain the support of a large number of backers, incumbent governments would find more cost-effective to invest state revenues in

the provision of social services. These could be thought of as public goods since their provision benefits virtually every citizen at once. If, on the contrary, the number of key supporters is small, an incumbent leader would opt for investments in private goods. These goods typically take the form of preferential access to various services, privileges, positions and they can be distributed in a selective way.

Contrary to their democratic counterparts, in conclusion, authoritarian incumbent leaders enjoy a structural advantage over any challenger. They are in the position of holding on power by simply making a small group of key actors – relatives, allies, the military, private security corps, specific sectors of the civil society – better off than the rest of the society. To be sure, this holds true also for competitive autocracies. Although they formally abide by the rules of political competition, the unevenness of the playing field, along with the frequent recourse to electoral fraud, make the actual size of the winning coalition smaller than in democratic countries.<sup>9</sup>

#### *Hypothesis 1.*

As anticipated, the above structural conditions of authoritarian politics tend to counterbalance the initial incentives to invest in social welfare. They make the latter option costly and poorly efficient. The mutual distrust between rulers and ruled decreases the payoffs of investments in the productivity of society. The information deficit faced by authoritarian governments hampers the implementation of public policies on target. The most efficient strategy to buy off the loyalty of a relatively small number of key supporters is to invest state revenues in private (rather than public) goods. All these aspects of authoritarianism have a distortive effects on the initial incentives to promote citizens' wellbeing. Taken together, these opposite incentives make the behaviour of an authoritarian government quite unpredictable, but generally devoted to the defence of the privileges of a few, rather than the interest of the majority.

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<sup>9</sup> This is confirmed by a simple empirical test, comparing Bueno de Mesquita et al.'s measure of the size of the winning coalition (2003: 134-135) and the regime types identified in chapter 1. The mean size of the winning coalition in democratic regimes, as expected, is close to 1 (0.87). For competitive autocracies, the mean is 0.57, about one-third less than democracies.



Competitive autocracies are essentially non-democratic regimes. As a consequence, their governments are likely to be trapped between similar contrasting incentives.

Carbone's analysis (2012) of the diverging political trajectories followed by Ghana and Cameroon and their consequences on the respective health policies confirms the intuition. Democratization in Ghana led to "emergence of a domestic public sphere in which policy issues could be openly and vigorously debated" and "creation of a context where voters' demands could be articulated and voiced" (Carbone, 2012: 167). Cameroon's transition to competitive authoritarianism, in turn, prevented policy issues to become "the object of genuine public debates (...) as the room for discussion remained limited and controlled" (ibidem: 169). As a consequence "the regime appeared to remain much more concerned with the appropriation and distribution of private benefits to its core constituency" (ibidem: 170).

In conclusion, to the extent that the authoritarian dimension of competitive authoritarianism prevails, the policy-making of competitive authoritarian governments will be diverted to priorities different from the wellbeing of the citizens. The first hypothesis is:

Hp1. Competitive autocracies provide less social welfare, and in a less efficient way, than democratic regimes.

#### **2.3.4 CA vs. Full authoritarian regimes.**

How far should the above considerations be brought? The analysis that led to the formulation of the first hypothesis equated competitive autocracies to other forms of authoritarianism and contrasted them jointly with democracy. Yet competitive authoritarianism is a specific type of non-democracy. It differs from other authoritarian regimes because of the presence of formally democratic institutions: a limited (unfair) form of political competition put into effect by multi-party inclusive elections for both the executive and legislative positions, a multi-party legislature in which opposition is represented. To the extent that they are so important as to define a regime type, these distinctive institutional features are likely to have as much

relevant consequences in shaping politics in these non-democratic regimes, including governments' commitment to promote social welfare.

The consequences of competitive autocracies' democratic dimension on this sector of policy, however, are controversial. Two main approaches could be identified. One focuses mainly on citizens' participation, and implicitly considers the presence of political competition too limited to have meaningful effects. The other, on the contrary, takes the latter seriously and focuses on the consequences of multi-party elections, multi-party legislatures, and the role of the opposition more generally.

#### *Citizens' participation.*

If we carry on along the line of reasoning traced by Bueno de Mesquita and his colleagues, we may end up to draw quite pessimistic scenarios. Contrary to other non-democratic regimes, with the exception of single-party systems, competitive authoritarianism are inclusive regimes characterized by a large *selectorate*, of a size similar to the selectorate of democratic regimes.<sup>10</sup> In the absence of a mechanism that effectively makes incumbent governments dependent on the support of a majority of citizens, however, their participation in the process of leadership selection may trigger a vicious cycle.

With few exceptions, it has been said, in a competitive authoritarian regime citizens are not able to sanction an incumbent leader by voting him out of office. Autocrats' fate still depends on the support of a few actors. Yet in a competitive autocracy citizens are recognized as political actors, they are entitled to take part to the political game. Therefore they represent as many potential members of the winning coalition of an incumbent leader. This peculiar combination of small winning coalition and large selectorate results in a further advantage from rulers' point of view. Their hold on power is strengthened by a higher loyalty of their supporters.

This structurally induced loyalty derives from the replaceability of any single member of the current (small) winning coalition and the consequent fall of his/her

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<sup>10</sup> The mean size of the selectorate in democratic, competitive authoritarian and single-party regimes is 0.99, 0.98 and 0.96 respectively. In military regimes is 0.36, while in hereditary regimes is 0.62.

‘cost’. The smaller the number of supporters necessary to hold on power and the larger the number of potential candidates, the lower is the probability for a single member of the current winning coalition of being essential. In case of defection, the incumbent leader can easily replace him/her. For identical reasons, however, even if the incumbent falls, a single defector has little chances to enter the winning coalition that the successor (i.e. the former challenger) will arrange. Defection is risky, the potential returns are unlikely, loyalty to the incumbent is thus the option that makes members of the current winning coalition better-off.

Authoritarian rulers benefit from this situation in two important aspects. On the one hand, supporters’ loyalty increases the difficulties for opponents to challenge an incumbent leader by advancing a credible alternative that may appeal members of the current winning coalition, and persuade them to defect and overthrow the incumbent. This is the main reason why “leaders most prefer autocratic regimes with universal suffrage implying rigged elections” (Bueno de Mesquita et al. 2002: 575). On the other hand, supporters’ loyalty lets the incumbent in the fortunate position of keeping the investments in both private and public goods to their minimum. Rulers do not pay the consequences of policy failure. They are indeed encouraged in their predatory attitudes, to the detriment of citizens’ wellbeing.

#### *Multi-party elections.*

The literature on authoritarian elections traditionally stressed rulers’ ability to use them as an instrument to consolidate their power. The periodic hold of elections is, first of all, a symbolic act that perpetuates a fiction to which the entire population is called to take part (Weeden, 1998). The main purpose, however, is to reduce threats of coups d’état and/or popular rebellions (Cox, 2009). In many cases, especially in the Middle-East at the beginning of the 1990s, the concession of elections represented a strategy to funnel people’s discontent (Brumberg, 2002). In many others, such as Mexico under the PRI and Egypt under Mubarak, elections acted as a mechanism to monitor and strengthen the loyalty of members of the ruling elite, reward it by assigning posts, and as a method of carrier advancement (Magaloni,

2006; Blaydes, 2008). Autocrats, finally, hold elections to win them, and to do so with the largest margin of victory possible. Supermajorities facilitate the implementation of governments' programs and allow incumbents to unilaterally modify the rules of the game in their own favour. Overwhelming electoral successes "generate a public image of invincibility" and "discourage potential challengers" (Magaloni, 2006: 9). By signalling how imbalanced the distribution of power is and how difficult it would be to mobilize the masses against the government (Geddes, 2005), authoritarian leaders nip potential rivals' ambitions in the bud.

What, on the contrary, this influential body of literature tends to downplay is the mutual nature of elections as an instrument of communication between the ruling elite and the masses. In order to achieve their goals, we have seen, autocrats use elections to send various kinds of messages to as many different recipients. Yet autocrats could also use elections to gather information from other actors.

Elections, in particular, may represent an efficient means to collect information about citizens. Of course the amount and quality of the information produced depend on the nature of the elections. Not all authoritarian elections may be useful in gathering information. Plebiscitarian, purely facade, heavily manipulated and/or otherwise restricted elections can hardly be expected to provide reliable information about voters. Yet elections in competitive authoritarian regimes seem to be quite effective in that sense. Citizens' vote in universal suffrage minimally competitive elections may provide relatively good quality information about a number of issues: among them, overall support to the government, dissatisfaction with the current state of affairs, variation across regions and groups in the distribution of consent and dissent, preferences, needs, sensitivity to specific themes.

Similar expectations derive from the peculiar hybrid institutional setting of competitive authoritarianism. In a competitive autocracy opposition parties are not only allowed to run the elections, but also to compete for positions with at least the realistic chance to gain some influence on the government's policy-making. As Levitsky and Way put it, moreover, their activity – recruitment, campaigning, etc. – suffers from substantial limitations but is "above ground" (2010: 6), that is

sufficiently meaningful to make opposition parties a valid alternative for voters. Citizens can get acquainted with opposition parties' programs and, above all, vote for them. Given the uneven playing field – the ultimately unfair competition – voting for the opposition in a competitive autocracy can hardly contribute to defeat the incumbent party. Citizens under a competitive authoritarian regime are by no means decisive voters. Yet voting for an opposition party which runs the elections according to the rules of the game is neither meaningless, nor dangerous. It is not like taking part to demonstrations and street protests against the government, under the threat of a violent repression. Citizens can do it. They can use their vote to reveal their true preferences, their dissatisfaction with the government, at a relatively low cost.

Contrary to other non-democratic rulers, then, incumbent governments in competitive authoritarian regimes may benefit from a further advantage deriving from the periodic call of elections. Elections in competitive autocracies not only deter threats, they may also prove an efficient instrument to collect reliable information about citizens preferences. With reference to the initial incentives to meet at least part of citizens' needs, competitive authoritarian elections facilitate the collection of the information necessary to invest in an efficient way in social welfare programs.<sup>11</sup>

By following the same line of reasoning also the consequences of a fragmented opposition could be reconsidered. The literature has already emphasized that authoritarian rulers may take advantage of the fragmentation that typically affects opposition fronts in authoritarian regimes.<sup>12</sup> The institutionalization of a multi-party system and, in particular, the reduction of the entry costs for small parties hamper the coordination among the challengers of the ruling party. Given the unrealistic

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<sup>11</sup> The discussion parallels the one proposed by Michael Miller in a forthcoming paper, in which the author focuses on the credibility of the information provided by authoritarian elections. His argument and mine are largely complementary.

<sup>12</sup> The degree of opposition's fractionalization in non-democratic regimes featuring an elected multi-party legislature – including competitive autocracies, non-pure forms of single-party regimes, and some hereditary regimes – ranges from 52% to 54%, whereas for democracies is 46%. The index measures the probability that two deputies picked at random from among the government parties will be of different parties. Source: Database of Political Institutions (Keefer, 2012).

possibility of defeating the ruling party, rather than creating electoral alliances, opposition parties are more likely to compete with each other for maximizing their own influence over the policy-making (Magaloni, 2006: 26). Likewise, divisions among opposition parties are likely to emerge as soon as the ruling party signals the intention to dialogue with some of them (Lust-Okar, 2004).

From the perspective of the government of a competitive autocracy, however, opposition's fractionalization may also improve the quality of the information provided by citizens' vote. On the one hand, political competition leads opposition parties to diversify their political supply. On the other, failure to form a coalition discourages citizens from voting tactically, while favouring program-sensitive voting behaviours. Therefore, the distribution of votes among different opposition parties may signal citizens' sensitivity toward specific issues.

#### *Multi-party legislatures.*

Authoritarian rulers may consider to transfer part of the control over decision-making to a legislative assembly. By accepting to self-restrain their own power, they expect to enjoy substantial returns in terms of stabilization of their rule, with specific reference to intra-elite relationships. Authoritarian legislatures "facilitate power-sharing among the ruling elites" (Boix and Svolik, 2013: 300). In the absence of a third independent authority able to enforce the contract between the dictator and his allies, a deliberative body in which the interactions between the former and the latter are formalized "alleviate commitment and monitoring problems" (ivi). The benefits deriving from regular (and regularized) interactions within these assemblies are greater transparency, i.e. a mutual control that promotes trust and cohesion, wider agreement over policy-making, and more generally a clearer partition of tasks and definition of jurisdictions.

In competitive authoritarian regimes, however, the elective nature of legislative assemblies and their opening to opposition parties have important consequences beyond the stabilization of the regime and the relationship between ruler and allies. As Gandhi (Gandhi, 2008; see also Gandhi and Przeworski, 2006) pointed out,

legislatures in which opposition parties are represented “ease the task of governing” (2008: 79). Specifically, legislatures may serve as an “environment of controlled bargaining” (ibidem: 78), a forum for negotiations in which government and opposition parties representing different sectors of society can dialogue, share information, and reach agreements over issues of mutual interest. Put another way, from an authoritarian ruler’s point of view, multi-party legislatures represent instruments of co-optation by means of which to control opposition. By offering a place in the legislature, rulers channel the activity of potential opposition groups within regularized procedures and “induce these groups to vest their interests in the status quo” (ibidem: 100).

With respect to the initial incentives to promote citizens’ wellbeing, multi-party legislatures contribute to the overcoming of the problems of mutual trust between an authoritarian ruler and the citizens. By opening the legislative body to the participation of opposition groups autocrats signal their actual commitment to stipulate (and respect) a contract with society. An agreement by means of which to solicit the cooperation and compliance of different sectors of the society. From an incumbent authoritarian leader’s point of view, the effects of multi-party legislatures are thus not very dissimilar to the effects illustrated by Boix and Svobik. While the latter focused on power-sharing between dictator and members of the ruling elite, the above argument extends the analysis to the problem of commitment between insiders and outsiders. The broadening of the social basis of the regime, however, yields several benefits also for opposition parties and, more generally, the citizens they represent. In exchange for their cooperation, citizens not only receive the now credible promise of investment in social welfare and policy concessions. Thanks to opposition parties’ access to the legislative process, they also gain entitlement to voice their demands and influence the policy-making.

In the legislature of a competitive authoritarian regime, moreover, multiple parties are not only represented but also elected. Elections determine which parties have access to the legislature as well as the relative weight of each of them, as reflected by the distribution of seats. From this perspective, once again, the consequences of a

fragmented opposition, and more generally of the competition existing among opposition parties for a place in the legislature, should be reconsidered. Fractionalization certainly weakens opposition parties' ability to challenge the ruling party, both in elections and in the parliament. Yet electoral competition among different opposition parties does not necessarily hamper their ability to coordinate afterward. Legislative assemblies, indeed, represent a favourable environment in that sense. Even in the presence of a fragmented opposition front in the legislature, however, competition among opposition parties has important implications on the content of bargaining between government and opposition and, more specifically, of the demands advanced by representatives of the latter.

First, when these parties run elections with the realistic expectation that a good electoral performance would correspond to a higher influence over policy-making, competition among them may trigger a mechanism not very dissimilar from the one illustrated by the median voter theorem. By promoting the interests of the lower-middle classes, therefore, they bring issues related to social welfare into the legislative assembly. Second, competition among opposition parties may improve the responsiveness of opposition's members of the parliament to their respective constituencies. As long as the access to the legislative assembly relies primarily on a method of top-down co-optation it is likely that the bargaining between government and opposition will focus on the distribution of rents and privileges. If on the contrary this access depends on people's vote, opposition's deputies are required to justify their engagement with the incumbent government by promoting the interests of the social groups and classes they represent.<sup>13</sup>

### *Hypothesis 2.*

As the theory from which it has been drawn, the argument based on the negative effects of citizens' political participation in authoritarian regimes on governments' preference for distribution of public goods is rigorous. Yet it overlooks the

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<sup>13</sup> The government itself has an interest in having as interlocutors opposition leaders which actually represent those sectors of the society whose cooperation and compliance is needed.



transformative potential that political competition, albeit limited, may have in an authoritarian context. Specifically, this section was meant to illustrate how the institutions typical of competitive authoritarianism – namely multi-party elections and multi-party legislatures – may mitigate, rather than intensify, the negative consequences of its authoritarian dimension on governments’ commitment to promotion of social welfare.

By institutionalizing a channel through which citizens can communicate their preferences at a relatively low cost, multi-party elections at least partially compensate the information deficit that hampers the propensity and the capacity of an authoritarian government to intervene in the public sector, invest in human capital, and fulfil some of citizens’ demands. This argument, in other words, provides an alternative account of how autocrats react as a consequence of electoral results. Authoritarian leaders do not merely monitor the distribution of support and dissent across groups and regions in order to establish a “punishment regime” (Magaloni, 2006: 20) by means of which to deliver selectively rewards and sanctions. Instead they can make a more constructive use of the relatively reliable information about citizens’ preferences, needs, and dissatisfaction gathered via elections. To the extent that autocrats have an incentive to broaden the basis of support (or compliance at least) and to solicit cooperation among citizens, therefore, multi-party elections favour the effectiveness of their social welfare programs.

Kjaer and Therkildsen’s analysis (2013) of the universal primary education programme launched in 2001 by President Mkapa in Tanzania corroborates similar considerations. They showed that “elite perceptions of voter priorities are also an important motivating factor in shaping policy making and implementation arrangements (...) even when these [elections] are flawed” (Kjaer and Therkildsen, 2013: 592-93). In particular they noticed that competitive authoritarian leaders learn from electoral contest toward what issues voters are particularly sensitive and are willing to alter policies as long as this has “the potential to benefit a large number of voters” and can be “clearly associated with the governing party” (ibidem: 603).

Likewise, the institutionalization in competitive authoritarian regimes of a forum of mutual exchange with the opposition in the form of multi-party legislatures further contributes to fill the communication gap from which non-competitive autocracies suffer. This is true in both directions. The dialogue with opposition parties provides additional information about citizens' needs. Even more importantly, the regularization of the relationships between government and opposition signals the former's commitment to fulfil the terms of the agreement.

From a slightly different point of view, it could be said that the presence of opposition parties in an authoritarian legislature has the effect of breaking the vicious cycle triggered by the disproportion between a small winning coalition and a large selectorate (cf. Bueno de Mesquita et al., 2003; and above). Although citizens are still not decisive for an incumbent's chances to hold office, the opening of legislatures to opposition parties, their involvement in the policy-making, could be thought of as a partial enlargement of the winning coalition.<sup>14</sup> To the extent that autocrats are actually disposed to bargain welfare programs for cooperation and compliance, therefore, multi-party legislatures favour the enforcement of the agreement.

To conclude, the institutional attributes that distinguish competitive authoritarianism from other forms of non-democratic rule have a compensatory effect. Overall, they make the provision of social welfare a rather attractive option for an incumbent government. Specifically, when interacting with the authoritarian dimension of competitive authoritarianism, multi-party elections and multi-party legislatures correct for the distortions deriving from the communication gap and the small winning coalition with respect to the initial incentives to promote citizens' wellbeing. From an autocrats' point of view, indeed, competitive authoritarianism seems to represent quite a favourable setting. While the limited nature of political competition

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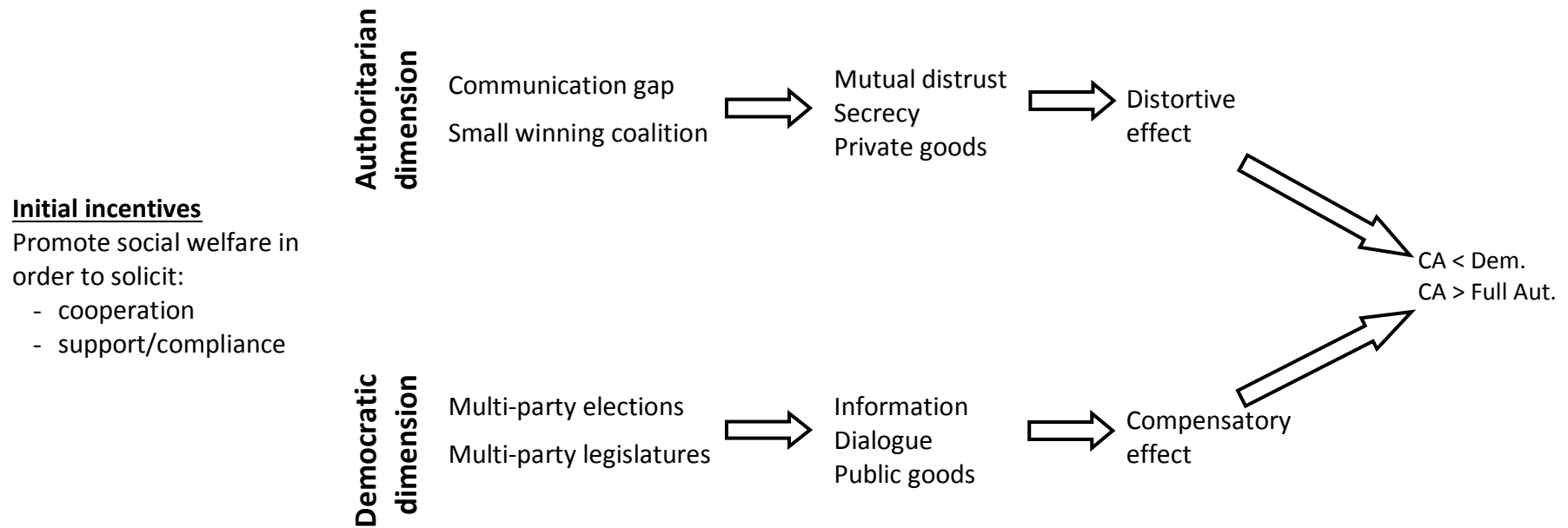
<sup>14</sup> This is somehow confirmed by the mean value of the W/S ratio (winning coalition size divided by selectorate size) associated with competitive autocracies, 0.58, which lies in between the mean values of non-competitive autocracies (0.32) and democracies (0.86). Preliminary evidence, then, casts doubts on some of the conclusions drawn by Bueno de Mesquita and his colleagues (see in particular Bueno de Mesquita et al. 1999: 153; and 2002: 575)

has no or little consequences on incumbent's hold on office, it is sufficiently operative to generate benefits in terms of information flow and cooperation.

This compensatory effect, however, is likely to be partial from citizens' point of view. Policy concessions dictated by an authoritarian ruler's egoistic goals "are not the same as open-ended decisions" (Ghandi and Przeworski, 2006: 21) and they can always be cancelled by the leader. More generally, the authoritarian dimension is still the predominant trait in competitive autocracies. Provided the differences between democratic and competitive authoritarian regimes and their consequences on citizens' wellbeing (see section 3.3), then, the second hypothesis is:

Hp2. Competitive autocracies provide more social welfare, and in a more efficient way, than other non-democratic regimes.

**Figure 2. The consequences of competitive authoritarianism on citizens' well-being.**



## **2.4 The role of time and context.**

The aim of this last section is to carry on the discussion of the consequences of the peculiar institutional setting of competitive authoritarianism on citizens' wellbeing. The focus is on two 'interfering' factors that may influence the mechanisms theorized and the relationships hypothesized. Specifically, the potential effects of the consolidation of a competitive authoritarian regime and of the regional context to which it belongs are taken into account. To be sure, what follows is not meant to controvert the hypotheses formulated in the first part of the chapter and their explanation. Quite the opposite, the analysis of these additional two factors is instrumental to complement the main argument, its second part in particular: to specify it by considering to what extent these factors may impact on the positive effect that, according to the main argument, competitive authoritarianism has (see figure 3). Therefore, the hypotheses that are formulated at the end of this section (the third and fourth respectively) should not be thought of as contrasting with hypothesis 2. Their test in the next chapter would rather contribute to evaluate, or weigh, the reach of the latter.

### **2.4.1 Consolidation of competitive authoritarianism.**

Competitive authoritarian regimes can consolidate. Levitsky and Way argue that the inherent tension marking competitive authoritarianism does not bound these regimes to collapse (2010: 20). More generally scholars now agree that, contrary to early expectations, the halfway house may in fact stand (cf. Huntington, 1991: 137). Occasionally in the present and previous chapters the discussion has already touched upon the issue. In section 1.5.2, descriptive statistics and distribution frequencies showed that competitive autocracies do not appear particularly fragile. The literature review at the beginning of this chapter, in turn, briefly illustrated the 'state of the art' of research on the topic: the main questions under examination, the role played by formally democratic institutions in the strengthening of an autocrat's tenure, as well as the major points on which scholars' opinions still diverge.

Here, however, we are only marginally interested in this debate. Rather than trying to explain whether and how competitive autocracies consolidate, the present analysis only takes stock of past contributions and tries to move beyond. Based on existing literature, it is assumed that competitive authoritarianism (at the very least) does not house the seeds of its own decay. Starting from this, I then look at the consequences of its consolidation on citizens' wellbeing. Specifically, the goals of this section are (1) to clarify what is meant by consolidation when non-democratic regimes in general and competitive autocracies in particular are concerned and (2) to think about the mediating effect of the consolidation of a competitive authoritarian regime on political dynamics previously examined.

#### *Authoritarian consolidation...*

The use of the notion of regime consolidation became prominent in the 1990s. Since the very beginning, it has always suffered from a 'democratic bias'. The lack of scholarship on the concept of authoritarian consolidation forces us to start from its democratic version. During the 1990s, especially in the second half of the decade, researchers engaged in a sometimes heated debate on the conceptualization of democratic consolidation and its implications for the study of democratization and third wave new democracies (O'Donnell, 1996a; Gunther et al., 1996; O'Donnell, 1996b). In its early formulations, the concept was centred around the institutionalization of democratic rules, their acceptance and their repeated practice (Przeworski 1991: 26; cf. Schmitter and Karl, 1991: 76; Huntington, 1968: 12). The definition of the concept has been progressively expanded. To date the most famous definition of democratic consolidation remains the one formulated by Linz and Stepan (1996: 5). Consolidation is achieved when "democracy has become the only game in town". Their definition includes a behavioural dimension, according to which all relevant actors adhere to the rules of the game; an attitudinal dimension referring to the belief shared by the majority of the people in the appropriateness of these rules; as well as a constitutional criterion according to which all political actors recognize the established norms as the default option to resolve political conflict.

More recently, however, Schedler recommended a thinner conceptualization. Specifically, he suggested to stick to the idea of democratic survival and to the negative formulation of “avoiding democratic breakdown and avoiding democratic erosion” (1998: 112).

The reason of the almost exclusive focus on democratic regimes relies on the idea that non-democratic regimes are, by nature, unable to consolidate. Well institutionalized authoritarian regimes, when they are acknowledged, are considered as exceptions. Even in the case of long-standing regimes, the personalization of power that characterizes most autocracies is expected to hamper the development of institutions that ‘survive’ a leadership succession. This idea has been gradually called into question during the past decade. Scholars showed that authoritarian regimes differ in their propensity to breakdown and tried to explain variations of outcome by the structure of intra-elite interactions (Geddes, 1999; Hadenius and Teorell, 2007). Only recently, however, it has been noted that authoritarian and democratic regimes face similar challenges and that the task of preventing breakdown make their respective rulers more similar than appearance would suggest. Accordingly, Gobel defines authoritarian consolidation as “a deliberate project of the ruling elite to enhance its capacities to govern society” (2011: 177). Those capacities refer to the exercise of despotic, infrastructural and discursive power. Progresses in the consolidation of an authoritarian regime, in particular, correspond to the enlargement of the “range of options to address social problems and regime challenges” (ivi), beyond the mere intimidation or repression of opponents.

*... and its consequences.*

Not surprisingly, research on the consequences of regime consolidation in the past years focused almost entirely on democracies.. Scholars studied mainly economic outcomes, such as income inequality (Muller, 1988) and growth (Gerring et al.,

2005).<sup>15</sup> These studies are characterized by a common approach. They are all aware of the relevance of time as an explanatory factor when political institutions and their outcomes are under examination. They reject the idea that democratization – either a democratic transition or an increase in the level of democracy – has a more or less immediate effect on a given outcome and, more generally, that the presence of democracy produces the same effect regardless of the age of the regime, and/or the past experience and legacies of a country. They posit that “democratic processes need time to take root and flourish” (Carbone, 2009: 127), that their effects unfold over time and in a cumulative way. As regards the explanation of the importance of time and history, finally, research on the consequences of democratization tends to focus on two interrelated process: learning and institutionalization (Gerring et al., 2005).

This influential, albeit numerically scant, body of research has important merits. These studies contribute to the identification and clarification of causal relationships that would have otherwise been underestimated, if not fully misinterpreted. Yet they only look at the democratic side of the world. In some cases they just neglect the consequences of the consolidation of non-democratic regimes. In some others, their theories explicitly rule out the possibility that a similar effect may even exist. Although all polities are subject to the “liability of newness”, scholars argue, the significance of these liabilities is not constant across democratic and non-democratic regimes: “experience matters more in a democratic setting” (Gerring et al., 2005: 330). Autocrats rule by coercion. Autocrats, in other words, are in the position of making decisions with little or no delay.

All this sounds just not plausible and a bit superficial. It is legitimate to focus only on the consequences of democratic consolidation, if this is the goal of the researcher. Yet it is not convincing to justify this with the argument that what matters for democracy, consolidation, has no implication at all for other forms of political regime.

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<sup>15</sup> Among the few exceptions is Ross’ 2006 article on the consequences of democratic experience on infant mortality, although he does not really delve into theory.



First, regime consolidation is a factor that does not necessarily require an adjective. Before studying the consequences of democratic and authoritarian consolidation we should better investigate the consequences of regime consolidation in the first place. As soon as we do so, we may easily realize that some of the intuitions that justify the focus on democratic consolidation actually refer to regime consolidation in a broader sense. At the early stage of the life of a political regime, of any political regime, a government's policy-making is likely to be less efficient than after a period of running in. With more specific reference to the object of our interest, the restructuring and re-organization of the institutional apparatus implicit in a regime change is likely to take time and may induce governments to assign priority to issues that have little to do with social welfare.

Second, to the extent that regime consolidation matters, it is likely to mediate the effect of both democratic and authoritarian regimes (or worth to explore this possibility). This is not to say that if theory suggests the consolidation of a democracy to have a positive effect on a given outcome, the same should inevitably apply also in the case of authoritarian consolidation. Quite the opposite, from this enlarged perspective it is possible to consider the presence of regime consolidation's potentially diverging (but still mediatory) effects. Rather than being more or less important, experience matters in different ways. Not only the consolidation of a democratic regime may favour political dynamics that would not be triggered if the regime was authoritarian. The exact opposite could also obtain. Authoritarian consolidation may trigger as much relevant dynamics, while producing opposite effects. Depending on the democratic or authoritarian nature of the political regime, then, consolidation may tell us very different stories.

Similar considerations are corroborated by Bell's re-examination of the selectorate theory in the light of regime consolidation. The main claim is that "public goods provision varies over the tenure of a regime because regime consolidation changes leaders' incentive for government spending" (2011: 626). Especially in the early days of a newly established political regime, incumbent leaders are more exposed to extra-institutional threats than to replacement via institutionalized processes of

competition (however the latter is configured). In non-consolidated democratic regimes, members of the elite have both the motive and the means to represent the most severe extra-institutional threats. Democratization eroded their de jure privileges, while they still hold enough de facto power. At the opposite, extra-institutional threats in a non-consolidated authoritarian regime are likely to come from the masses. They have little to lose and, given the relative weakness of the new institutions (including coercive capacity), there are still some chances that a popular revolution would be successful.

Similar threats are likely to influence a leader's strategy, including his/her responsiveness to the incentives toward the distribution of public goods generated by the institutional environment in which he/she rules. Early in the life of the regime, a democratic leader tends to give priority to the interest of dissatisfied elites, to appease them with private goods. Before the regime consolidates, on the contrary, a dictator should deter popular uprising with public goods. In short, by redistributing de facto power according to the de jure distribution established by a regime transition, "consolidation allows leaders to focus resource allocation on incentives created by institutions" (ibidem: 643).

### *Hypothesis 3.*

To date, Bell's article represents the best attempt to shed light on the consequences of authoritarian consolidation on citizens' wellbeing. Unfortunately his argument tells us nothing about the differences that may exist across types of non-democratic regime. Above all, it can hardly be generalized to competitive autocracies. These regimes are, from an institutional point of view, more complex than the ideal-type of authoritarian regime described by the author. As it stands, the theory is of little help. To be useful to the advancement of our understanding of competitive authoritarianism, and the implications of its consolidation, it needs (and deserves) further examination. The theory, in other words, should be re-read in the light of the peculiarities of competitive authoritarianism.

I start from Bell's idea that, in non-democratic regimes, consolidation corresponds to a progressive decrease in the size of the winning coalition necessary to keep an incumbent government in office and to the strengthening of other instruments of rule. This is consistent with Gobel's definition. Interestingly, in more than a half of the competitive authoritarian regimes identified in previous chapter (see Appendix 1.B) the size of the winning coalition follows a decreasing trend. Preliminary analyses thus suggest that, also in the case of competitive authoritarianism, regime consolidation determines the progressive insulation of a government. Yet contrary to other non-democratic regimes, competitive authoritarianism by definition allows the opposition to enter the political arena and to take active part to the political life of the country. How then does government's insulation happen in a competitive authoritarian regime?

I suggest this process in a competitive autocracy does not exhibit the level of coercion that arguably characterizes the consolidation of the ruling elite's power over the masses in non-competitive dictatorships. More precisely, I argue that competitive authoritarianism consolidates by inertia, or rulers' active pursuit of the latter (if you accept the paradox). By repeatedly thwarting opposition's attempts to challenge incumbent government, competitive authoritarian governments indirectly erode the 'quality' of the opposition. Facing the impossibility of a victory, opposition leaders' responsiveness to their constituents is likely to deteriorate. They will be increasingly attracted by individual privileges, and prone to get co-opted. Similar dynamics are likely to affect voters too. The frustration of expectations – realizing that elections represent an instrument to rule rather than to select rulers – generates dissatisfaction with politics and indifference.

These processes let and even favour the insulation of the ruling elite of a competitive autocracy from the society and, more generally, the consolidation of existing structure of power. Yet the crucial point is not (not only at least) that competitive authoritarian governments no longer need to fulfil citizens' demands since they have developed other capacities to govern society. In a competitive autocracy regime consolidation seems to determine something like a general deterioration of politics,

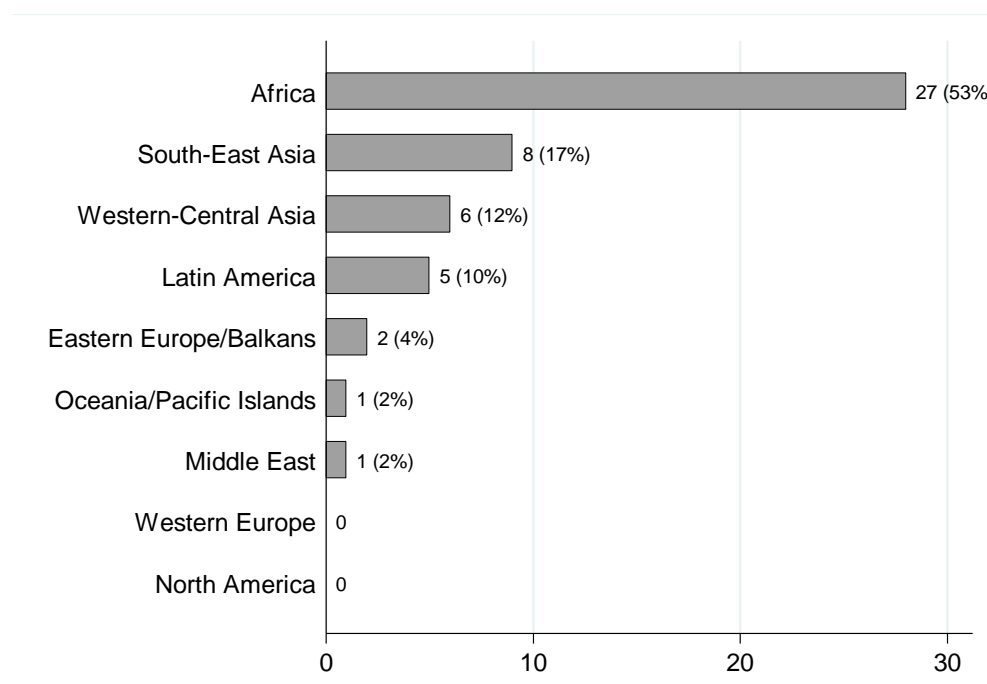
and in particular of communications between government and society. The result, however, is the same. Similarly to other forms of authoritarianism, consolidation of a competitive autocracy may correspond to a progressive decrease in the commitment and capacity of a government to promote citizens' wellbeing. To conclude, with reference to the dynamics triggered by competitive institutions described in previous section, regime consolidation in a competitive autocracy has an inhibitory effect. The continuous and repeated practice of a formally democratic routine, when its substantive functioning is obstructed, tends to dissipate its compensatory benefits. Regime consolidation thus mediates the relationship between competitive authoritarianism and citizens' wellbeing. Specifically, the consolidation of competitive authoritarianism makes the difference from closed authoritarianism progressively thinner. The third hypothesis is:

Hp3. Competitive autocracies become worse providers of social welfare as they consolidate.

#### **2.4.2 Regional context.**

So far the discussion has focused on competitive authoritarianism as a phenomenon that, in principle, may characterize any country and political system. Yet in chapter one we have seen that competitive autocracies belong to the developing world. Upon a closer examination of the map illustrated in the last section of that chapter, indeed, we may also note that these regimes tend to cluster in a few specific regions (see also figure 3 below). With very few exceptions, in 2008 competitive authoritarian regimes could be found either in Africa (27), east and south Asia (8), the northern part of Latin America (5), or in the so-called post-Communist world – including eastern Europe, Balkans and the former Soviet Republics (8).

**Figure 3. Competitive Autocracies by region: raw sum and global % (2008).**



These raw figures suggest that the relationship between competitive authoritarianism as a general phenomenon and the regional context(s) in which it is observed deserves careful scrutiny. On the one hand, the applied analyst could simply ‘control for’ region-fixed effects in order to avoid biased estimates. On the other hand, the researcher may want to take the regional distribution of the phenomenon more seriously. One for instance can be interested in investigating why competitive autocracies proliferated only in some regions, while they did not find fertile terrain elsewhere. Alternatively, the observation that context matters, or that our “answers depend on the context in which the political processes under study occur” (Tilly and Goodin, 2006: 6), could be taken as a starting point.

Here in particular it represents the occasion to speculate on the implications that different regional contexts could have on the relationship between competitive authoritarianism and socioeconomic wellbeing. Specifically, the discussion focuses on the possibility that regime effects, such as those examined in section 2.3.4, are region-specific. I borrow the idea from Krieckhaus (2006), who suggests that the exact nature of the consequences of democratic reforms – namely their positive or

negative effect on economic growth – is fundamentally shaped by regional context. Rather than looking at stark changes of signs, however, I investigate the consequences of different regional contexts on the magnitude of the regime effects previously theorized. The production of a given outcome may be explained not merely by the institutionalization of a specific political regime, but also by the change that this event induces with respect to the past (Carbone, 2009: 127). Put another way, at this stage of analysis, my interest is not in assessing whether competitive authoritarianism has different effects (positive vs. negative) in different contexts. Here, the political processes illustrated in the previous section – i.e. the compensatory effect of formally democratic institutions – are taken as given. Yet while triggering always the same political dynamics, a given event – e.g. the establishment of competitive authoritarianism – may or may not cause substantial consequences – e.g. a significant improvement in citizens’ living conditions. The same (transition) event may be more or less crucial for the achievement of that outcome, depending on where it happens.

Similar considerations somehow anticipate what exactly is meant here by context-specific effects. Studying the influence of the regional context on more general political processes is like opening the classic ‘can of worms’. The risk is to push the reasoning too far and to end up with quite nonsensical conclusions. To begin with, it should be clarified that by claiming that political dynamics respond, up to a certain extent, to regional effects, we are not implying that region-specific factors cause these dynamics. We are rather assuming that some “antecedent conditions” exist and thus examining whether they may activate, or magnify the effect of a (otherwise potentially weak) causal relationship between competitive authoritarianism and citizens’ wellbeing (van Evera, 1997: 9-10).

Moreover, regions are “merely a summary of factors that have taken on geographical form” (Bunce, 2003: 192). What we are actually interested in are heterogeneous constellations of factors, including prevailing patterns and/or various kinds of regularities at the regional level in the presence of specific political, ideological, socioeconomic, historical and other traits, together forming a common ‘heritage’.

Their relevance relies on three main criteria. First, they should capture the salient defining elements of a given context *as of* the moment in which competitive authoritarianism made its appearance in the region (or proliferated). We should always keep in mind that we are studying a relatively new phenomenon that, with few exceptions, emerged in the late 1980s during the second phase of the third wave of democratization. Second, these regional legacies should have clear potential influence on the relationship between competitive authoritarianism and citizens' wellbeing. Third, there should be considerable convergence of agreement over the regional-specificity and distinctiveness of these contextual factors.

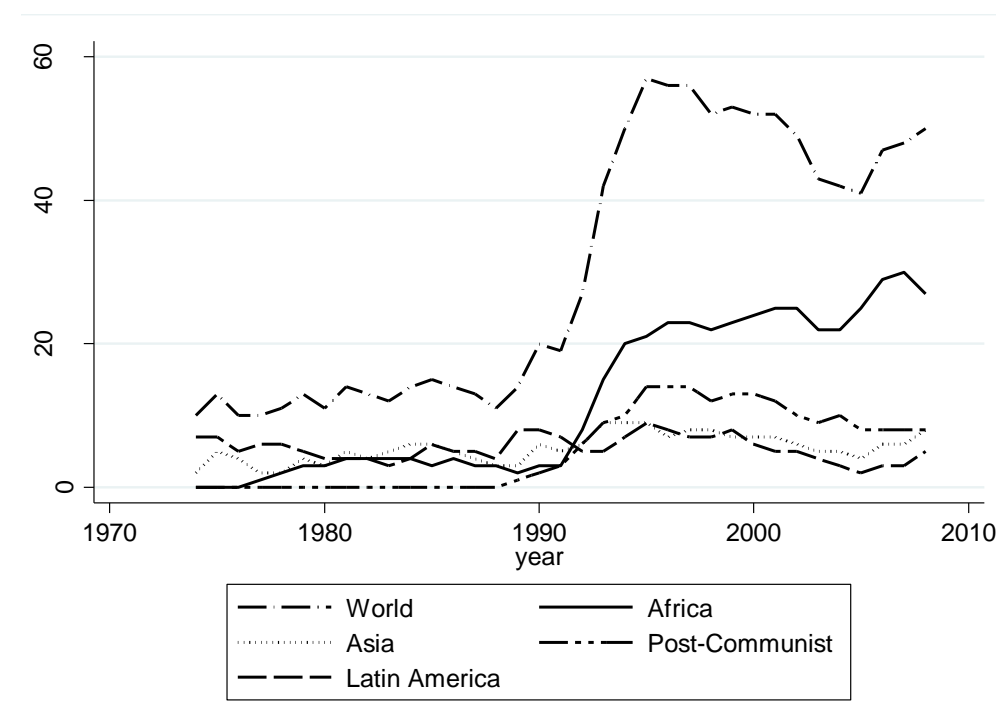
Accordingly, the main thesis is that region-specific factors may temper the significance of the political dynamics triggered by the institutionalization of a competitive authoritarian regime and their consequences on citizens' wellbeing. Depending on the region – Africa, Asia, the post-Communist area, and Latin America – these factors may refer to different domains. Likewise it is granted that, because of their heterogeneity, the analysis of different regional constellations of factors may depict very different pictures. At the same time, I argue that a crucial distinction exists between the African regional context – and its influence on the ability of competitive authoritarianism to improve citizens' quality of life – and the regional contexts of the other three regions. Albeit different in nature, the latter invariably play a less significant role in the relationship under examination.

#### *Africa.*

The diffusion of competitive authoritarianism in the African continent has to a large extent driven its world overall pace (Figure 4). Two relevant points, however, distinguish the growth of the phenomenon in Africa from the trend it followed in the rest of the world. First, until the late 1980s African competitive autocracies – namely Gambia, Senegal, Zimbabwe – were rather exceptional. The expansion of the phenomenon almost perfectly overlapped with the continent's 'second independence' (Bratton and van de Walle, 1992). Indeed, rather than a wave of democratization, Africa seems to have experienced a wave of hybridization. Many reasons contribute

to the explanation of this deviating trend (cf. Diamond et al., 1989; Bratton, 1997; Joseph, 1997; Berg-Schlosser, 2008). Any of these, however, leads to the same conclusion. Elections rarely favoured leadership turnover (Baker, 1998; cf. Cheeseman, 2010) and, even when they did, in most cases they failed to change rulers' authoritarian attitudes (Joseph, 2008). Second, while in the rest of the world the phenomenon touched its peak by the half of the 1990s and then started to withdraw, in Africa it has been growing for another decade – with countries such as Rwanda (2003), Egypt (2005) or the Democratic Republic of the Congo (2006) among the late joiners – although at a slower pace than before.

**Figure 4. Competitive autocracies regional trends (1974-2008).**



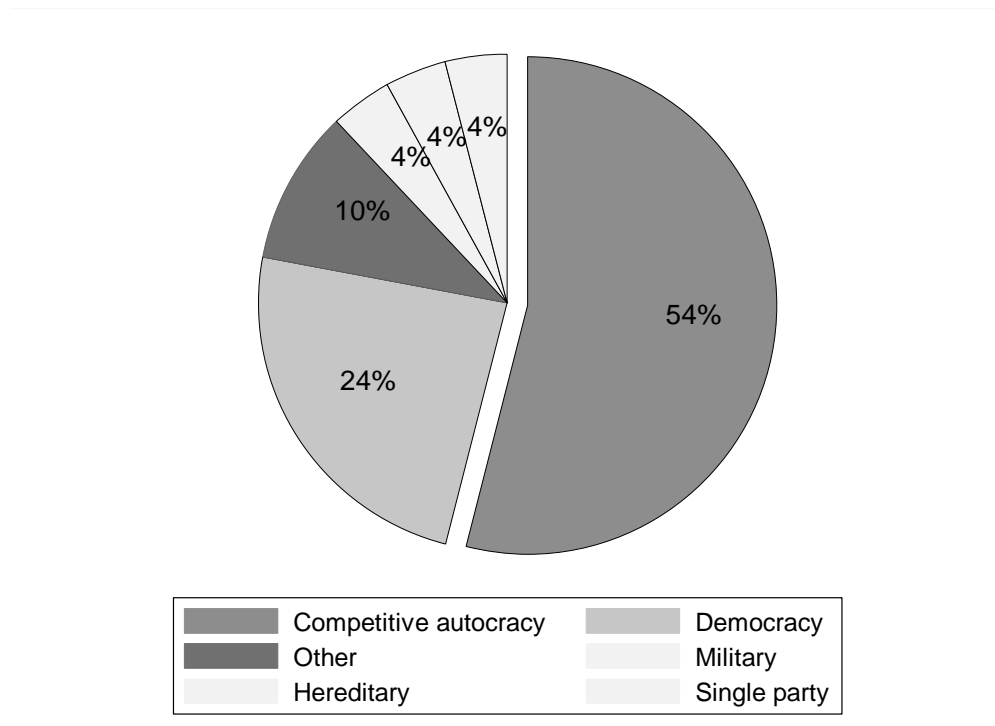
As a result of these trends, by 2008 Africa is the region with the major share of world's competitive autocracies (Figure 3). The 27 African competitive autocracies not only are more than a half (53%) of the total, they also represent the modal type of political regime within the continent (54%) (Figure 5). About 70% of the continent's population is ruled by this form of political regime. In 2008 the top four countries in



terms of population size – Nigeria, Ethiopia, Egypt, and the Democratic Republic of the Congo – were all ruled by autocrats who won minimally competitive elections. The above figures highlight the strong link between competitive authoritarianism and Africa. Africa is the cradle of competitive authoritarianism, while competitive authoritarianism is one of the most relevant political phenomena of contemporary Africa.

For most of the post-colonial era, however, Africa has been associated with another widespread political phenomenon, cross-cutting most existing regimes, regardless of their nature and/or type. “The institutional hallmark of politics in the *ancien régimes* of postcolonial Africa was neopatrimonialism” (Bratton and van de Walle, 1997: 61).

**Figure 6. Africa’s political regimes: continent % (2008).**



With respect to its Weberian ancestor, the term refers to a polity that presents a mix of traditional and modern patterns of authority. On the one hand, neo-patrimonial regimes are founded on rational-legal institutions (Clapham, 1985: 48, quoted in Erdmann and Engel, 2006: 14), power is formally constitutionalised and bureaucratic

institutions regularly exist. On the other hand, the political system maintains a high degree of personalization (Snyder, 1992: 379), power is concentrated in the hands of a virtually *legibus solutus* dictator, and a fusion can be observed between the private and public sphere, where the latter is to a great extent seen as “extensions of the big man’s household” (Bratton and van de Walle, 1997: 61). Likewise, the bureaucratic apparatus at all its levels relies mainly on relationships of loyalty and dependence, is used as an instrument for the practice of systematic patronage and clientelism, while often being deprived of any de facto power of administration.<sup>16</sup> Put another way, in neopatrimonial regimes the formal legal/institutional state apparatus co-exists with a parallel structure of informal relationships of power hierarchically organized that pervades and overbears the former (Erdmann and Engel, 2006: 18).

Neo-patrimonial practices, of course, are not absent from other polities and regions. Yet the acceptance of the idea that neopatrimonialism is “the core feature of politics in Africa” (Bratton and van de Walle, 1994: 459) and that “the heritage of neopatrimonialism distinguishes Africa” from other world regions (Bratton and van de Walle, 1997: 269) is unusually wide among scholars. The reason lies not only in the pervasiveness and diffusion of this pattern of authority, but also in the peculiar form that it took in the continent and its negative consequences.

With few exceptions, only in Africa the blurred distinction between office and office-holder and the monopolization of state resources for personal political purposes led to the conversion of the state into a private patrimony (Médard, 1979: 39, quoted in Bach, 2011: 276; Theobald, 1982: 549; Lindberg, 2003: 123). Only in Africa the neo-patrimonial state took a markedly predatory character and qualified as the quintessence of the anti-developmental state (Bach, 2011: 281). The Central African Republic under Bokassa (1966-1979) and Mobutu’s Zaire (especially since the mid-1970s) represent two cases in point. In a predatory neo-patrimonial regime “the ruler exerts unrestrained control over the state” and this kleptocratic behaviour ultimately

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<sup>16</sup> For a neater differentiation between clientelism and patronage, as two integral parts of neopatrimonialism, see Erdmann and Engel (2006: 20) and their distinction between individual and collective benefits.

leads to absence “of any capacity to produce public policies” (ibidem: 279). The invasive intervention of the state in the African national economies, subordinated to the exigency of rulers to generate rents to be used for personal interests, not only caused highly inefficient allocation of resources (Lewis, 1996: 99-100) but also the most total indifference “to the interests, concerns, and problems of social strata beyond the political class” (Jackson and Rosberg 1984: 424). Significantly, according to the United Nations Development Program, in 1990 twenty-four of the thirty countries with the lowest level of human development were African.

#### *Asia.*

Along with Africa, Asia is a region in which competitive autocracies outnumber any other regime type, including democracy. In 2008 autocrats selected by means of formally competitive elections were ruling over about 35% of the countries. The historical trend followed by competitive authoritarianism in this region, however, is a very different one. Although also in this case the end of the Cold War corresponded to its proliferation, this form of political regime was already present in the region before that event. At the beginning of the 1980s, South Korea, Malaysia, Thailand, the Philippines were already competitive autocracies, while Singapore and Sri Lanka joined the group a few years later. In Asia competitive authoritarianism did not represent a novelty as much as it did for Africa. Nor did its diffusion throughout the region inherit the same institutional legacies. Among the distinctive traits of Asian politics are the strength of state central institutions, their supremacy over civil society (Diamond et al., 1989: 22; Slater, 2008: 256) and, most importantly, dynamic political elites committed to the economic development of the country – e.g. Lee Kuan Yew in Singapore and Malaysian Prime Minister Mahatir bin Mohamad (Diamond et al., 1995: 2).

Asia’s dominant political model is the developmental state. Similarly to the African neopatrimonial state, this model proved compatible with different political regimes, including democracy (e.g. Japan). Other affinities however can hardly be found. In a developmental state “politics has concentrated sufficient power, autonomy and

capacity at the centre to shape, pursue and encourage the achievement of explicit developmental objectives” (Leftwich, 1995: 401). In addition to those already cited, key features of the developmental state are the following. First, there is a bureaucratic apparatus whose composition is based on strictly meritocratic criteria and that enjoys a high degree of autonomy from the political elite in the administration of the economy: “the politicians reign while the bureaucrats rule” (Onis, 1991: 111). The most cited example is the Japanese Ministry of International Trade and Industry, as described by Johnson (1999). Second, in spite of its autonomy, the economic bureaucracy is “embedded” (Evans, 1995 quoted in Routley, 2012: 8). In other words, institutionalized channels of communication connect the bureaucratic apparatus to the private sector.

The combination of rationality, autonomy and embeddedness that characterizes the pursue of economic growth in the Asian model has always led to an all-encompassing approach to development. This means investments in both technology, physical and human capital (Baum and Lake, 2003: 334). Accordingly, albeit selective and addressed only to those categories considered more useful to the national (economic) interests (Fiori, 2005), since the early 1960s Asian developmental states introduced social programs as part of the overall strategy for economic development (Kwon, 2005). Likewise, broadly based programs of education are frequently cited among the key of Asia’s superior economic record. South Korea, Singapore, Taiwan achieved universal primary education before the end the 1960s. Despite its vast population Indonesia’s performance was above 70%. Within a decade similar improvements were also made at the level of secondary school (Page, 1994: 247).

#### *Post-communist countries.*

For obvious reasons, post-communist countries were the most exposed to the consequences of the dramatic events occurred around November 1989. The diffusion of competitive autocracies in the region corroborates the intuition. Until the end of the Cold War, competitive authoritarianism was completely absent from the region.

By the mid-1990s, at the opposite, the post-communist world was the second region for presence of competitive authoritarian regimes, just after Africa. The mid-1990s represented also the peak of their regional proliferation, as the number of competitive autocracies progressively decreased since that moment.

Beyond the peculiarities characterizing each sub-regional system and the sometimes tragic episodes that marked that phase in some of these countries, the legacy bequeathed by the collapse of communism invariably included two relevant elements. The first has to do with the socioeconomic profile that characterized most region's countries and distinguished them from others lying at same level of development (Bunce: 758): high rates of literacy, pro-children stances such as free health care and education, an unusually egalitarian distribution of income (Milanovic, 1998: 20). These in fact are among the factors that in the early 1990s led political analysts to include most of the countries in the region in the "political transition zone" (Huntington, 1991: 60; Grassi, 2008: 95) in which the overthrow of the existing regime is particularly likely.

The second factor refers to the challenge of managing a difficult and often painful transition to liberal economy. The political transition that Russia, the former Soviet Republics of western and central Asia, the eastern European members of the Warsaw Pact, and the Balkan countries of the Socialist Federal Republic of Yugoslavia experienced in the early 1990s, in effect, is not the only radical change of their recent history. An as much significant transition occurred in the economic domain. The fall of the Berlin Wall represented the end of state socialism and of its model of administration of the economy. The region suddenly moved from the "homogenizing effects of the socialist experience" (Bunce, 1999: 756) to the often disorganized "introduction of far-reaching economic reforms, and, in most of the cases, the construction of a new state" (Bunce, 2003: 189). The diffusion of competitive authoritarianism in the region, therefore, happened in conjunction with the "post-communist Great Depression" (Milanovic, 1998: 24), which frequently corresponded to a large increase in inequality (Gradstein and Milanovic, 2004: 528).

*Latin America.*

Latin American experience with competitive authoritarianism is exceptional. First, the continent represents the only region in which the overall number of competitive authoritarian regimes between the half of the 1970s and the end of the 2000s remained almost stable, despite frequent oscillations. Second, this number also remained relatively small throughout the entire period of observation. Third, contrary to all other regions, the diffusion of the phenomenon throughout Latin America does not seem to have been deeply influenced by the end of Cold War. Yet these are not the most distinctive traits of Latin America's late-20<sup>th</sup> century experience.

One directly refers to competitive authoritarianism and is represented by the variety of historical trajectories that led to the institutionalization of this form of political regime. Beyond a few long-standing instances – Mexico first and foremost, but also Guyana and Paraguay – the number of competitive autocracies (either existing or existed) resulting from the breakdown of a fully authoritarian regime has been almost matched by the number of cases that followed a diametrically opposite trajectory. Colombia and Venezuela's transitions from democracy to competitive authoritarianism represent the most recent and resounding examples of democratic erosion.

In spite of these diverging trends, Latin American countries also present a few relevant common traits. The first is political and has to do with the past experience of bureaucratic authoritarianism (O'Donnell, 1973). The second is economical and derives from the high level of inequality in the distribution of wealth that traditionally affects the region. The two themes are strictly related to each other. The establishment of bureaucratic authoritarian regimes in Latin America during the 1960s – Brazil and Argentina – and 1970s – Chile, Uruguay, Argentina – was meant to deal with the pressures generated by income inequality. These disequilibria were mainly due to the exhaustion of the capacity of the import substitution programs launched in the past decades in most Latin American countries to sustain economic development. These programs, however, also created “the basis for populist coalitions that encouraged the political incorporation of the popular sector” (Remmer

and Merckx, 1982: 4). Governments in the region tried to respond to pressures for redistribution with largely ineffective measures of “macroeconomic populism” (Krieckhaus, 2006: 320), involving irresponsible raises in government spending and wages. The resulting economic crises led to the formation of coup coalitions of military officers, technocrats and civilians representative of the industrial bourgeoisie, and the removal of elected governments. The goal was to solve economic disequilibria and implement effective but unpopular growth-enhancing economic policies by excluding the masses from political participation and deactivating their contractual power by means of repression. (Brooker, 2000: 29).

#### *Hypothesis 4.*

Competitive authoritarianism spread all over the developing world during the last part of the 20<sup>th</sup> century. Africa, we have seen, is by far the region where it found the most fertile ground to expand and take root. The above analysis of the different regional contexts in which contemporary competitive autocracies are found, however, also showed another important element. The African continent is the region in which the recent emergence of competitive authoritarianism had the greatest potential to influence the object of our interest, citizens’ wellbeing.

The pervasive character of neo-patrimonial practices in African politics, its distinctive predatory and anti-developmental nature, makes the region particularly sensitive even to limited progresses that, from an institutional point of view, are associated with the establishment of a competitive autocracy. It is no coincidence that the wave of political transitions that shook the continent at the beginning of the 1990s had its origins in mass popular protests against African governments’ economic mismanagement, declining living standards, and took the form of struggles to establish legal rules (Bratton and van de Walle, 1994: 460 and 466). In this context the introduction of political competition, albeit limited and not fostered by the full democratization of the country, and its consequences in terms of information, communication, and accountability may have substantial impact on people’s living conditions.

None of the other regions surveyed presents as 'favourable' contextual factors as those characterizing Africa. The Asian developmental state model, we have seen, proved compatible with various forms of authoritarian (and democratic) rule. The attention paid to the enhancement of human capital as a vehicle for the achievement of economic goals downplays the role that political institutions in general might play in the improvement of citizens' quality of life. Similar considerations apply to the post-communist world, given the relatively high level of socioeconomic development promoted by the socialist model in these countries. Moreover, the emergence and diffusion of competitive authoritarianism coincided with the region's transition to liberal economy and its negative correlates. Latin America, finally, presents a more complex scenario. On the one hand, unequal distribution of wealth coupled with the political inclusion and competition that distinguish competitive autocracies from the bureaucratic military regimes that populated the region until the late 1980s may suggest conclusions similar to the African case. Yet the relative frequency of transitions from democracy to competitive authoritarianism muddles the picture. Although the issue would deserve deeper scrutiny, these cases of democratic reversal could be interpreted as the repetition of the same dynamics that in the past led to restriction of the political arena. If this intuition were correct, these cases of competitive authoritarianism could hardly be considered an 'advancement' with respect to the past.

Before drawing conclusions from the above discussion two caveats are needed. First, the contrast between African neo-patrimonial and competitive authoritarian regimes should not be overrated. Scholars concede that "obvious imperfections should not blind us to the clear improvement in competition and participation that the 1990s have brought" (van de Walle, 2002: 66-67). They agree that the "rule of big men and associated politics of the belly has been tempered" by the political transition experienced by the continent during the past two decades (Lynch and Crawford, 2011: 283; cf. Bayart, 1993). Yet they also remark the "persistence of neo-patrimonial rule" (Bratton and van de Walle, 1997: 234), the "high degree of continuity" with the past and persistent "reliance on private patronage" (ibidem:



259). Neopatrimonialism, let us remember, is something that not even new (full) democratic regimes managed to get rid of, as Lindberg's (2003) study on Ghana illustrates.<sup>17</sup> Second, considering neopatrimonialism as a defining attribute of African politics should not lead us to overlook the existence of neopatrimonial tendencies in other regional contexts. Asia, former socialist countries and Latin America all had and still have experience with similar practices. Emphasis should be better put on the different trajectories followed in these regions toward more regulated – rather than predatory – forms of neopatrimonialism (Bach, 2011).

To conclude, the analysis of the region-specific factors that may intervene in the relationship between competitive authoritarianism and citizens' wellbeing leads to the following considerations. The African regional context potentially acts as a catalyst factor. The political dynamics triggered by the introduction of political competition in an authoritarian regime – their capacity to bring about substantial improvements in social welfare – are magnified by a context shaped by so diffused and markedly predatory neo-patrimonial practices of governance. Where neopatrimonialism has not become as extensive and deeply-rooted – as is arguably the case in other world regions (Bach, 2011) – and/or other counter-balancing factors are at stake, the reach and consistency of the hypothesized consequences of competitive authoritarianism may fade off. With respect to other regions, the citizens of the African countries in which competitive autocracies have been established are thus likely to benefit the most from living under this form of political regime rather than under any other form of authoritarian rule. The fourth hypothesis is:

Hp4. The socioeconomic consequences of competitive authoritarianism tend to lose significance outside Africa.

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<sup>17</sup> Similar considerations also call for a reappraisal of the possibility to interpret the recent political and economic evolutions underwent by several countries in the region as the emergence of an African model of developmental neopatrimonialism (Kelsall, 2011; Booth and Golooba-Mutebi, 2012; Routley, 2012). But this is not the place where the topic could be discussed as accurately as it deserves.

## Chapter 3

### **The consequences of competitive authoritarianism: Evidence from a TSCS analysis and a cross-regional comparison.**

The four hypotheses formulated in previous chapter are tested by means of a time-series cross-sectional (TSCS) analysis. The first part of this chapter illustrates how the analysis has been carried out. Section 3.1 briefly describes the dataset. While the main independent variable of the analysis – regime type – has already been presented in the first chapter, the indicators used to operationalize the dependent variable – citizens' wellbeing – and all the other variables that are used during the analysis as control variables are discussed in sections 3.2 and 3.3 respectively. Section 3.4 presents the statistical model applied and justifies its choice on the basis of both technical and theoretical arguments. Section 3.5, finally, clarifies how each hypothesis is tested.

The second part of the chapter is devoted to the presentation of empirical findings. Section 3.6 provides the reader with the necessary guidelines and keys to follow the subsequent discussion on the tables and graphs included either in the text or in the appendix. Section 3.7 comments on the results relative to the first and second hypotheses. Here the results of each analysis are accompanied by more general remarks on the performance of the statistical model applied. Sections 3.8 and 3.9, finally, focus on the third and fourth hypotheses respectively.

### **3.1 Dataset.**

The present analysis works on a sample of 132 developing countries, observed through 29 consecutive years, from 1980 to 2008. Developing countries are identified on the basis of the following criteria: (1) being a current member of the UN, (2) having more than 500,000 inhabitants according to the latest census made available by the United Nations Population Division when the analysis began (January 2012), (3) not being a high income (GNI  $\geq$  \$12,616) member of the OECD.

Case selection was justified by the very object of the analysis. Competitive authoritarianism, we have seen, is a phenomenon of the developing world. Two additional reasons support that choice. First, progresses in countries' socioeconomic performance are more clearly observable in developing countries. Second, an accurate analysis of well-being in affluent countries would require different indicators of capabilities – arguably less basic ones – from those that could (and should) be used in developing countries (see section 2.2 and below). At the earliest stage of analysis, however, data have been collected for a total of 161 countries (i.e. including advanced economies), the above criteria relative to (1) the international status and (2) the demographic size still holding.

Newly independent countries – former colonies, former occupied territories, former subunits of a larger state (either federal or not) – have been included since the year of their international recognition. Given the relatively large number of countries that became independent between 1989 and 1993, the unbalancing of the panel dataset is the obvious consequence. I consider this setback less problematic than most common potential solutions, such as excluding these countries or, especially in the case of former soviet republics, using data referring to the larger state unit they were part of. The choice of the temporal boundaries was dictated by mainly practical reasons. Although data on several development indicators used in the analysis are available since the early 1960s, experts from economic international organizations such as the World Bank and the International Monetary Fund frequently caution against the

reliability of data collected before the 1980s. As we go farther than 1980 in the past, moreover, the number of missing observations rises exponentially. The year 2008, in turn, is the last year for which data are available on some of the institutional indicators I use to operationalize the regime type variable (see chapter 1).

### **3.2 Dependent variable(s).**

The dependent variable of the analysis is citizens' wellbeing. Earlier in the manuscript (see section 2.2), it has already been clarified that the present analysis relies on the definition of human development adopted by the United Nation Development Program in its annual report. Human development is the process through which people acquire the capabilities "to enjoy a long, healthy and creative life" (UNDP, 1990: 9). The notion highlights the relevance of the non-strictly-economical dimension of development and the centrality of the individual in that process. Yet, it has also been said, objective indicators of wellbeing should be preferred to subjective, survey-based, measures.

Accordingly, this research makes use of objective, non-monetary indicators of wellbeing, namely those referring to education and health care. These represent the two sectors of social welfare on which governments traditionally have a stronger potential of intervention and which in turn have a more direct impact on citizens' quality of life. In particular, twenty variables from the World Bank's World Development Indicators dataset have been selected as alternative measures of citizens' well-being. In order to draw an exhaustive picture of the relationships under examination, the selected indicators refer both to inputs, i.e. public spending, and outputs. A complete list of the indicators used, along with descriptive statistics and other information is available in Appendix 3.A at the end of the chapter.

Data on government expenditures refer either to investment's raw size (as a percentage of gross domestic product) or to their relative size as a share of the budget. Public spending on education includes government spending on education institutions (both public and private), education administration as well as subsidies

for private entities (e.g. students and households). Public health expenditure includes spending from government budget (both central and local), external borrowings and grants (e.g. donations from international agencies and nongovernmental organizations), and social health insurance funds. Public spending are frequently used in the literature on the socioeconomic consequences of democratization because they are expected to measure variations in a government's commitment to promote social welfare in a more direct and immediate way than indicators of the actual performance that are slow-changing.

Whether social spending should be measured as a percentage of GDP or of government budget is an open question. The point is how to determine the importance that governments place on human capital. Shares of total government spending, in principle, highlight this in a more intuitive way. They capture how governments allocate the resources that are under their direct control, thus making explicit their choice to fund either public or private goods (Rudra and Haggard, 2005). Not being affected by the size of the government, however, is also their drawback. Relative levels of social spending do not allow to assess whether the increase is merely caused by a decrease in other sectors, while the real amount of resources invested declines (Brown and Hunter, 1999 and 2004). Measuring resources allocated to social welfare as a percentage of national wealth avoid similar risks. Moreover, the priority that governments give social services rather than other sectors is not necessarily more informative than the overall amount of resources directed toward society.

More generally, government spending can tell only part of the story. First, countries differ in the degree of state, local, and federal responsibility in the management of social welfare. Second, our interest goes beyond how different political regimes may influence governments' commitment to promote social welfare per se. On the one hand, it has been argued that their commitment is also shaped by the possibility of intervening in an efficient way, i.e. to produce successful results. On the other, to the extent that similar policies are aimed to solicit citizens' compliance and boost their productivity, what really matters is a change in the quality of life, rather than in a

budget report. Therefore we need to look also at the actual performance of countries characterized by different political regimes in the sectors of education and health care. Although states also differ in the degree of privatization of public services, this only affects their supply. Governments are invariably responsible for the establishment, and the ultimate achievement, of goals.

Data on education outputs refer to primary and secondary enrolment ratios, rates of primary school completion and progression to secondary school. Gross enrolment ratios correspond to the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education of interest (multiplying the result by 100). Enrolment indicators are typically used by practitioners to monitor the capacity of an educational system to meet the needs of a society. I prefer gross to net rates since they include overage students enrolled in each grade because of late entry, which may also indicate the extension of universal education programs to previously excluded sectors of the society.

Primary completion rate is the percentage of students completing the last year of primary school. It is calculated by taking the total number of students in the last grade of primary school regardless of age, minus the number of repeaters in that grade, divided by the total number of children of official graduation age and by multiplying the result by 100. Primary completion rates complement the information drawn from enrolment ratios, because official enrolments may differ even significantly from attendance and high average enrolment ratios do not necessarily correspond to high completion rates.

Progression to secondary school is the number of new entrants to the first grade of secondary school in a given year as a percentage of the number of students enrolled in the final grade of primary school in the previous year. The transition rate from primary to secondary levels of schooling conveys information on the capacity of a country's education system to absorb the pressures for participating in lower secondary education deriving from successful universal primary education programs. Data on health care outputs refer to life expectancy, child mortality, immunization, and access to an improved source of water. Life expectancy at birth indicates the

average number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout his/her life. Estimates of child (under-5), infant (under-1) and neonatal mortality (under-28 days) rates reflect the probability per 1,000 that a newborn baby will die before reaching a given age, if subject to current age-specific mortality rates. Political scientists sometimes prefer child over infant and/or neonatal mortality rates. This indicator is expected to be more informative, because it reflects a longer ‘treatment period’ during which the state has more opportunities to influence outcomes (Ross, 2005). Yet data relative to the other age groups are equally available, and I don’t see any good reason not to make use of them. Because data on the incidence and prevalence of diseases are frequently unavailable, mortality rates for different age groups and measures of life expectancy at birth are important indicators of health status in a country. They also are often used to compare socioeconomic development across countries.

Child immunization against diphtheria, pertussis, tetanus (DPT), and measles measures the percentage of children of an age ranging from 12 to 23 months who received vaccinations before they were twelve month old or at any time before the survey. In most developing countries immunization against these diseases is traditionally included in the basic public health package. Access to an improved water source refers to the percentage of the population using a drinking water source that is protected from outside contamination. Many international organizations consider global access to safe drinking water programs as the primary instrument to contrast extreme poverty, given their direct consequences on health prevention and their indirect benefits deriving from a higher economic productivity.

Where available, education and health output data refer both to the total and to the female population. Far from being a proper measurement of gender gap, female education and health indicators may however provide information about the effectiveness of governments’ programs. Moreover scholars sometimes prefer this latter figures in that they are more sensitive to variations (Lake and Baum, 2003).

### **3.3 Control variables.**

The twenty selected alternative indicators of citizens' wellbeing correspond to the dependent variables of as many regression analyses. While the main independent variable, regime type, is always the same, the specification of each regression model depends on the specific indicator of wellbeing under examination. In principle each model should include as controls all those factors – economic, demographic, political mainly – that are expected to affect the outcome. In practice, the use of econometric techniques as the primary instrument of empirical investigation, as well as the specific design of this research, require the aspiration to completeness of the model to be balanced with observance of at least two other prescriptions: parsimony and comparability.

I seek parsimony by following three main guidelines. I focus primarily on those potential determinants of the outcome of interest that may also stand in some non-random relationship with the main independent variable, in order to limit the risk of biased estimates. Secondly, I identify those variables that may represent proxies of potential alternative explanations of the outcome under examination. At the same time I try to avoid inclusion of redundant variables that present worrisome levels of collinearity with each other, and may lead to imprecise regression coefficients and underrated level of significance. Another particularly important concern is to avoid controlling for intervening variables representing intermediate 'segments' of the causal mechanism theorized to explain how regime type may affect social welfare.

In order to make results from different regressions easily comparable, the variations in the specification of each model is minimized by starting from a base model common to all the dependent variables analyzed. Then, depending on the nature of the dependent variable – either input or output – and sector of reference – either education or health – different control variables are added. The base model includes the main independent variable broken in regime type dummies, a variable for regime consolidation (own measurement) and one for per capita gross domestic product



based on the Penn World Table (v. 7.1). Unless differently specified, all control variables referring to economic and demographic factors come from the World Bank's Development Indicators dataset.

Consistently with the considerations presented in section 2.4.1, the duration of a political regime is included as a proxy of regime consolidation. According with what has been said, I expect the consolidation of a political regime, regardless of its democratic or authoritarian nature, to have a positive effect on welfare programs. I share most of the criticisms that could be raised against the crudeness of choosing regime duration as a proxy of consolidation. To be clear, "regime consolidation and regime durability are not perfect correlates" (Bell, 2011: 629). A first reason of concerns derives from the reliance of the concept of consolidation on expectations, rather than empirical facts (Schedler, 2001: 67). An additional issue has to do with the impossibility to observe the difference between the actual consolidation of a political regime and the mere survival, or sustainability, as a consequence of favourable exogenous circumstances (Svolik, 2008: 154; Bunce, 2003: 179). I am in good company however. When researchers faced the problem of applying the notion of regime consolidation in quantitative empirical analysis, they invariably opted for the same solution: to consider consolidation as a function of time and the duration/age of a regime as an indicator of stability.<sup>18</sup> Specifically, regime duration is measured as the incremental number of consecutive years a given political regime has been in place. The variable, therefore, records neither the survival of a given leader in office – a given political regime ostensibly encompasses the rule of multiple leaders – nor, in the case of authoritarian regimes, the overall length of autocratic spells, i.e. uninterrupted periods during which a country is ruled by some form of authoritarian rule (Geddes et al., forthcoming).

The level of economic wealth of a country is another factor of primary importance when welfare policies are concerned. Several reasons justify the inclusion of this variable in the base model. First, preliminary analyses showed high correlations with

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<sup>18</sup> The only partial exception is the measure of 'stock of democracy' elaborated by Gerring et al. (2005) which however cannot be applied here, given the different research design.

most dependent variables. Second, wealthier citizens are typically more attentive to the quality of public services (Lake and Baum 2001). Third wealthier countries are better equipped to provide them (Brown and Hunter, 2004, Stasavage, 2005), by devoting a larger portion of tax revenues to welfare programs without penalizing other public sectors (Ghobarah, 2004; Mulligan et al., 2004). To be sure, controlling for national income does not necessarily bias the estimates of a regression analysis including regime type. Decades of empirical research failed to demonstrate the existence of a linear relationship between regime type and economic development. Although the literature suggests the presence of a link between economic development and democracy, it is still far from clear whether this association is causal and what direction it takes.

I consider budgetary decision-making in the sectors of public education and health to be influenced mainly by economic factors. A country's economic performance represents a significant constraint on government expenditures on these two sectors. Yet, the effect is rather controversial. On the one hand, one might expect that periods of economic growth correspond to higher state revenues, and thus to a larger budget to invest (Brown and Hunter, 2004). On the other, it should be noted that social spending tends to be countercyclical: to remain low in time of growth and to expand during recession (Rudra and Haggard, 2005). Following Mulligan et al. (2004), in the model for education spending I also control for the share of national value added from agriculture because it might signal the relative importance assigned to education in a country. Following Gandhi (2008), the model for health spending includes also the size of dependent population (under-14 and over-65), under the assumption that the demand for health services is proportional to the relative weight of these two age groups in a society.

I consider education and health outputs to be influenced mainly by demographic factors. With the only exception of mortality rates, all models examining the actual performance of a country in these two sectors control for the percentage of citizens living in urban areas. Although there are strong reasons that justify the inclusion of an indication for the urban-rural divide, the ultimate effect of the geographical

distribution of a country's population is hardly predictable. On the one hand, one might argue that it is relatively easier to provide public services such as education and health care in highly populated and circumscribed urban areas than in sparsely populated rural communities (Lake and Baum, 2001). On the other hand, fast-paced urbanization often leads to the proliferation of peripheral urban slums, where people are exposed to several health risks, where school infrastructures are scarce, and citizens are politically marginalized (Ghobarah, 2004). Following Keefer (2005), moreover, the percentage of population living in urban areas can also be used as a proxy for the level of information that citizens enjoy about the quality of public services and their sensitivity to related issues.

When examining the effect of regime type on the performance of a country's educational system, an additional control for the size of the young population is entered. Although the dependent variables referring to educational outputs are measured as percentages, experts in demography strongly recommend the inclusion of such an indicator. By controlling for the raw size of the school-age population it is possible to assess the extent to which the results achieved by public education programs across different countries are actually driven by institutions, as it has been hypothesized, and not merely by differences in the demographic structure of the society. To the extent that these figures represent the demand for primary and secondary education, the higher the number of school-age residents in a country, the more challenging for governments is to supply it. At the opposite, to provide efficient education services in countries characterized by a small young population is relatively easy, even in the absence of rulers' explicit commitment.

Demographic factors are expected to play a relevant role also in most of the selected indicators of the performance of the public health care sector. When examining life expectancy, a measure of demographic growth is included. Periods of rapid growth of the resident population may put a country's health care system under lot of pressures and have a negative effect on indicators measuring its performance (Frey, 1999).

Considerations similar to those relative to education outputs lead to the inclusion of a control variable for the total size of the population in the analysis of the access to safe drinking water, and of a control for fertility rates in the analysis of child, infant, neonatal mortality, as well as child immunization. Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates. In the literature this indicator has been frequently used to control for the number of newborns (Zweifel and Navia, 2000). The higher the fertility rate, the higher the number of newborns that need to receive neonatal and infant health care, such as vaccinations. And, in situations of inadequate access to these services, the higher the number of children that are at risk of dying. Because the selected indicators of immunization and mortality differ from each other in the exact age group of reference, slightly different version of the indicator are used. In the analysis of neonatal mortality fertility rates are included at their current value (time  $t$ ). In the analysis of child immunizations, under-1 mortality, and under-5 mortality, in turn, the variable is included as two-year (time  $t + \text{time } t-1$ ) and five-year average values respectively.

Finally the specification models referring to neonatal, infant, and child mortality rates include, instead of the size of urban population, a control for the incidence of HIV measuring the number of people (adults and children) who are infected with HIV. As Ross (2005) pointed out, unlike other diseases, AIDS should be considered an exogenous factor with respect to the overall state of a country's health care system. AIDS is not a direct consequence of poverty or lack of health care facilities and therefore it is not under the direct control of a government.

Additional control variables, whose effects has been tested throughout the models described above, are drawn from the literature on the socioeconomic consequences of democratization. Among them: trade openness (Brown and Hunter, 2004; Gandhi, 2008; Rudra and Haggard, 2005); external debt (Rudra and Haggard, 2005); external development assistance (Stasavage, 2005); either an indicator of the relative weigh of oil rents (Brown, 1999; cf. Ross, 2012) or a dummy variable recording oil exporting

countries (Przeworski et al., 2000); ethnic fractionalization (Ghobarah et al., 2004; Stasavage, 2005; Vollmer and Ziegler, 2009) as measured by the index created by Alesina et al. (2003); a binary variable indicating either that the country is a former British colony (Brown, 2004) or that it has British legal origins (Mulligan et al., 2004); an indicator of the involvement of a country in an ongoing conflict (Ghobarah et al., 2004; Vollmer and Ziegler, 2009) taking place also within the country borders. While expectations relative to the effects of most of the above control variables are rather intuitive, special attention should be devoted to a further additional control variable: the ruling party's ideology (Mulligan et al., 2004; Ross, 2005). More precisely, one might expect the presence of a communist ruling party to have a potential confounding effect in the analysis of the different performance between competitive autocracies and non-competitive single-party regimes. Let us remember that neither single-party regimes in general, nor the pure one-party subtype, are defined on the basis of the ideology of the ruling party. Yet we cannot overlook that while single-party regimes can be characterized by different ideologies, if any, communist dictatorships are invariably characterized by the structure of power typical of the single-party regime type. And because communist dictatorships are also characterized by a centrally planned economy and by an ideological commitment to improve the condition of the less well-off, a study on the consequences of different political regimes on the public sector should disentangle the two effects. The risk is to fail to seize the differences between competitive autocracies and single-party regimes because the socioeconomic performance of the latter is positively influenced by an exogenous factor such as state socialism. The indicator is drawn from Cheibub et al.' dataset (2010) and records the presence of an incumbent ruler which is the Communist Party leader.

### **3.4 Statistical model.**

During the past decade, time-series cross-sectional (TSCS) analysis has become one of the most frequently used techniques in empirical research on democratization.

Many large panel datasets covering about the entirety of world countries, the whole post World War II period, and containing a number of political, social, and economic indicators, are now made openly available to researchers in comparative politics.

Their use in TSCS analysis has brought several benefits in terms of augmented variability and robustness of findings. These advantages outnumber the challenges that TSCS analysis also raises to some of the most fundamental assumptions of the ordinary least square regression model, notably homoskedasticity and no-autocorrelation of the residuals.<sup>19</sup> These advantages, however, come at the cost of paying more attention to the consequences of working in a TSCS environment. This section focuses on one issue in particular, namely the modelling and interpretation of dynamics involved in the relationships under examination.

#### **3.4.1 Main alternative dynamic specifications.**

A relevant limitation of simple cross-sectional analysis derives from its ‘timeless’ nature. TSCS analysis allows researchers to overcome this obstacle. Yet this requires time to be treated as something more than a noise, a nuisance to be merely swept away. If researchers wished to deepen the dynamic dimension of the phenomenon they are interested in, they should model it. This inevitably entails important decisions about how to do it, with obvious consequences on the interpretation of the analysis’ findings. In a recent article, Beck and Katz (2011) put some order in the main existing alternatives and clarify their substantive implications. Each option corresponds to specific assumptions regarding how the impact of a given independent variable on the outcome under examination is distributed over time.

The easiest way to incorporate dynamics is represented by the static model:

$$Y_{i,t} = B_1(X_{i,t}) + E_{i,t}$$

where E refers to the error term including all the variables that the model omits. According to this model any change in X (or in the error term) is felt instantaneously; and as much instantaneously its impact dissipates: there are no delayed effects. Of

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<sup>19</sup> For a more complete review of the benefits and challenges associated with longitudinal/panel data see Baltagi, 2005: 4).

course, for most political phenomena this assumption is implausible and researchers should stick with this model only when they have good reasons to do it.

Slightly more complex ways to handle dynamics are the Serially Correlated Error model (SCE), the Lagged Dependent Variable model (LDV) – two special cases of the more general Autoregressive Distributed Lag (ADL) model – and the Finite Distributed Lag (FDL) model. As we may note, in the SCE model:

$$(SCE) \quad Y_{i,t} = B_1(X_{i,t}) + E_{i,t}$$

where  $E_{i,t} = V_{i,t} + E_{i,t-1}$ , the behaviour of  $X$  is quite similar to the static model. Contrary to the previous model, however, the assumption of no serial correlation is relaxed and the error term is expected to follow a first-order autoregressive process, rather than being independent and identically distributed. Therefore, while the  $X$  has an immediate and only immediate impact on  $Y$ , all the omitted variables that form the error term have a progressively declining effect. Also in this case, the representation of dynamics is rather unusual and a researcher should have good reasons to justify the use of this model.

Much more realistic are the dynamics described by the three remaining alternatives. More precisely, both the FDL and ADL models:

$$(FDL) \quad Y_{i,t} = B_1(X_{i,t}) + B_2(X_{i,t-1}) + E_{i,t}$$

$$(ADL) \quad Y_{i,t} = B_1(X_{i,t}) + B_2(Y_{i,t-1}) + B_3(X_{i,t-1}) + E_{i,t}$$

allow for the impact of  $X$  to set over at least two consecutive time periods, rather than immediately. Yet, while in the FDL model this impact is constrained to dissipate completely within the same space of time, the ADL lets this effect to decay following a geometric progression dictated by the coefficient of the lagged dependent variable.

The main difference between this latter model and the LDV:

$$(LDV) \quad Y_{i,t} = B_1(X_{i,t}) + B_2(Y_{i,t-1}) + E_{i,t}$$

is that the decline of the effect of  $X$ , even if it never completely dissipates, is quicker.

### 3.4.2 Application.

Beck and Katz recommend the choice of a model's dynamic specification to be driven by theory. Yet the theoretical argument underlying the two main hypotheses formulated in previous chapter tell little about the dynamic dimension that governs the impact of a political regime on citizens' wellbeing.

A substantive interpretation of the different approaches to model dynamics, however, can easily rule out the first three alternatives. It just seems too unrealistic that the full effect of a political regime on social welfare is entirely instantaneous or nearly so. With reference to our research question, it would mean to expect that, if a given country in time  $t$  and  $t+1$  were ruled by two different regimes, it would be possible to observe between time  $t$  and  $t+1$  a sizeable change in one of our wellbeing indicators, say primary completion rates. The constraints that the institutions of a political regime impose to a government's policy making in the public sector are more likely to disclose over time. Likewise, reforms in the education and health care sectors need time to have an effect. With reference to previous example, even if the government that takes office in time  $t+1$  (i.e. under a new regime) launched an important welfare program, its effects are likely to be fully observed after a while.<sup>20</sup> Accordingly, even in the absence of specific expectations concerning the prevalence of political regimes' long- rather than short-term effects, it is quite clear that we are dealing with variables and processes whose interaction and behaviour can be better observed in the long run.

We are thus left with two options, the ADL and the LDV models. In the absence of strong theoretical prescriptions, their differences seem to be negligible. Yet the ADL represents the general model from which the LDV is derived. At this rather explorative stage of the analysis, the former has been given priority (de Boef and Keele, 2008: 199) and applied in the analysis of the first two hypotheses. Then all the

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<sup>20</sup> To be sure, this has nothing to do with the discussion in chapter 2 on the effects of regime consolidation that led to the formulation of hp.3 and the inclusion of a regime duration variable as a control in all model specifications. Here the point is to determine whether being ruled by a given regime in time  $t$  has an effect that is immediate, i.e. observable already and only in time  $t$ , or an effect that discloses over future time periods and, if it is the case, how much time it takes.



analyses have been replicated by using the Lagged Dependent Variable model. In most cases previous results have been confirmed, and a comparison of the two alternative models based on either the Bayesian or Akaike's information criteria (BIC and AIC) has failed to determine the best performance.

*A few 'technical' problems...*

Regardless of the model applied, however, many regression analyses have produced very high R-square values (larger than .90). Suspiciously high R-square values often indicate the presence of a "unit root" in the dependent variable, i.e. non-stationarity. A time series is stationary if it follows a mean-reverting process: the mean is the best long-run forecast, or the equilibrium. Conversely a time series is non-stationary, or integrated, if it is characterized by a permanent memory. Past shocks cumulate, and the series tends to follow a 'random walk', to wander far from rather than to revert to its mean value. Non-stationary processes do not have a long-term equilibrium and the best prediction of the series in a future point in time is the current value. Integrated time series are also said to contain a "unit root" because, if we regress them on their lagged value, the coefficient of the latter term would be 1. In other words, the current value of an integrated series is highly correlated with its past values. A more accurate instrument to detect non-stationarity in econometric analysis is the augmented Dickey-Fuller test. Yet, unlike many economic time series, political economy panel datasets typically consist of annual observations for relatively short periods of time. This hampers our ability to establish beyond any doubt whether a series is actually a random walk or it just needs more time (i.e. a longer period of observation) to revert to its mean. In many cases we have nearly-integrated series characterized by long yet non-permanent memory, where there is "a root close to but not quite unity" (de Boef, 2000: 81).

Most of the regression analyses that have been run have produced coefficients on the lagged dependent variable really close to 1. Additional evidence of the presence of nearly (or fully) integrated time series may be derived from a simple diagnostic. Previous regressions have been replicated by adding right-hand side elements

incrementally. The procedure has clearly demonstrated that R-square scores peak when the lagged dependent variable is included. The value of the dependent variable in time  $t-1$  explains, or predicts, most of its current value. From a more substantive perspective, also the meaning of these indicators, the sample of countries observed, as well as the period of observation suggest similar conclusions. First, it is perfectly plausible that the effects of reforms in the public education and health care sectors are long-remembered, sticky, or characterized by some persistence. Second, we are examining the socioeconomic performance of developing countries throughout the last three decades. Although most selected wellbeing's indicators are by definition bounded between 0 and 100, so that their values cannot grow infinitely, it sounds just normal to observe a progressive, random walk-like, increase during the past decades. In the presence of similar signs of inertia, modelling dynamics with a lagged dependent variable could be highly misleading. Working with near-integrated time series dramatically increases the likelihood of 'false negatives', i.e. failure to reject a false null hypothesis. The inclusion of a lagged dependent variable in the right-hand side of the regression risks to absorb, and thus obscure, the predictive potential of other important regressors. The easiest solution would be to induce stationarity artificially by re-parametrizing both the dependent and independent variables in terms of changes. Unfortunately, in the present analysis the First Difference model would perform poorly. It would throw out all the relevant information about the long-term dynamics occurring in the relationships under examination. In terms of interpretation that would be quite constrictive. We would focus exclusively on the short-term effects on social welfare of short-term changes in the main independent variable, i.e. regime changes. Yet the theory exposed in the second chapter focuses on regime functioning rather than transitions. Nothing suggests the specific relevance of the latter, nor their prevalence.

*...a solution.*

A more efficient way to handle both long and short term dynamics in the presence of near integrated series is to apply a simplified version of the Error Correction model

(EC). Starting from a structure similar to the First Difference model, this method requires the inclusion of an error correction mechanism to take into accounts also long-term dynamics. As regards the dynamic specification of the model, it is perfectly equivalent to the Autoregressive Distributed Lag model. Formally, the EC model regresses the change (i.e. the first difference) in the dependent variable on its lagged level, and the lagged levels and changes of all the independent variables included in model specification.

As Franzese pointed out, this approach produces statistically valid estimates, provided that the coefficient on the lagged dependent variable is significant and negative (Franzese, 2002: 82). If on the contrary the estimated coefficient is zero, it means that (near-) integration was erroneously remarked. With respect to its more complex (and famous) ‘two-stage’ counterpart, moreover, this EC model maintains the same asymptotical properties, while it can be applied also in the absence of co-integration, thus avoiding ex ante decisions about which variables are co-integrated and in what order of co-integration they stand.<sup>21</sup>

As it has already been mentioned, however, the most relevant benefits of the EC model derive from its way to treat dynamics and its consequences on the interpretation of the coefficients of a regression analysis. The EC model allows for a more sensible treatment of short- and long- term dynamics. Researchers enjoy the possibility to treat them simultaneously – i.e. in the same model – and separately – i.e. without lumping them together – at once. All this improves our ability to link theory and empirical quantitative research.

First, since the EC model structure is asymmetric, with a clear distinction between left- (dependent) and right- hand side (independent) variables, it indirectly reduces the risk of reverse causality (Beck, 1991: 70). Y responds to shocks produced by X, and there’s no room to interpret the regression’s coefficients the other way around. Second, whenever theory suggests that one or more independent variables might have both a short-term, or transitory, effect and a long-term ‘equilibrium’ effect, the

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<sup>21</sup> Two series are co-integrated if they are both non-stationary and their respective random walks are in an equilibrium relationship.

EC model allows for a neater distinction and estimate. Third, whenever researchers do not have clear expectations about the short- or long- term nature of the dynamics involved in the political phenomenon under examination, as it is here the case, but are willing to investigate these differences, the EC model lets data speak. In so doing it also gives impetus to a refinement of the initial theoretical framework and, more generally, encourages the development of theories that explicitly address the dynamic dimension of political processes.

In order to make the most of it, the functioning and interpretation of EC model deserve careful scrutiny. The EC model assumes that X and Y are in an equilibrium relationship. Changes in the independent variable have short-run effects that temporarily break the equilibrium. In the long run, however, Y will restore the equilibrium by adjusting to X's new level. Therefore, the 'level' of the independent variable has an additional long-run impact on the 'level' of the dependent variable.

The EC model is formally structured as follows:

$$(EC) \quad \Delta Y_{i,t} = B_1(\Delta X_{i,t}) + B_2( Y_{i,t-1} - B_3(X_{i,t-1}) ) + E_{i,t}$$

The coefficient on the first-differenced variable,  $B_1$ , refers to the short-run, transitory effect of a 1-unit change in X on (a change in) Y. It describes the nature and magnitude of the instantaneous relationship between the independent and the dependent variables. The ratio  $-( B_3 / B_2 )$ , in turn, represents the 'long-term multiplier'. It accounts for the total long-run effect that X has on Y, distributed over future time periods. The long-term multiplier estimates the long-term effect that a change in X has on Y. It represents the extent to which the long-term equilibrium between X and Y has been deviated by a change in X. It represents the expected total change that Y will experience over time to converge to a new equilibrium relationship with X. This long-term effect is distributed over future time periods according to a rate dictated by the coefficient on the lagged level of the dependent variable,  $B_2$  (in absolute value). This is the 'error correction' rate that regulates the working of the long-term equilibrium relationship between X and Y. More precisely, it represents the speed at which the above relationship returns to equilibrium, after the shock caused by X. In each subsequent period, Y will adjust a portion of the

disequilibrium equal to  $B_2$ . The smaller  $B_2$ , the larger  $(1 - B_2)$ , the slower the pace of adjustment and the more persistent the effect over time. An example, drawn from De Boef and Keele (2008), might help.

$$\text{E.g.: } B_1 = 0.5 ; B_2 = -0.5 ; B_3 = 1 ; - ( B_3 / B_2 ) = 2$$

The immediate effect of a 1-unit increase in  $X$  on  $Y$  is 0.5 ( $B_1$ ). Yet the increase in  $X$  disturbs the equilibrium between  $X$  and  $Y$ , causing  $Y$  to be too low. As a result,  $Y$  will increase an additional 2 points over future time periods, at a rate dictated by  $|B_2|$ , as follows:

$$\text{in time } T_1, Y \text{ increases } 1 = 2 * 0.5$$

$$\text{in time } T_2, Y \text{ increases } 0.5 = (2 - 1) * 0.5$$

$$\text{in time } T_3, Y \text{ increases } 0.25 = (2 - 1 - 0.5) * 0.5$$

...and so forth until  $Y$  has increased 2 points cumulatively.

### 3.5 Analysis.

Previous section showed the ‘technical’ advantages of the EC model over the main existing alternative options, as well as its potential in terms of interpretation. These are the reasons that led to promotion of the EC model as the main instrument of investigation. The present section delves a bit deeper into the analysis of the four hypotheses, and illustrates how the test has been performed.

Hp1. Competitive autocracies provide less social welfare, and in a less efficient way, than democratic regimes.

Hp2. Competitive autocracies provide more social welfare, and in a more efficient way, than other non-democratic regimes.

Hp3. Competitive autocracies become worse providers of social welfare as they consolidate.

Hp4. The socioeconomic consequences of competitive authoritarianism tend to lose significance outside Africa.

### 3.5.1 Hypotheses.

For each indicator of citizens' wellbeing, the four hypotheses are tested using the same model specification (see section 3.3). As it has already been mentioned, the analysis focuses on developing countries. Cases of non-independent authority, moreover, are kept out. This is an additional constraint dictated by the conceptualization of the notion of political regime (see chapter 1).

Hypotheses 1 and 2 are tested jointly. Yet the analysis of the second hypothesis is carried out at three different levels of generality. At the more general level, the analysis includes only two regime categories (entered in the regression model as dummy variables), democracy and competitive autocracy, while the category referring to full authoritarian regimes is the (omitted) reference category. Therefore, the estimated coefficient of each dummy refers to the difference of being ruled by the corresponding regime, rather than by a full autocracy. Then the significance of the difference between the coefficients of the democracy and competitive autocracy dummies is tested by means of a Wald test. The corresponding estimated equation is:

$$\Delta Y_{i,t} = B_1(Y_{i,t-1}) + B_2(\Delta CA_{i,t}) + B_3(CA_{i,t-1}) + B_4(\Delta Dem_{i,t}) + B_5(Dem_{i,t-1}) \\ + B_6(\Delta X_{S_{i,t}}) + B_7(X_{S_{i,t-1}}) + E_{i,t}$$

where Xs indicates all the control variables included in each specification.

At a lower level of generality, without compromising the properties of mutual exclusivity and of joint exhaustiveness of the typology, the non-competitive autocracy category is replaced by three subtypes of full authoritarianism – military, hereditary, single-party – and a residual category ‘other regimes’. At this level, the omitted reference category is ‘military regime’. The corresponding estimated equation is:

$$\Delta Y_{i,t} = B_1(Y_{i,t-1}) + B_2(\Delta CA_{i,t}) + B_3(CA_{i,t-1}) + B_4(\Delta Dem_{i,t}) + B_5(Dem_{i,t-1}) \\ + B_6(\Delta Single-p_{i,t}) + B_7(Single-p_{i,t-1}) + B_8(\Delta Hereditary_{i,t}) + B_9(Hereditary_{i,t-1}) \\ + B_{10}(\Delta Other_{i,t}) + B_{11}(Other_{i,t-1}) + B_{11}(\Delta X_{S_{i,t}}) + B_{12}(X_{S_{i,t-1}}) + E_{i,t}$$

At the most specific level of analysis, finally, the single-party category is divided and replaced by a pure one-party dummy and another dummy including all other single-party regimes. The corresponding estimated equation is:

$$\begin{aligned} \Delta Y_{i,t} = & B_1(Y_{i,t-1}) + B_2(\Delta CA_{i,t}) + B_3(CA_{i,t-1}) + B_4(\Delta Dem_{i,t}) + B_5(Dem_{i,t-1}) \\ & + B_6(\Delta One-p_{i,t}) + B_7(One-p_{i,t-1}) + B_8(\Delta Other-single_{i,t}) + B_9(Other-single_{i,t-1}) \\ & + B_{10}(\Delta Hereditary_{i,t}) + B_{11}(Hereditary_{i,t-1}) + B_{12}(\Delta Other_{i,t}) + B_{13}(Other_{i,t-1}) \\ & + B_{11}(\Delta X_{S_{i,t}}) + B_{12}(X_{S_{i,t-1}}) + E_{i,t} \end{aligned}$$

Hypotheses 3 and 4 are assessed only at the more general level of analysis. As regards the third hypothesis, the consequences of the consolidation of a competitive autocracy on a country's socioeconomic performance are tested by including in the regression specification an interaction term between the competitive autocracy dummy and the regime duration indicator. The hypothesis refers only to this kind of interaction, therefore there is no need to include similar interaction terms for other regime types. Because the hypothesis has to do with only long-terms dynamics, moreover, the interaction is applied only to the levels of the two variables (i.e. the lagged terms). The corresponding estimated equation is:

$$\begin{aligned} \Delta Y_{i,t} = & B_1(Y_{i,t-1}) + B_2(\Delta CA_{i,t}) + B_3(CA_{i,t-1}) + B_4(\Delta Dem_{i,t}) + B_5(Dem_{i,t-1}) \\ & + B_6(CA_{i,t-1}) * (Dem_{i,t-1}) + B_7(\Delta X_{S_{i,t}}) + B_8(X_{S_{i,t-1}}) + E_{i,t} \end{aligned}$$

Based on the regression estimates, the ultimate assessment of the hypothesis relies on the graphical analysis of the marginal effects (on the outcome under examination) of being ruled by a competitive autocracy as regime duration increases. The analysis follows the strategy recommended by Berry et al. (2012).

The fourth hypothesis concerning the presence of region-specific factors, finally, is tested by replicating the analysis relative to the second hypothesis on different subsamples of the initial one. More precisely, the analysis is replicated on a sample of 50 African countries, and its results compared with those produced by replicating the same analysis on a sample of 82 non-African developing countries, 22 post-communist countries, 21 Asian countries, and 23 Latin American countries. The

analysis of hypothesis 4 focuses only on six representative indicators: public spending (as a % of GDP) on education and health, primary school completion rate, secondary school female enrolment, life expectancy, under-5 mortality rate. The ultimate assessment of the hypothesis is driven by three criteria: (1) whether a difference in the socioeconomic performance of competitive and non-competitive autocracies exists regardless of the sample examined; if yes, (2) how robust these results are, and (3) how large (in absolute value) the effects estimated on different samples are .

### **3.5.2 Diagnostics and robustness checks.**

Diagnostic analyses have been performed on all the regressions run. In virtually all cases, violations of the assumption of the homoskedasticity of the conditional distribution of the errors have been detected. In the presence of heteroskedasticity, a viable strategy is to compute the standard errors by means of a Huber/White, or ‘sandwich’, estimator of variance that is robust to violations of the assumption of constant variance of the errors. This solution must be preferred to the ‘panel corrected standard errors’ (PCSEs) recommended by Beck and Katz (1995), for a simple and practical reason. According to the two authors, PCSEs outperform existing alternatives in that they allow to deal with both ordinary, panel-level heteroskedasticity and contemporaneous correlation at once. Yet my sample of analysis does not represent the ideal environment for the application of this technique. Although the time coverage is similar to the one used in most of the experiments run by Beck and Katz in order to test the performance of their PCSEs model (1995: 635), the number of units that are included in the analysis of the hypotheses 1-3 is much larger.

In most cases, the transformation of the dependent variable in terms of a change from time  $t$  and time  $t+1$  has proved sufficient to eliminate the risk of serially correlated residuals. Whenever remaining serial correlation has been found, however, it has been handled by including in the specification of the regression model as many lags



of the first-differenced dependent variable as indicated by a Lagrange Multiplier test (usually one lag has proved sufficient).

The strength of the analysis' main findings, i.e. those relative to the first two hypotheses, is assessed by means of several robustness checks. A relevant issue in a cross-country analysis where a large number of units (countries) are pooled together is the risk of overlooking important sources of heterogeneity whose omission may bias the regression estimates. The peculiar structure of TSCS data, namely the observation of the same units over time, may partly alleviate this risk. Generally speaking, if we can observe the same unit at different points in time, we can indirectly control for all the omitted, hardly observable and time-invariant factors. Therefore, the main model of analysis also includes country-fixed effects to account for all those unobserved characteristics – geographical, cultural, etc. – that make countries different from each other, but that do not vary over time.

Although in all cases the appropriateness of the fixed effects model (FE) has been confirmed by a Hausman test – i.e. by comparing the performance of fixed versus random effects – and by a Wald test of joint significance of the country-fixed effects, the use of fixed effects can be criticized because of its a-theoretical justification. As a matter of fact, when we include country-fixed effects we are merely admitting our ignorance. Country-effects, moreover, may absorb too much, and underestimate the importance of some of the variables included in the model. Accordingly, as an alternative, each regression analysis is replicated by using simple Ordinary Least Square (OLS), thus omitting country-fixed effects.

This solution offers an additional advantage over the FE model. A severe limitation of this model is the impossibility to correctly evaluate the effect of other specific factors that are not country-specific but nonetheless are time-invariant or rarely changing (a variable is rarely changing if its within standard deviation is close to 0). By omitting country-fixed effects, therefore, it is possible to control also for the role played by other more specific factors. This is the case of many of the additional control variables that have been selected in order to assess the robustness of the

findings to alternative explanations. The within standard deviation of the indicator for the presence of a communist government, for instance, is 0.09.

Another important issue has to do with the presence of time-specific effects. In a not really dissimilar way from country-specific factors, time-fixed effects vary from a period of observation to another but are constant across the same cross-section of countries. Likewise their omission may represent an important source of endogeneity and bias a regression's estimates. Contrary to the FE model, however, in the literature the inclusion of time-fixed effects is less of a standard practice. Therefore, before using them, I'd rather prefer to find some good reason to do it. If we go back to figure 3 in chapter 1, we may note that the end of the Cold War represented the crossroad for the diffusion of the phenomenon of competitive authoritarianism. Until the end of the 1980s, competitive autocracies were a largely negligible fraction of non-democratic regimes, while since the early 1990s their number have been growing exponentially so as to invert the ratio. Yet the 1980s also represented a period particularly unfruitful for the socioeconomic emancipation of developing countries. With respect to the historical coverage of the present analysis, in other words, we have a decade during which the development world was dominated by full authoritarian forms of political regime and living conditions deteriorated, and two subsequent decades during which both these trend got inverted. The risk of not accounting for the historical turning point represented by the end of the Cold War is to overlook the influence of the "decade lost for development"<sup>22</sup> in the analysis of hypothesis 2. Accordingly, as a third check, each regression is also replicated by including a dummy variable signalling if an observation refers to the post Cold War period.

The comparison of the results across the three alternative model specifications – country-FE, no-FE, time-FE – represents the main test of the strength of the analysis' findings. A fourth robustness checks has been performed by replicating all the regression analyses including advanced economies. The aim of this additional test

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<sup>22</sup> UN Declaration on International Economic Co-operation; Resolution A/RES/S-18/3 of the General Assembly, 11<sup>th</sup> plenary meeting, 1 May 1990: paragraph 7.

was to strengthen the conclusions relative the first hypothesis, i.e. the different socioeconomic performance of democratic and competitive authoritarian regimes. Yet, as it will be clear later on, the test has proved largely meaningless.

### **3.6 A note on tables.**

The empirical analysis produced a large amount of findings that have been organized in a few tables. Tables that are included in the text, in particular, refer to and summarize the information reported in other tables that are included in Appendix 3.B (see below for details). Tables that are included in the text are marked by progressive numbers; tables that are included in the appendix and are marked by the prefix 3.B. This section is just meant to provide the reader with the necessary guidance in the interpretation of their contents, thus making easier to follow the presentation of findings in the next sections and to check for the correctness of my conclusions.<sup>23</sup>

All the regression outputs are reported in Appendix 3.D at the end of this chapter. For each independent variable, six regressions are reported: three country-FE models referring to the three different levels of analysis, one no-FE model and one time-FE model both referring to the second level of analysis; one no-FE model including the interaction term and referring to the first level of analysis. For those independent variables whose data are not available for the 1980s (see Appendix 3.A), the time-FE model has not been performed for obvious reasons. From an interpretational point of view, however, these regression outputs tell us relatively little. First, they do not report the results of the Wald tests performed to ascertain the significance of the difference between the coefficients associated to different regime categories (see section 3.5.1). Second, we have seen, when using the EC model the estimation of short- and long-term effects requires some additional calculus (see section 3.4.2).

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<sup>23</sup> I realize that the chosen presentation strategy implied the building of a sometimes complicated, Chinese-box-like, structure. After several attempts, however, it proved the most efficient way to balance clarity and accuracy fairly. I hope this section will prove as enlightening as it is meant to be.

<u>Hypothesis</u>	<u>Appendix</u>	<u>Text</u>
Hp. 1 , 2	Tables 3.B. 1-5	Tables 1-3
Hp. 3	Table 3.B. 6	Table 4
Hp. 4	Tables 3.B. 7-9	Table 5 , 6

*Tables in the appendix.*

Tables 3.B.1-5 refer to the first and second hypotheses. Tables 3.B.1-4 report, for each indicator of citizens' wellbeing, the findings produced by the three main models: country-FE; no-FE; time-FE. In the left-hand side of each table, the reported scores refer to the estimated effect – either short- or long-term, depending on the table – of being ruled by different political regimes on the outcome under examination. The first two columns refer to the first level of analysis, the reported scores thus indicate the effect of being either a democratic (Dem) or a competitive authoritarian (CA) regime rather than a full autocratic regime (Aut). Similarly, the next four columns refer to the second and third level of analysis and report the estimated effect of being either a competitive autocracy (CA), a single-party (Sin), a pure one-party (One), or a hereditary (Her) regime rather than being ruled by a military junta (Mil).

The right-hand side of each table reports the results of the Wald tests performed. Asterisks corresponds the standard three levels of significance – p-values < 0.1, 0.05, 0.01 – relative to the results of the Wald tests performed. Thus they refer to the difference between the coefficients associated to the competitive autocracy category and to the other regime categories – CA vs. Dem, Aut, Mil, Sin, One, Her. Yes and No refer to the validation of hypotheses 1 and 2. In the CA vs. Dem column, Yes means that democratic regimes significantly outperform competitive autocracies. Put another way, the difference between a democracy and a full autocracy is statistically larger than the difference between a competitive and a full autocracy, if any. In the remaining columns, Yes means that competitive autocracies outperform other non-democratic regimes in general, and specific subtypes of the latter in particular. The underlying logic is always the same. No, therefore, invariably indicates either a non-

significant difference, or a significant difference but opposite in sign to expectations (as indicated by the sign minus). When a letter “c” is reported next to a Yes, it indicates that the difference is significant only when the relationship is insulated from the influence of a communist ruling party. Tables 3.B.3-4 also display a column reporting the estimates of the long-term error correction mechanism (see section 3.4.2).

Table 3.B.5 summarizes the results of tables 3.B.1-4. For each independent variable, the first row reports the latter’s conclusions: Yes and No have just the same meaning as in tables 3.B.1-4. Asterisks, on the contrary, do not refer to formal levels of significance, but to the robustness of findings across the different models – country-FE, no-FE, time-FE. Three asterisks indicate that a significant difference ( $p < 0.1$ ) has been found in all the three models, and so forth. The second and third rows, summarize the differences across these models. The second row specifies whether the findings refer to either short-, mainly (~) short-, long-, mainly long-term effects, or both. When results are only partly robust (less than three asterisks), finally, the third row specifies whether they are (mainly) confirmed either by the country-FE or the no-FE model.

Table 3.B.6 refers to the third hypothesis. The first and second columns report the significance of the interaction term and its sign. The third column reports the information provided by the graphs relative to the marginal effects analysis, available in Appendix 3.C. More precisely, the column specifies the range of values, in years, of the regime duration variable for which the marginal effect of being a competitive autocracy on citizens’ wellbeing is significantly different from zero.

Tables 3.B.7-9, finally, refer to the fourth hypothesis. Tables 3.B.7-8 report, for the replication analyses relative to the five regional sub-samples (Africa, the rest of the developing world, Asia, Latin America, and the post-communist bloc), exactly the same kind of information reported in tables 3.B.1-4. Table 3.B.9, in turn, follows the same logic as table 3.B.5.

*Tables in the text.*

Tables 1-3 refer to the first and second hypothesis and summarize all the information contained in the appendix's tables 3.B.1-5. Let me start from table 2. For each dependent variable, it either accepts (Yes) or rejects (No) the two hypotheses. Specifically, as regards hypothesis 1, conclusions (and asterisks) are the same as in table 3.B.5. The necessary and sufficient condition for accepting the second hypothesis, in turn, is that competitive autocracies outperform full authoritarian regimes, as indicated by a Yes in the CA vs. Aut column of table 3.B.5. Here, however, asterisks refer to the 'breadth' of conclusions, with respect to more specific subtypes of non-democracy. Three asterisks indicate that competitive autocracies outperform any subtype of full dictatorship (Mil, Sin, One, Her); two asterisks signal the presence of no more than two exceptions; and so forth.

Tables 1 summarizes the conclusions reported in Table 2 by sector. In the left side of the table, a hypothesis about spending is marked Yes if it is accepted at least one time (out of two), while asterisks indicate how many. A hypothesis about outputs, in turn, is marked Yes if it is accepted at least three time (out of eight), while asterisks indicate how many. Three asterisks signal no more than one exception, two asterisks indicate no more than three rejections. In the right side of the table, previous conclusions are further summarized, based on the simple distinction between spending and outputs. A hypothesis is accepted if it is marked Yes at least one time in the left side of the table. Three asterisks indicate two Yes, both with two or more asterisks, two asterisks indicate two Yes, one asterisks is assigned when only in one occasion (either in the education or in the health care sector) the hypothesis is accepted.

Table 3 reports exactly the same information as table 1 and applies the same criteria of evaluation in the comparison of competitive autocracies with specific subtypes of full dictatorship.

Table 4 refers to the third hypothesis (regime consolidation) and summarizes, by dependent variable and sector, the findings reported in table 3.B.6 in the appendix. The hypothesis is (partly) accepted, as signalled by a Yes with a single asterisk, if

two conditions hold true: (1) the sign of the interaction term is negative and (2) the marginal effects analysis shows that, for at least some range of values, the inversely proportional relationship between the marginal effect of being a competitive autocracy and regime consolidation is significant. Whenever also the estimated coefficient of the interaction term in the regression analysis is significant, the hypothesis is fully accepted, as indicated by three asterisks.

Tables 5 and 6, finally, refer to the fourth hypothesis (regional effects). Similarly to tables 1 and 2 – i.e. by following the same logic – these tables summarize the results relative to the comparison between the socioeconomic performance of competitive and full autocracies by region, dependent variable and sector. Table 6 is more specific than table 5, therefore I start from the former. Asterisks in table 6 are assigned based on table 3.B.9 in the appendix. In table 5, for each sector, asterisks are assigned based on the number of Yes reported in table 6. Three asterisks are assigned only if the results in table 6 are fairly robust.

## 7. Findings: Hypotheses 1 and 2.

According to the analysis' results, both hypothesis 1 and 2 are accepted. Overall, empirical evidence drawn from the comparison between competitive autocracies, democratic and full authoritarian regimes confirms that the expectations based on the theoretical argument developed in the previous chapter are well grounded.

**Table 1. Hp. 1,2 (by sector).**

DV	HP1	HP2	HP1	HP2
Education spending	YES**	NO	YES***	YES*
Health spending	YES**	YES**		
Education outputs	NO	YES***	YES*	YES***
Health outputs	YES*	YES**		

With reference to the second part of table 1, however, we may note a curious form of symmetry. Whenever governments ruling in competitive authoritarian regimes are found to be less committed to citizens' wellbeing than democratic governments, the empirical evidence in support of the second hypothesis is weak. It just seems that competitive autocracies do as poorly as any other non-democratic regime. When governments of competitive autocracies are found to be more committed to citizens' wellbeing than the ruling elites of full dictatorships, on the contrary, there is little evidence of a 'democratic advantage'. In most of these latter cases, competitive autocracies appear to do as good as democracies. Interestingly, the support to the first hypothesis is stronger in the analysis of public spending, while the strongest conclusions associated with hypothesis 2 invariably derive from the analysis of governments' actual performance.

From a substantive point of view, therefore, empirical findings suggest two rather surprising considerations. First, competitive authoritarian governments seem to be able to offer citizens of developing countries better living conditions than other non-democratic regimes, indeed not very dissimilar conditions from those enjoyed by citizens of democratic countries. Second, they also seem to be able to achieve these results by investing in the welfare sector, notably education and health care, less state revenues than their democratically elected counterparts. Before advancing similar conclusions, however, a deeper scrutiny of all the analyses performed for both the hypotheses is recommended.

### **3.7.1 CA vs. Democracy.**

Starting from the first hypothesis, the left-hand side of table 1 clarifies that while the hypothesis receives equal and fairly robust empirical support in the analysis of spending in both the sectors under examination, only the analysis of the health sector's outputs provides some supporting evidence. Table 2 goes into the details of each analysis and sheds further light on these divergences.



**Table 2. Hp. 1,2 (by indicator).**

DV (Education)	HP1	HP2	DV (Health)	HP1	HP2
Educ. spending (% gdp)	YES**	NO	Health spending (% gdp)	YES*	YES**
Educ. spending (% gov.)	YES*	NO	Health spending (% gov.)	YES*	YES*
1ary sch. compl. rate	NO	YES**	Life expectancy	NO	YES***
1ary sch. compl. rate (f.)	NO	YES**	Life expectancy (f.)	NO	YES***
Progr. to 2ary sch.	NO	YES***	Child Mortality (<5)	NO	YES*
Progr. to 2ary sch. (f.)	NO	YES**	Infant mortality (<1)	NO	YES**
Enrolment 1ary sch.	NO	YES**	Neonatal mortality	NO	YES**
Enrolment 1ary sch. (f.)	NO	YES**	Safe drinking water	YES*	YES**
Enrolment 2ary sch.	NO	YES***	Immunization measles	YES**	NO
Enrolment 2ary sch. (f.)	NO	YES***	Immunization DPT	YES*	NO

Democratic regimes are found to invest in education and health care more than competitive autocracies both as a percentage of GDP and as a fraction of the total budget available. The analysis of education spending as a percentage of national income shows that the difference between democratic and competitive authoritarian regimes is significant both in the long and the short-term. With respect to full dictatorships, a transition to democracy has an immediate and positive impact on a government's investments, equal to 0.2 points, and a total long-run effect equal 0.6 points. The institutionalization of a competitive autocracy, on the contrary, makes no difference at all. In all other analyses – education spending as a percentage of government budget, and health spending in general – the difference is evident only in the long run. While the difference between competitive and full autocracies is always negligible, democratic governments invest in health care 2.1 points of GDP more than non-competitive regimes. With respect to other public sectors, in turn, they invest in the sectors of education and health up to 4 points more of their budget in each of them. Finally, while in the analysis of education expenditures results are

significant only when country-fixed effects are also included, their inclusion downplays the differences found in the sector of health.

The results of the comparison between the actual socioeconomic performance of democratic and competitive authoritarian regimes are well captured by the first column of table 2. In the sector of education, all the analyses performed on the eight selected indicators rejects the hypothesis that, with respect to other authoritarian regimes, democratic governments promote social welfare in a more efficient way than governments of competitive autocracies. In virtually all cases, the difference in the performance of the two regime types is negligible. The only exception is the analysis of primary school enrolment (both total and female), where some evidence of a better performance associated to competitive autocracies was found, although weak and not robust to the inclusion of country-fixed effects.

Slightly more variegated are the results of the analysis of the health care sector. The examination of three out of eight indicators – safe drinking water, immunization against measles and DPT – shows that democratic regimes do better than competitive autocracies. In all the three cases the effect is evident only in the long-run. The supporting evidence, however, is rather poor. With the exception of the percentage of children receiving vaccination against measles, the above findings hold only if country-fixed effects are omitted. Their inclusion in the analysis of the access to an improved water source even overturns previous conclusions. Interestingly, these three cases show another similarity with spending indicators. When democracies do better than competitive autocracies, it is because the latter do just as bad as any other non-democratic regime, or even worse as in the case of immunizations (where democracies actually do less bad than competitive but worse than non-competitive autocracies). This is true also in the analysis of safe drinking water, where competitive autocracies achieve better results than other non-democratic regimes only when we control for the presence of a communist government. Finally, it should be noted that competitive autocracies display a better performance than democracies when indicators of life expectancy at birth are concerned.

In conclusion, only in the case of spending we can safely accept the first hypothesis. According to the analysis' findings, democratic regimes invest in the education and health of citizens more than competitive autocracies. This holds true either if we focus on the total amount of resources invested or if we look at the relative allocation of a government's budget. The analysis, on the contrary, failed to highlight a similar difference in the concrete results achieved in the same sectors by the two forms of political regimes.

### **3.7.2 CA vs. Full authoritarian regimes.**

Both the left-hand side of table 1 and the second column of table 2 confirm that, overall, the second hypothesis receives a stronger empirical support than hypothesis 1. Table 2, however, also corroborates early considerations about the relative robustness of findings across sectors and types of indicator.

Starting with spending, a significant difference between competitive and non-competitive forms of authoritarianism is found only in the health care sector. Here, according to the analysis' findings, governments of competitive autocracies invest more than rulers of other non-democratic regimes both as a percentage of GDP (0.4 points) and in comparison with other public sectors (1.6 point of the total budget). In both cases, these positive effects are long-term. The mere change of regime from non-competitive to competitive authoritarian, therefore, has no specific consequence on a newly elected government's spending decisions.

Even if we focus on the long-run equilibrium relationship between regime type and public spending, however, empirical evidence is rather weak. A first concern derives from the absence of a cross-model validation of previous results. While differences in terms of budget allocation are significant only when country-fixed effects are omitted, their inclusion is necessary in order to make the differences in terms of national income significant. Moreover, we should note that the analysis of budgetary decisions highlights a significant difference between competitive and non-competitive autocracies only in the case of health care. Since the same analysis on

education produces a non-significant but negative coefficient, we should at least consider the possibility that competitive autocracies' higher commitment to public health comes at the cost of the allocation of a smaller share of the budget to education.

Overall, the comparison between competitive and non-competitive autocracies fails to clarify whether the two regime types engender different incentives on governments' decisions about public investments on education and health. If and where such a difference exists, it seems to be in favour of competitive autocracies. Yet, as regards spending in citizens' wellbeing, we are not confident enough to fully reject the null hypothesis that the government of a competitive authoritarian regime behaves as any other non-democratic ruler.

The analysis of competitive autocracies' actual socioeconomic performance produces much less controversial findings. Empirical evidence clearly demonstrates that competitive authoritarian regimes do outperform their full authoritarian counterparts. Similar conclusions hold true for both sectors under examination. According to the more specific information provided by table 2, however, we may note that findings are slightly more robust in the sector of education, while in the health care sector a few exceptions are found.

Significantly positive coefficients, robust to cross-model validation, indicate competitive autocracies' better performance relative to six out of eight indicators of the actual state of the educational system of a country: primary school completion rates (total and female), primary and secondary school enrolment ratios (total and female). As regards the remaining two dependent variables, referring to the rate of progression from primary to secondary school (total and female), findings are weaker since they are not robust to the inclusion of fixed effects.

The analysis of the four indicators referring to primary schooling shows that competitive authoritarianism's positive effect is both short- and long-term. The regression analysis estimates that the mere institutionalization of a competitive autocracy, as measured by the coefficient on the first-differenced dummy variable, is associated with an initial rather instantaneous increase in the above indicators,

ranging from 1.2 to 1.4 points in enrolment ratios and from 1.7 to 2.2 in fifth grade attainment, depending on the model. The larger difference in the performance of the schooling systems of competitive and full authoritarian regimes, however, discloses over time, and is evident in all the eight selected indicators.

According to the country-FE model's estimates, being ruled by a competitive rather than a full authoritarian regime, in the long-run, is associated with an increase in the total primary school enrolment ratio equal to 28.7 percentage points, and about 30 in the case of female data. The surprisingly high absolute value of these figures could be promptly justified. First, as the estimates of the error correction rates show (.93% and .94% respectively), these indicators respond very slowly to the 'shock', i.e. the incentive that the institutions of a competitive autocracy engender for a government to improve the country's educational system. These figures, in other words, represent the overall estimated effect as it cumulates over a rather large span of time. Second, we are looking at developing countries where, according to the World Bank, these indicators may frequently exceed 100 percent, since universal basic schooling programs often involve large numbers of late entrant overage children.

Competitive autocracies display similarly positive long-run effects also in the rates of pupils completing the fifth grade and enrolling in secondary school, resulting in a 8.2 and 11.3 points increase respectively. Here, the long-run impact of a permanent shock, i.e. the presence of (rather than the transition to) a competitive authoritarian regime, is about 5.2 and 6.2 times its immediate impact (i.e.  $1 / \text{coefficient of the lagged dependent variable}$ ). The above results are also confirmed when focusing on data relative to female schooling rates, although to a lesser extent, corresponding to a 6.4% and 9% increase.

The analysis of the health care sector, it has been said, provides slightly weaker empirical evidence. Only six out of eight indicators of the performance of a country in this sector are found to be significantly influenced by the presence of a competitive rather than full authoritarian regime. According to the analysis, citizens of a competitive authoritarian regime enjoy a better quality of life than citizens of other non-democratic regimes. Competitive autocracies are associated with higher

levels of life expectancy at birth (total and female), lower rates of child mortality (under-5, under-1, and neonatal), and a larger number of people with access to an improved water source. With the sole exception of the latter indicator, the above findings receive robust cross-model validation.

The positive impact of competitive authoritarianism on the health care system of a country is both short- and long-term. The institutionalization of a competitive authoritarian regime is expected to bring to citizens an initial improvement in their basic living conditions as measured by an immediate 0.03 points increase and 0.34 points reduction in life expectancy and infant (under-1) mortality rate respectively. The estimated short-term effects on the life expectancy of the total population and of the female population are almost identical. Likewise, different models produced largely similar regression coefficients.

Once again, however, the analysis shows that the political dynamics under examination are mainly long-term. In order to fully seize the extent to which governments of competitive and full autocracies differ in their commitment to promote social welfare and, in particular, to improve citizens' living conditions, we should look at how the 'regime effect' is distributed over time. Accordingly, in the case of life expectancy, the long-run impact of being a competitive autocracy is more than thirty times its instantaneous effect. In the long-run, competitive autocracies are associated with a rise of the total population's life expectancy of more than two years, two years and a half in the case of women.

The comparison of the long-term equilibrium relationship between each regime type and the examined indicators produces substantively meaningful findings also in the case of under-5, under-1 and neonatal mortality rates. The probability of dying for individuals belonging to the youngest demographic groups is invariably reduced by the presence of a competitive authoritarian regime. According to the estimates of the country-FE model, the difference (in absolute values) between competitive and non-competitive autocracies in the number of deaths occurring before reaching either age five, age one, or 28 days of life is about 34 per 1,000 new births, 36, and 43 respectively. Note also the slowness that characterizes the pace of adjustment of the

three dependent variables to regime type's variations. In the abstract, all other things being equal, most of the disequilibrium (96%, 98%, 99%) produced in time  $t$  in the relationship between political regime and mortality rate by 'applying' either a competitive or a non-competitive form of authoritarianism, persists into the next time period, then most of it into the following one, and so forth. The positive association between the length of the 'treatment period' corresponding to each dependent variable – 5 years, 1 year, 1 month – and the speed of the error correction mechanism is not surprising. Indeed it is consistent with Ross' idea (2005) that, in the case of mortality rates, the longer the treatment period, the more the chances for a government to influence the outcome, the faster is the disclosure of the full effect. Ross' arguments, however, could hardly explain why the largest (in absolute value) effect can be observed on neonatal mortality rate.

As anticipated, the analysis of people's access to safe drinking water produces weak evidence. A significant difference in the performance of competitive and non-competitive autocracies is found only when fixed effects are omitted from the model and a control for the presence of a communist government is included. Finally, the empirical analysis fails to identify a positive association between competitive autocracies and the implementation of more extensive child immunization programs. Indeed, some weak evidence suggests quite opposite conclusions. In both cases under examination, the regression model with no fixed effects produces significantly negative coefficients.

In summary, early considerations are mostly confirmed. The ability of competitive autocracies to improve citizens' quality of life, by providing better services in the sectors of education and health care than other non-democratic regimes, is evident in most of the analyses carried out. The use of the error correction model clarifies that the regime effect, more often than not, is not immediate and discloses over time. When a transition effect is also found, however, its magnitude is invariably smaller than the estimated long-term effect. In the few cases (two out of sixteen, overall) in which the analysis fails to highlight a similar pattern, finally, there's little evidence of an opposite one.

### 3.7.3 CAs vs. Full authoritarian subtypes.

The above conclusions should be revisited at a less general level of analysis. By unpacking the full autocracy category it is possible to re-assess the robustness of the findings relative to the second hypothesis with respect to different subtypes of non-democracy. Let us remember that the asterisks in the second column of table 2 refer to the breadth of our findings, i.e. how many times the hypothesis is confirmed when the comparison is between competitive autocracies and military, hereditary, single-party and one-party regimes. As we may observe, in both sectors under examination a few exceptions exist and call for a deeper scrutiny. Table 3 illustrates the results of this more specific analysis.

The re-analysis of government spending clarifies that, whenever a significant difference between competitive and non-competitive regimes is found, it is mainly driven by hereditary regimes. While investment decisions of the government of a competitive autocracy do not differ from those of other non-democratic governments, hereditary regimes appear to invest significantly less money in both education (as a percentage of GDP) and health (as a percentage of GDP and of budget). Interestingly, the analysis of education spending shows that competitive autocracies invest more than hereditary regimes as a percentage of GDP, but less in relative terms. For completeness, the analysis of health spending (as a share of national income) also highlighted a difference between competitive autocracies and military regimes.

**Table 3. Hp. 2 (by regime subtype).**

DV	CA vs. ...	Mil	Sin	Her	One	Mil	Sin	Her	One
Educ. spending	NO	NO	YES*	NO	YES*	NO	YES**	NO	
Health spending	YES*	NO	YES**	NO					
Educ. outputs	YES***	YES***	YES*	YES***	YES***	YES**	YES**	YES**	
Health outputs	YES**	YES*	YES*	YES*					



The comparison between the socioeconomic performance of different non-democratic regimes shows that only in one third of cases, five out of the fourteen analyses in which hypothesis 2 is accepted, competitive autocracies outperform any other subtype of authoritarian rule: progression to secondary school, secondary school enrolment ratios (total and female), life expectancy at birth (total and female). More often than not, the more detailed analysis of the second hypothesis highlights a few exceptions (either one or two). The last two rows of table 3 suggest that the analysis of education indicators produced stronger findings than the analysis of health indicators. In the case of under-5 mortality rate, in particular, the second hypothesis is accepted only with respect to one regime subtype.

The most robust findings derive from the comparison between competitive and military regimes. Every time hypothesis 2 is accepted at the most general level of analysis, a significant difference in the performance of competitive autocracies and military juntas is also found. In most cases, these findings prove robust to cross-model validation. In four cases – progression to secondary school (total and female), neonatal mortality, safe drinking water – they lose consistency after the inclusion of country-fixed effects in the model specification. The benefits for the citizens of a competitive autocracy with respect to the citizens of a military regime tend to become evident in the long-run. In several cases however, even the mere change of regime seems to bring about a significant improvements in citizens' quality of life. This is the case of life expectancy at birth, primary school enrolment and completion rates (always both total and female). In the latter case, in particular, according to the country-fixed effects model the difference between competitive autocracies and military regimes is significant only in the short-term.

A further examination of the short- and long-term effects estimated by the country-FE model when competitive autocracies are analysed at the first and the second level of generality unveils another interesting trend. More often than not, the positive effect of being ruled by a competitive authoritarian regime is larger when the comparison focuses on military regimes, rather than non-competitive dictatorships in

general. Therefore, military regimes seem to be among the main drivers of full authoritarian regimes' poor socioeconomic performance.

The comparison between competitive authoritarian and single-party regimes, including the one-party subtype, provides fairly robust empirical evidence in support of the second hypothesis. Yet it also requires a particularly thorough scrutiny. To be sure, this is not really surprising, since the two non-democratic regimes types share several institutional features. The analysis of eleven indicators of education and health, out of the fourteen cases in which hypothesis 2 is accepted, confirms that competitive autocracies outperform single-party regimes. As many analyses corroborate similar conclusions in the case of pure one-party regimes. The exceptions derive from the analysis of female progression to secondary school, under-5 mortality, under-1 mortality (in the sole case of single-party regimes), safe drinking water (in the sole case of one-party regimes). As expected, in several cases the inclusion in the model specification of a control for the presence of a communist government proves necessary to highlight the different socioeconomic performance associated with competitive autocracies and single- and one-party regimes. This is the case of the analyses of progression to secondary school rates, female secondary school enrolment ratio, neonatal mortality, safe drinking water.

Findings relative to the comparison between competitive autocracies and single-party regimes are robust to cross-model validation in eight out of eleven cases. The findings produced by the analysis of progression to secondary school and of female enrolment ratio lose significance after the inclusion of country-fixed effects, while their omission has the same consequences when the access to improved water sources is examined. When the comparison focuses on pure one-party regimes, robustness checks are passed in seven out of eleven cases. With respect to the findings relative to single-party regimes, the analyses of primary school completion rates (total and female) produces significant coefficients only when fixed effects are omitted. Findings relative to the analysis of female secondary school enrolment, on the contrary, prove stronger in the case of one-party regimes.

The analysis of competitive authoritarian, single-party and one-party regimes' socioeconomic performance confirms that the positive effect of the former regime type tends to disclose over time. While in the comparison between competitive autocracies and one-party regimes this effect is exclusively long-term, however, in some cases the comparison between competitive autocracies and single-party regimes highlights also the existence of a short-term effect. In particular, an immediate improvement in citizens' wellbeing, deriving from the mere institutionalization of a competitive authoritarian regime, is recorded in the analysis of indicators of primary school enrolment ratios, completion rates and of life expectancy (always both total and female). Finally, the comparison between the estimated effects of competitive autocracies, full autocracies in general, single-party regimes in particular leads to the following conclusion. Similarly to military regimes, single-party and one-party regimes are among the main drivers of non-competitive autocracies' poor socioeconomic performance.

What has been said so far somehow anticipates the results of the remaining comparison between competitive autocracies, hereditary regimes and the quality of life enjoyed by their citizens. To the extent that the differences between competitive and full autocracies are magnified when focusing on two out of three subtypes of the non-competitive category, the last should necessarily be the one that counter-weighs the performance of the others.

The analysis confirms this expectation. Competitive autocracies are found to outperform hereditary regimes only in half of the fourteen analyses in which hypothesis 2 is accepted. No significant difference is found in the analysis of primary school enrolment ratios and completion rates (total and female), nor in the analysis of under-5, under-1, and neonatal mortality. When such a difference is found, in most cases the inclusion of country-fixed effects proves essential in order to make it significant.

The analysis also confirms that the largest benefits, in terms of social welfare, deriving from living under a competitive authoritarian rather than a hereditary regime discloses over time. Indeed, the comparison of the short-term effects associated with

the two non-democratic regime types in the analysis of primary school completion rates (total and female) produces fairly robust evidence of a diametrically opposite pattern. Here, a transition to competitive authoritarianism is expected to bring about less benefits than the institutionalization of a hereditary regime (military regimes being the reference category).

To conclude the re-assessment of hypothesis 2 at a more specific level of analysis sheds light on a few important pieces of evidence that complement early more general conclusions. The analysis shows that governments of competitive authoritarian regimes are better able to promote citizens' wellbeing than military juntas and single-party dictatorships. On the contrary, we are less confident about hereditary regimes. Sometimes competitive authoritarian regimes do better, sometimes their citizens enjoy similar levels of social welfare, while in a few cases hereditary regimes achieve better results. Upon closer examination, the comparison between competitive autocracies and hereditary regimes leads to consideration similar, but opposite, to those drawn from the comparison with democratic regimes. While competitive autocracies tend to invest more in education and health, they do not necessarily achieve better outcomes.

#### **3.7.4 Robustness checks.**

In the presentation of the analysis' findings in sections 3.7.1-3.7.3 it has already been made reference to their robustness across different model specifications, either including or omitting fixed effects. In most cases, the positive relationship between competitive authoritarianism and citizens' wellbeing proves strong enough to hold to the inclusion of country-fixed effects. Overall, the same applies to the comparison between competitive autocracies and other specific subtype of authoritarian rule, including hereditary regimes in those cases where a difference is found. This result is noteworthy, since country-fixed effects frequently tend to 'dominate' the regression analysis and obscure the significance of other independent variables. It rules out an important source of uncertainty about the reliability of previous conclusions.

The second main check of the robustness of findings is represented by the inclusion of a time-fixed effect to control for the negative influence of the 1980s, the lost decade for development. Interestingly, the variable proves significant in most analyses, indicating that the post Cold War period is positively associated with an improvement of the living conditions of many citizens in the developing world. In most cases, however, its inclusion does not cast doubts on previous findings. More precisely, the time-FE model only weakens the long-term differences existing between competitive autocracies and military regimes in the analysis of progression to secondary school and the long-term differences between competitive and single-party regimes in the analysis of female secondary school enrolment. More generally, by including either country- or time-fixed effects, the estimated long-term effects tend to present smaller absolute values than those estimated by the no-FE model.

As already mentioned in section 3.5, another robustness check involves the inclusion in the sample of advanced economies (i.e. OECD high-income members). Because the largest part of the new observations (about 93%) refer to democratic regimes, this replication analysis is especially meant to re-assess the strength of the findings relative to the first hypothesis. This analysis failed to provide any meaningful additional information about the phenomenon under examination. Normally, that would correspond to a remarkable confirmation of previous conclusions. Since hypothesis 1 is accepted only in the case of spending, however, in most cases the new test just confirms the absence of a significant difference in the socioeconomic performance of competitive authoritarian and democratic regimes. Yet validating non-significance is a rather poor achievement, and it does not rule out the risk of having overlooked some other important factor.

The strength of previous findings, on the contrary, receives a sometimes essential contribution by the inclusion of a control for the presence of a communist government. This variable proves significant (and positive) only in few cases. Nonetheless its inclusion in the model specification often sheds light on the consequences of the institutional differences between competitive autocracies and single-party regimes, including the one-party subtype. As an example, while in the

analysis of female secondary school enrolment the time-FE model obscures those difference, by adding also the control for communist rule the difference became significant.

### **3.7.5 Control variables.**

A few exceptions notwithstanding, the estimated coefficients and signs of the control variables included in each model specification are consistent with early expectations. Duration, which is included in every analysis, is significant in more than the half of the times, especially when spending and health outputs are examined. Its effects – sometimes long-, sometimes short-term, some others both – is always positive. Income, the other control variable that is present in all the regression models analyzed, behaves in a similar manner. It often proves significant, especially in the analysis of the outputs of the education and health sectors. Its long-term effect is mainly positive, although in a few cases it also presents a negative short-term impact. The effect of economic growth on government spending is negative and instantaneous, thus suggesting that welfare investments tend to be countercyclical. The relative weight of the agricultural sector on a country's economy, similarly, has a negative long-run effect on a government's commitment to invest in education. Moving to demographical factors, the size of the young population proves a significant predictor of the concrete results achieved by a country's educational system. Interestingly, a 1-point increase in this variable frequently corresponds to a negative effect in the short-term, then compensated by a positive long-term effect. This makes a lot of sense, since it indicates that the initial shock represented by a larger number of recipients may be negative, but is absorbed over time. The variable recording the urban/rural divide shows similar results. In most cases, a higher number of people living in urban areas corresponds, in the long-run, to a larger number of people that can be reached by, and benefit from the services provided in the sectors of education and health. In some of these case, however, the short term is negative, thus signalling the initial difficulties that governments face to address a

higher demand of services. The same considerations applies to the results produced by the analysis of people's access to safe drinking water. Less intuitive, on the contrary, is the behaviour of demographic growth and its impact, positive in the short- and negative in the long-term, on life expectancy at birth. Fertility rates tend to have a negative short- and long-term effects on both neonatal mortality and child immunization. Likewise, as expected, the higher the incidence of HIV on a country's population, the higher is mortality within the youngest sectors of the society.

Generally speaking, the results relative to the additional control variables used in order to test the validity of alternative explanations, when significant, comply with expectations without casting doubts on the reliability of previous conclusions. The incidence of foreign development assistance and official aid is significant only in the analysis of health indicators. Oil exporting countries tend to invest in education and health less money and to be less committed to provide basic services such as the access to an improved water source, thus corroborating the argument relative to a 'resource curse' (cf. Ross, 2012). The involvement of a country in war (either civil or international) negatively affects the provision of education and health services. The ethnic fractionalization of the society tends to have a similarly negative effect. Having experienced a period of colonial domination under the British empire, finally, is associated with higher primary completion rates, but with a negative performance in several indicators referring to the health care system.

### **3.8 Findings: Hypothesis 3.**

Table 4 reports, for each dependent variable, findings relative to the third hypothesis of research; and summarizes them by kind of indicator. Is the consolidation of a competitive autocracy negative in terms of citizens' wellbeing? As we may note, the hypothesis is invariably rejected when spending are under examination, and accepted with reference to most indicators of outputs in the sectors of education and health.

**Table 4. Hp. 3 (by variable and sector).**

DV (Education)	HP3	DV (Health)	HP3	DV	HP3
Educ. spending (% gdp)	<b>NO</b>	Health spending (% gdp)	<b>NO</b>	Spending	<b>NO</b>
Educ. spending (% gov.)	<b>NO</b>	Health spending (% gov.)	<b>NO</b>		
1ary sch. compl. rate	<b>YES*</b>	Life expectancy	<b>YES*</b>	Outputs	<b>YES**</b>
1ary sch. compl. rate (f.)	<b>NO</b>	Life expectancy (f.)	<b>YES*</b>		
Progr. to 2ary sch.	<b>NO</b>	Child Mortality (<5)	<b>YES*</b>		
Progr. to 2ary sch. (f.)	<b>YES*</b>	Infant mortality (<1)	<b>YES***</b>		
Enrolment 1ary sch.	<b>YES***</b>	Neonatal mortality	<b>YES***</b>		
Enrolment 1ary sch. (f.)	<b>YES***</b>	Safe drinking water	<b>NO</b>		
Enrolment 2ary sch.	<b>YES***</b>	Immunization measles	<b>NO</b>		
Enrolment 2ary sch. (f.)	<b>YES***</b>	Immunization DPT	<b>NO</b>		

Once again, the analysis of a country's educational system produces stronger findings than the analysis of its health care sector. The four cases in which no supporting evidence is found refer to variables – progression to secondary school (total), access to an improved water source, child immunizations against measles and DPT – whose analysis provides the weakest findings also when the second hypothesis is examined. Finally, in one case – female primary completion rate – some evidence of a diametrically opposite pattern, i.e. a positive effect of the consolidation of a competitive autocracy, is found.

Overall, the analysis demonstrates that the positive effect on education and health care services that previous analyses found to be associated with competitive authoritarian regimes tends to vanish as these regimes consolidate. This seems to happen regardless of the amount of resources invested by governments of these regimes in the two sectors. Welfare spending decisions in competitive autocracies are not influenced by the consolidation of the political regime. Yet the longer a



competitive autocracy endures, the more the initial benefits in terms of citizens' wellbeing dissipate.<sup>24</sup>

A closer look at the table, however, reveals the existence of important variations in the robustness of findings produced by the analysis of the indicators of socioeconomic outputs. In many cases, evidence is weak. The hypothesis receives full confirmation only in about half of the cases, corresponding to six out of eleven dependent variables for which some supporting evidence is found: primary and secondary school enrolment ratios (total and female), infant and neonatal mortality rates. A necessary condition for full acceptance is the significance of the interaction term between the competitive autocracy category and the regime duration variable. In the remaining five cases, the hypothesis is only partly accepted. Partial acceptance means that, although the interaction term is non-significant, the sign is correct – negative in most cases, positive for mortality rates – and the marginal effect of being ruled by a competitive autocracy, conditional on regime consolidation, is significant for some range of values.

Once the robustness of the analysis' findings has been discussed, and it has been clarified that our conclusions are weak, however, there's no need to throw the baby out with the bath water. The empirical analysis highlights important pieces of evidence indicating a rather unequivocal pattern, consistent with the hypothesis' expectations. The examination of the graphs produced by the analysis of the marginal effects that has been performed after each regression analysis proves that early conclusions are indeed empirically grounded.

The first four graphs in Appendix 3.C confirm that the interaction between the institutional environment typical of a competitive autocracy and the consolidation of these institutions has no influence in shaping governments' budgetary decisions, neither as a percentage of GDP, nor in their relative distribution. The graphs referring

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<sup>24</sup> As already explained (cf. Footnote 20), similar considerations do not conflict with previous conclusions about the relevance of competitive autocracies' positive long-term effects discussed with reference to the second hypothesis. Long-term effects refer to the actual amount of time that the effect of being ruled by a competitive authoritarian regime in a given point in time ( $t_0$ ) needs to fully materialize. Regime duration interacts with regime type in time  $t_0$  thus influencing magnitude (and sign) of its long-term effects as they disclose over time.

to the indicators of outputs for which the hypothesis is rejected do not differ a lot, with the exception of the analysis of female primary completion rate. In this case, the analysis shows that for values of regime duration close to the variable mean the marginal effect of competitive autocracies is positive and increases when duration increases, although it soon becomes non-significantly different from zero. The eleven graphs referring to dependent variables for which the third hypothesis is at least partly accepted, in turn, differ from each other in many aspects – notably the range of values of the regime duration variable for which the relationship is significant, and the slope of the line – but they invariably tell the same story.

The marginal effect of being ruled by a competitive authoritarian regime on citizens' quality of life is positive and significant in the early years following its institutionalization. This initial period during which the institutions of a competitive autocracy maintain their positive influence on a government's commitment to promote the wellbeing of their citizens may vary from about 13 to 37 years. 13 years of duration for a competitive autocracy is more than the median (6 years) duration of this regime type, than the mean (8.5), and close to mean duration of a political regime in general (14 years). Albeit positive, however, this marginal effect progressively declines in conjunction with regime consolidation. This tendency goes in a diametrically opposite direction to the one suggested by the literature on the consequences of democratic consolidation. Even more interestingly, the marginal effect of being a competitive autocracy is not only declining, it completely dissipates. The analysis highlights a sort of threshold effect. When a competitive autocracy reaches a given level of consolidation, which in raw terms of age may vary from case to case, its positive influence on the promotion of citizens wellbeing just becomes non-significantly different from zero. In one case this pattern is even more radical. As the analysis of the secondary school enrolment ratio shows, the declining path followed by the marginal effect of being ruled by a competitive authoritarian regime leads to negative (and significant) values. Here, it not only dissipates, it does deteriorate.

### 3.9 Findings: Hypothesis 4.

The findings relative to the assessment of the presence of region-specific effects, and their analysis, are summarized in tables 5 and 6. Empirical evidence supports the hypothesis that the relationships under examination are mediated by regional context. Depending on where we study the phenomenon of competitive authoritarianism and its consequences on citizens' wellbeing we might come to different conclusions. As it will be clear soon, variations have to do with both the acceptance/rejection of the second hypothesis of research concerning the comparison between competitive and full autocracies, and with the magnitude of the estimated effects.

More precisely, table 5 shows that the overall conclusions that can be drawn from the analysis of the socioeconomic consequences of competitive authoritarianism at the global level hold their robustness only when the analysis is replicated on a sub-sample of African countries. Most of these conclusions, on the contrary, are rejected when the analysis is replicated on non-African developing countries. More precisely, global-level findings are severely weakened when the analysis focuses either on Asia, the post-socialist countries, or Latin America.

**Table 5      Hp. 4 (by sector)**

DV	World	Africa	Rest	Asia	ex-Soc.	Latin Am.
Spending	YES*	YES*	NO	NO	YES*	NO
Education outputs	YES***	YES***	NO	YES*	YES*	YES***
Health outputs	YES**	YES***	YES**	YES*	YES*	NO

According to findings, a systematic and robust relationship between the presence of a competitive authoritarian regime and governments' commitment to promote citizens' wellbeing exists only in the African continent. Asian competitive autocracies, Latin American ones, and those emerged in the former Communist bloc display little or no

difference with their full authoritarian counterparts. Outside Africa, the socioeconomic consequences of competitive authoritarianism are not as good, if any. From a cross-regional comparative perspective, African competitive autocracies, or more generally the diffusion of competitive authoritarianism in Africa, has brought to citizens higher benefits in terms of an improvement in their living conditions than the diffusion of the phenomenon elsewhere. Although we cannot say whether African competitive autocracies outperform those of other regions, we are confident enough to conclude that competitive authoritarianism has made quite a difference for African citizens, while it has not for the citizens of other developing regions. Table 6 delves into these differences.

**Table 6**      **Hp. 4 (by indicator)**

<b>DV (Hp 2)</b>	<b>Africa</b>	<b>Rest</b>	<b>Asia</b>	<b>ex-Soc.</b>	<b>Latin Am.</b>
Education spending (% gdp)	NO	NO	NO	YES*	NO
1ary school completion rate	YES***	NO	NO	NO	YES***
Enrolment 2ary (fem)	YES***	NO	YES*	YES*	YES*
Health spending (% gdp)	YES*	NO	NO	NO	NO
Life expectancy	YES***	YES*	NO	YES***	NO
Child Mortality (<5)	YES*	YES*	YES**	NO	NO

The analysis of government spending in Africa confirms that only in the case of health care it is possible to observe a significant difference between competitive and full authoritarian regimes. The same does not apply in other regions. Only in the post-socialists countries a similar difference is found in the sector of education, but this finding does not hold to the inclusion of country-fixed effects.

As the analysis at the global level showed, also in Africa the starkest differences derive from the comparison of competitive and non-competitive autocracies' actual performance, especially in the sector of education. African competitive authoritarian regimes promote more efficacious universal education programs, as measured by

larger rates of pupils completing the fifth grade and larger rates of female students enrolling in secondary school. They also prove able to provide citizens with better basic health services, as demonstrated by a higher life expectancy at birth, and by lower under-5 mortality rates. With the only exception of the latter indicator, the above findings are robust to the inclusion of country-fixed effects. Likewise, the inclusion of a time-fixed effect to control for the negative impact of the 1980s on development indicators does not cast any doubt on previous findings. The replication analysis on Africa also confirms that the effects of competitive authoritarianism on citizens' wellbeing are mainly long-term, especially in terms of their magnitude. Short-term effects associated with the mere institutionalization of a competitive autocracy, however, are found significant in three out of four cases.

The analysis on the remaining non-African developing countries provides some weak empirical support to the hypothesis concerning competitive autocracies' better socioeconomic performance only in the case of health indicators. Upon closer examination the findings on child mortality rate are mainly driven by Asian competitive autocracies, that are found to have a fairly robust long-term positive effect on its reduction. These findings, as a matter of fact, are even more robust than the findings relative to Africa. Findings on life expectancy, on the contrary, are mainly driven by the competitive authoritarian regimes ruling in the former communist bloc. Table 6 also clarifies the differences between African and Latin American competitive autocracies in the sector of education, which table 5 overlooks. Their performance is equally good (i.e. significantly better than their respective regional full authoritarian counterparts) only when primary education is analyzed. As regards female secondary enrolment ratios, on the contrary, the analysis of Latin American countries provides only weak evidence and findings are not robust to inclusion of country-fixed effects. Finally, a few differences between competitive and full autocracies are also found in the analysis of female secondary school enrolment ratios in Asian and post-socialist countries. In both cases, however, these findings are significant only in the country-FE model.

The above findings can also be interpreted from a slightly different point of view, by focusing on the absolute values of the long-term estimated effects associated with competitive autocracies across different regions. The comparison, for instance, shows that the long-term effect of African competitive autocracies on female secondary school enrolment ratio is larger than the similarly positive effect estimated for a competitive autocracy established in Asia or in post-communist countries. The same applies in the case of life expectancy with respect to Asian competitive autocracies, as well as in the case of primary school completion rates with respect to Latin American ones. Even when competitive autocracies outperform other non-democratic regimes, regional effects seem to play a catalyzing role and influence the extent of their positive effect. By replicating the same comparison between African countries and the entire sample of developing countries, finally, we note a similar pattern. The estimates of the long-term effects associated with African competitive autocracies are systematically larger than the estimates associated with competitive autocracies in general. Therefore, we may also conclude that global findings are mainly driven by the empirical evidence found in the African continent.

## Appendix 3.A Descriptive Statistics

Overall size of the dataset: 3,408 observations (2,351 or 1,755 for variables available since 1990 and 1995 respectively).

Maximum coverage: 128 countries ; 29 years.

Variable	Obs.	Time coverage (obs. per y)	Geo. coverage (c. >10 obs.)	Mean	Std. dev.	Std. dev. (within)	Min	Max	Source
<b>D.V.s</b>									
Public spending on education (% of GDP)	1408	1980- (30-80)	75	4.082	1.931	0.983	0	16.058	World Bank
Public spending on education (% of gov. exp.)	625	1995- (30-70)	59 (>5 obs.)	16.565	5.116	2.414	3.971	32.781	World Bank
1ary sch. completion rt. (% of relevant gr.)	1965	1980- (40-90)	95	72.106	26.722	9.855	5.671	128.546	World Bank
1ary sch. completion rt., female (% of relevant gr.)	1758	1980- (40-90)	88	69.272	29.462	10.264	3.753	128.118	World Bank
Progression to secondary school (%)	1590	1980- (30-80)	83	73.67	23.86	10.155	5.656	100	World Bank
Progression to secondary school, female (%)	1353	1980- (30-80)	68	73.969	24.026	10.286	3.252	100	World Bank
1ary sch. enrolment (% gross)	2826	1980- (90-100)	119	94.305	24.433	11.783	13.781	207.731	World Bank
1ary sch. enrolment, female (% gross)	2663	1980- (80-100)	117	89.407	27.103	12.382	0	164.112	World Bank
2ary sch. enrolment (% gross)	2404	1980- (70-100)	111	51.953	29.281	10.003	2.344	111.235	World Bank
2ary sch. enrolment, female (% gross)	2121	1980- (60-100)	115	50.951	31.591	10.631	1.626	119.436	World Bank
Public spending on health (% of GDP)	1712	1995- (120-128)	124 (>5 obs.)	2.676	1.47	0.578	0.003	14.044	World Bank
Public spending on health (% of gov. exp.)	1719	1995- (120-128)	125 (>5 obs.)	9.688	4.423	2.233	0	41.655	World Bank
Life expectancy at birth (years)	3372	1980- (100-120)	127	61.639	10.172	3.221	26.818	80.79	World Bank
Life expectancy at birth, female (years)	3372	1980- (100-120)	127	63.817	10.82	3.254	28.532	83.3	World Bank
Mortality rate, under-5 (per 1,000 live births)	3363	1980- (100-120)	126	86.889	66.732	22.756	2.8	321	World Bank
Mortality rate, under-1 (per 1,000 live births)	3363	1980- (100-128)	127	57.952	37.63	13.448	2.2	169.6	World Bank
Mortality rate, neonatal (per 1,000 live births)	2332	1990- (100-128)	126 (>5 obs.)	24.79	13.765	3.072	1.2	58.9	World Bank
Improved water source (% of pop. with access)	2243	1990- (100-128)	125 (>5 obs.)	77.157	19.317	4.429	2	100	World Bank
Immunization, DPT (% of children 12-23 m.)	3235	1980- (60-128)	127	71.04	25.361	17.281	1	99	World Bank
Immunization, measles (% of children 12-23 m.)	3192	1980- (60-128)	126	70.698	24.455	17.845	1	99	World Bank

Variable	Obs.	Time coverage (obs. per y)	Geo. coverage (c. >10 obs.)	Mean	Std. dev.	Std. dev. (within)	Min	Max	Source
<b>C.V.s</b>									
Population, total	3376	1980- (100-128)	127	3.82E+07	1.41E+08	1.80E+07	220582	1.32E+09	World Bank
Population ages 00-14, total	3376	1980- (100-128)	127	1.29E+07	4.34E+07	3780495	74126	3.73E+08	World Bank
Population dependent (under-14 and over-65)	3376	1980- (100-128)	127	1.49E+07	5.09E+07	4288018	77299	4.30E+08	World Bank
Urban population (% of total)	3379	1980- (100-128)	127	45.619	22.682	4.333	4.339	100	World Bank
Population growth (annual %)	3375	1980- (100-128)	127	2.077	1.586	1.047	-7.533	18.588	World Bank
Fertility rate, total (births per woman)	3372	1980- (100-128)	127	4.235	1.798	0.77	1.09	8.659	World Bank
Adults and children living with HIV	1967	1990- (90-100)	106	183167.4	497451.2	232857.7	100	5400000	World Bank
Agriculture, value added (% of GDP)	2971	1980- (80-120)	117	21.955	15.451	5.719	0.042	93.977	World Bank
Net off. dev. assistance & aid received (c. 2010 \$)	3276	1980- (100-128)	127	5.38E+08	7.43E+08	4.50E+08	-1.14E+09	1.24E+10	World Bank
GDP growth (annual %)	3183	1980- (80-128)	123	3.749	6.722	6.325	-50.248	106.279	World Bank
Real GDP per capita PPP (2005 c. pr)	3296	1980- (100-128)	126	5511.424	8820.754	2366.414	177.31	109972.6	Penn World Table
Oil producing country	3408	1980- (100-128)	128		0.34	0	0	1	Przeworski et al., 2000
Election year	3408	1980- (100-128)	128		0.436	0.42	0	1	Hyde et al., 2012
Communist government	3408	1980- (100-128)	128		0.23	0.094	0	1	Cheibub et el., 2010
Ethnic fractionalization index	3408	1980- (100-128)	128	0.512	0.237	0	0.039	0.93	Alesina et al., 2003
Ongoing war (either international or civil)	3408	1980- (100-128)	128		0.319	0.268	0	1	UCDC PRIO
Ongoing civil war	3408	1980- (100-128)	128		0.242	0.194	0	1	UCDC PRIO
Ongoing war fought within borders	3408	1980- (100-128)	128		0.255	0.205	0	1	UCDC PRIO
Regime duration	3408	1980- (100-128)	128	14.502	15.375	8.361	1	106	own coding
Post Cold War era	3408	1980- (100-128)	128		0.462	0.447	0	1	own coding
Former British colony	3408	1980- (100-128)	128		0.47	0	0	1	own coding



## Appendix 3.B Short- and Long-term Effects

Table 3.B.1. Hp. 1,2 : Short-term effects (education).

DV	Model	... vs. Aut		... vs. Mil				CA vs. ...					
		Dem	CA	CA	Sin	Her	One	Dem	Aut	Mil	Sin	Her	One
Educ. spending (% gdp)	c.-FE	0.205	-0.005	-0.138	-0.311	-0.608	0.073	Yes**	No	No (-)	No	Yes***	No
	no-FE	0.16	0.031	-0.053	-0.21	-0.536	0.036	No	No	No	No	Yes***	No
	t.-FE	0.144	0.008	-0.093	-0.229	-0.556	0.032	Yes	No	No	No	Yes	No
Educ. spending (% gov. budget)	c.-FE	0.681	0.417	-0.408	-3.017	-1.402	nc	No	No	No	No	No	nc
	no-FE	-0.119	-0.514	-0.929	-1.722	-1.618	nc	No	No	No	No	No	nc
1ary school completion rate	c.-FE	1.995	1.803	1.477	-0.902	4.627	-1.153	No	Yes***	Yes**	Yes**	No (-)	No
	no-FE	1.747	1.768	1.935	-0.531	5.887	-0.612	No	Yes***	Yes***	Yes**	No (-)	No
	t.-FE	1.622	1.616	1.757	-0.641	5.615	-0.655	No	Yes	Yes	Yes	No (-)	No
1ary school completion rate (fem)	c.-FE	2.366	2.121	1.793	-0.563	5.088	-0.275	No	Yes**	Yes**	Yes**	No (-)	No
	no-FE	2.296	2.223	2.493	-0.185	6.115	0.291	No	Yes**	Yes***	No	No (-)	No
	t.-FE	2.199	2.114	2.41	-0.236	6.002	0.269	No	Yes	Yes	No	No (-)	No
Progression to 2ary school	c.-FE	0.804	0.674	-0.251	-0.057	-6.332	3.793	No	No	No	No	Yes***	No
	no-FE	0.747	0.565	1.564	2.423	-0.976	6.047	No	No	No	No	Yes***	No
	t.-FE	0.426	0.316	1.041	2.151	-1.728	6.039	No	No	No	No	Yes	No
Progression to 2ary school (fem)	c.-FE	1.72	0.202	-0.843	-0.395	-7.255	2.768	No	No	No	No	Yes***	No
	no-FE	1.859	0.916	1.741	1.946	-0.978	4.75	No	No	No	No	Yes***	No
	t.-FE	1.573	0.66	1.237	1.732	-1.62	4.814	No	No	No	No	Yes	No
Enrolment 1ary	c.-FE	1.405	1.39	1.695	0.287	-9.95	0.283	No	Yes***	Yes***	No	No	No
	no-FE	0.993	1.191	1.578	-0.035	-10.511	0.116	No	Yes***	Yes***	Yes**	No	No
	t.-FE	0.883	1.034	1.419	-0.081	-10.754	0.131	No	Yes	Yes	Yes	No	No
Enrolment 1ary (fem)	c.-FE	1.708	1.434	1.72	0.09	-9.67	0.016	No	Yes***	Yes***	Yes**	No	No
	no-FE	1.149	1.219	1.518	-0.31	-10.251	-0.324	No	Yes***	Yes***	Yes***	No	No
	t.-FE	1.007	1.012	1.283	-0.378	-10.606	-0.305	No	Yes	Yes	Yes	No	No
Enrolment 2ary	c.-FE	0.036	0.307	0.172	-0.159	0.331	-0.288	No	No	No	No	No	No
	no-FE	-0.105	0.136	0.257	0.218	1.501	0.304	No	No	No	No	No	No
	t.-FE	-0.169	0.042	0.104	0.153	1.101	0.33	No	No	No	No	No	No
Enrolment 2ary (fem)	c.-FE	0.287	0.177	0.247	0.148	0.257	-0.103	No	No	No	No	No	No
	no-FE	0.044	0.04	0.299	0.392	1.366	0.359	No	No	No	No	No	No
	t.-FE	-0.032	-0.051	0.16	0.341	1.009	0.363	No	No	No	No	No	No

**Table 3.B.2. Hp. 1,2 : Short-term effects (health).**

DV	Model	... vs. Aut		... vs. Mil				CA vs. ...					
		Dem	CA	CA	Sin	Her	One	Dem	Aut	Mil	Sin	Her	One
Health spending (% gdp)	c.-FE	0.043	0.057	0.107	0.076	0.054	nc	No	No	No	No	No	nc
	no-FE	0.014	-0.006	0.076	0.14	0.058	nc	No	No	No	No	No	nc
Health spending (% gov budget)	c.-FE	0.236	-0.066	-0.177	-0.189	-0.08	nc	No	No	No	No	No	nc
	no-FE	0.375	-0.139	-0.146	-0.032	0.141	nc	No	No	No	No	No	nc
Life expectancy	c.-FE	0.016	0.036	0.039	-0.015	-0.016	0.018	No (-)	Yes***	Yes***	Yes**	No	No
	no-FE	0.007	0.03	0.031	-0.018	0.021	0.02	No (-)	Yes**	Yes**	Yes**	No	No
	t.-FE	0.006	0.027	0.028	-0.019	0.017	0.02	No (-)	Yes	Yes	Yes	No	No
Life expectancy (fem)	c.-FE	0.01	0.029	0.034	-0.005	-0.026	0.022	No (-)	Yes***	Yes***	Yes**	No	No
	no-FE	0.002	0.026	0.029	-0.006	0.021	0.025	No (-)	Yes**	Yes***	No	No	No
	t.-FE	0.0006	0.022	0.024	-0.007	0.015	0.025	No (-)	Yes	Yes	No	No	No
Child Mortality (<5)	c.-FE	-0.499	-0.524	-1.415	-1.519	-3.608	-1.688	No	No	No	No	No	No
	no-FE	-0.03	-0.049	-0.91	-1.379	-2.146	-3.95	No	No	No	No	No	No (-)
Infant mortality (<1)	c.-FE	-0.281	-0.341	-0.693	-0.551	-1.444	-0.515	No	Yes**	No	No	No	No
	no-FE	0.015	-0.027	-0.433	-0.642	-0.886	-2.105	No	Yes**	No	No	No	No (-)
Neonatal mortality	c.-FE	-0.095	-0.106	-0.171	-0.091	-0.285	-0.024	No	No	No	No	No	No
	no-FE	0.002	-0.001	-0.111	-0.157	-0.164	-0.565	No	No	No	No	No	No (-)
Safe drinking water	c.-FE	-0.065	0.027	0.069	-0.012	-0.17	0.432	No (-)	No	No	No	No	No (-)
	no-FE	-0.02	-0.028	0.08	0.211	-0.096	0.681	No	No	No	No	No	No (-)
Immunization measles	c.-FE	0.717	-0.201	0.35	-1.126	-0.866	-0.765	No	No	No	No	No	No
	no-FE	0.835	-0.07	0.721	-0.898	1.8	-0.203	No	No	No	No	No	No
	t.-FE	0.938	0.113	1.038	-0.836	2.423	-0.315	No	No	No	No	No	No
Immunization DPT	c.-FE	-1.26	-0.525	0.327	0.714	2.134	0.762	No	No	No	No	No	No
	no-FE	-1.226	-0.507	0.437	0.746	4.093	1.226	No	No	No	No	No	No
	t.-FE	-1.121	-0.296	0.805	0.85	4.771	1.124	No	No	No	No	No	No

**Table 3.B.3. Hp. 1,2 : Long-term effects (education).**

DV	Model	... vs. Aut		... vs. Mil				CA vs. ...						EC
		Dem	CA	CA	Sin	Her	One	Dem	Aut	Mil	Sin	Her	One	
Educ. Spending (% gdp)	c.-FE	0.607	-0.114	-0.083	-0.01	-1.041	0.219	Yes**	No	No	No	Yes***	No	0.73
	no-FE	0.827	0.309	0.44	0.66	0.241	1.432	No	No	No	No	No	No	0.93
	t.-FE	0.338	-0.33	-0.555	0.395	-0.266	1.2	No	No	No	No	No	No	0.93
Educ. Spending (% gov budget)	c.-FE	4.013	1.484	1.912	-2.726	5.816	nc	Yes**	No	No	No	No (-)	nc	0.44
	no-FE	-1.986	-2.834	4.08	6.104	10.907	8.288	No	No	No	No	No (-)	No	0.87
1ary school completion rate	c.-FE	10.696	8.236	4.016	-4.379	nc	-3.753	No	Yes***	No	Yes**	nc	No	0.81
	no-FE	13.143	16.501	24.283	1.447	28.633	-1.908	No	Yes***	Yes***	Yes**	No	Yes***	0.94
	t.-FE	10.438	13.441	20.761	0.308	24.814	-2.497	No	Yes	No	Yes	No	Yes	0.94
1ary school completion rate (fem)	c.-FE	7.796	6.448	1.568	-4.26	nc	-3.442	No	Yes**	No	No	nc	No	0.84
	no-FE	9.781	15.378	30.898	10.741	39.892	5.103	No	Yes**	Yes***	Yes***	No	Yes***	0.95
	t.-FE	7.216	12.314	28.746	10.064	38.035	4.698	No	Yes	Yes	Yes	No	Yes	0.95
Progression to 2ary school	c.-FE	0.151	2.193	-1.634	-6.524	-18.093	-6.754	No	No	No	No	Yes***	No	0.63
	no-FE	4.49	11.047	22.001	10.229	26.736	6.766	No	Yes*	Yes*	Yes*(c)	No	Yes*(c)	0.92
	t.-FE	-0.215	5.144	11.556	5.666	15.485	3.921	No	No	No	No	No	No	0.92
Progression to 2ary school (fem)	c.-FE	2.224	1.766	-1.331	-4.445	-17.525	-2.954	No	No	No	No	Yes***	No	0.61
	no-FE	7.926	12.902	21.839	9.453	18.514	5.921	No	Yes*	Yes*	No	No	No	0.9
	t.-FE	3.694	7.382	12.906	5.91	11.973	3.644	No	No	No	No	No	No	0.9
Enrolment 1ary	c.-FE	29.928	28.72	36.632	6.971	66.663	-10.198	No	Yes***	Yes***	Yes**	No	Yes***	0.93
	no-FE	25.8	39.466	57.071	2.29	59.734	-21.405	No (-)	Yes***	Yes***	Yes**	No	Yes***	0.97
	t.-FE	20.565	31.946	49.647	0.334	52.998	-21.896	No	Yes	Yes	Yes	No	Yes	0.97
Enrolment 1ary (fem)	c.-FE	31.341	29.957	39.148	15.48	68.191	-2.221	No	Yes***	Yes***	Yes**	No	Yes***	0.94
	no-FE	22.655	42.598	69.227	17.913	79.228	-10.28	No	Yes***	Yes***	Yes***	No	Yes***	0.97
	t.-FE	14.676	31.424	56.427	14.659	67.346	-10.851	No (-)	Yes	Yes	Yes	No	Yes	0.97
Enrolment 2ary	c.-FE	8.438	11.309	9.862	-2.054	-8.895	-6.253	No	Yes***	Yes***	Yes***	Yes***	Yes***	0.92
	no-FE	15.735	22.085	35.589	11.487	42.147	7.332	No	Yes***	Yes***	Yes***	No	Yes***	0.97
	t.-FE	10.558	14.051	23.766	7.288	30.364	4.908	No	Yes	Yes	Yes	No	Yes	0.97
Enrolment 2ary (fem)	c.-FE	8.832	9.036	10.26	3.476	-11.636	0.761	No	Yes**	Yes**	No	Yes***	No	0.93
	no-FE	13.913	22.761	49.656	25.877	58.202	21.144	No	Yes**	Yes**	Yes**(c)	No	Yes**(c)	0.98
	t.-FE	6.601	12.16	34.176	20.103	43.408	17.161	No	No	Yes	No	No	No	0.98

**Table 3.B.4. Hp. 1,2 : Long-term effects (health).**

DV	Model	... vs. Aut		... vs. Mil				CA vs. ...						EC
		Dem	CA	CA	Sin	Her	One	Dem	Aut	Mil	Sin	Her	One	
Health spending (% gdp)	c.-FE	0.445	0.394	0.467	0.02	0.103	nc	No	Yes*	Yes*	No	Yes**	nc	0.67
	no-FE	2.143	0.27	1.463	1.209	0.248	1.651	Yes**	No	No	No	No	No	0.95
Health spending (% gov budget)	c.-FE	0.944	0.721	0.498	-0.496	-0.997	nc	No	No	No	No	Yes***	nc	0.61
	no-FE	3.912	1.645	1.705	0.047	-0.563	-0.236	Yes**	Yes*	No	No	No	No	0.87
Life expectancy	c.-FE	1.965	2.24	2.715	0.407	-2.457	0.351	No	Yes***	Yes***	Yes**	Yes***	Yes***	0.97
	no-FE	2.428	5.118	5.796	-1.492	3.256	-3.355	No	Yes**	Yes**	Yes**	No	Yes**	0.99
	t.-FE	1.857	4.175	4.764	-1.679	2.445	-3.333	No	Yes	Yes	Yes	No	Yes	0.99
Life expectancy (fem)	c.-FE	2.402	2.586	3.025	0.202	-3.027	0.35	No	Yes***	Yes***	Yes**	Yes***	Yes**	0.98
	no-FE	3.981	6.318	7.168	-1.111	4.187	-2.481	No	Yes**	Yes***	Yes***	No	Yes***	0.99
	t.-FE	3.102	4.901	5.418	-1.456	2.806	-2.482	No	Yes	Yes	Yes	No	Yes	0.99
Child mortality (<5)	c.-FE	-29.972	-34.67	-63.474	-47.011	-66.99	-6.427	No	Yes***	Yes*	No	No	No	0.96
	no-FE	-43.776	-44.249	-125.14	-111.77	-82.699	-130.24	No	Yes***	Yes*	No	No	No	0.98
Infant mortality (<1)	c.-FE	-29.932	-36.676	-56.05	-28.968	-47.532	16.592	No	Yes**	Yes*	No	No	Yes**	0.98
	no-FE	-20.226	-28.029	-79.686	-71.218	-55.772	-80.978	No	Yes**	Yes**	No	No	No	0.98
Neonatal mortality	c.-FE	-36.584	-43.435	-50.84	-16.066	-58.827	49.704	No	Yes**	No	Yes**	No	Yes***	0.99
	no-FE	-26.955	-30.633	-75.247	-57.588	-79.994	-59.731	No	Yes***	Yes**	Yes*	No	Yes*(c)	0.99
Safe drinking water	c.-FE	0.681	6.382	2.941	-7.987	-25.184	16.296	No (-)	No	No	Yes**	Yes***	No (-)	0.98
	no-FE	10.547	3.884	12.791	19.167	16.325	31.326	Yes**	Yes*(c)	Yes**	Yes*(c)	No	No	0.98
Immunization measles	c.-FE	1.662	-3.371	-0.754	4.196	-3.453	8.517	Yes*	No	No	No	No	No (-)	0.75
	no-FE	-0.303	-4.313	3.041	8.894	18.788	12.367	Yes*	No (-)	No	No (-)	No (-)	No (-)	0.85
	t.-FE	0.945	-2.301	6.858	10.022	23.397	12.683	No	No	No	No	No (-)	No	0.85
Immunization DPT	c.-FE	1.547	-2.518	-0.315	3.839	-3.694	9.851	No	No	No	No	No	No (-)	0.78
	no-FE	-1.072	-6.142	0.618	8.142	18.215	13.208	Yes**	No (-)	No	No (-)	No (-)	No (-)	0.88
	t.-FE	0.496	-3.347	5.945	9.753	25.079	13.836	No	No	No	No	No (-)	No	0.88

**Table 3.B.5. Hp. 1,2 : Comparison across models.**

DV	CA vs. ...	Dem	Aut	Mil	Sin	Her	One
Educ. spending (% gdp)		YES** ~ short FE	NO	NO	NO	YES** ~ short ~ FE	NO
Educ. Spending (% gov budget)		YES* long FE	NO	NO	NO	NO	NO
1ary school completion rate		NO	YES*** both	YES*** ~ short ~ OLS	YES*** both	NO	YES** long OLS
1ary school completion rate (fem)		NO	YES*** both	YES*** ~ short ~ OLS	YES** ~ long both	NO	YES** long OLS
Progression to 2ary school		NO	YES* long OLS	YES* long OLS	YES* long OLS	YES*** ~ short ~ FE	YES* long OLS
Progression to 2ary school (fem)		NO	YES* long OLS	YES* long OLS	NO	YES*** ~ short ~ FE	NO
Enrolment 1ary		NO	YES*** both	YES*** both	YES*** ~ long ~ OLS	NO	YES*** long
Enrolment 1ary (fem)		NO	YES*** both	YES*** both	YES*** both	NO	YES*** long
Enrolment 2ary		NO	YES*** long	YES*** long	YES*** long	YES* long FE	YES*** long
Enrolment 2ary (fem)		NO	YES** long both	YES*** long	YES** long OLS	YES* long FE	YES** long both

DV	CA vs. ...	Dem	Aut	Mil	Sin	Her	One
Health spending (% gdp)		YES* long OLS	YES* long FE	YES* long FE	NO	YES* long FE	NO
Health spending (% gov budget)		YES* long OLS	YES* long OLS	NO	NO	YES* long FE	NO
Life expectancy		NO	YES*** both	YES*** both	YES*** both	YES* long FE	YES*** long
Life expectancy (fem)		NO (-)	YES*** both	YES*** both	YES*** ~ long ~ FE	YES* long FE	YES*** long
Child Mortality (<5)		NO	YES*** long	YES*** long	NO	NO	NO
Infant mortality (<1)		NO	YES*** both	YES*** long	NO	NO	YES* long FE
Neonatal mortality		NO	YES*** long	YES* long OLS	YES** Long both	NO	YES** long both
Safe drinking water		YES* long OLS	YES* long OLS	YES* long OLS	YES* Long FE	YES* long FE	NO
Immunization measles		YES** long both	NO	NO	NO	NO	NO
Immunization DPT		YES* long OLS	NO	NO	NO	NO	NO

**Table 3.B.6. Hp. 3 : Long-term effects.**

DV	CA*Consolidation		
	Int. T.	Sign	Mg. Eff.
Educ. spending (% gdp)	non sig	neg	never sig
Educ. spending (% gov budget)	non sig	pos	never sig
1ary sch. completion rate	non sig	neg	1-33 yrs.
1ary sch. completion rate (fem)	non sig	pos	9-24 yrs.
Progression to 2ary sch.	non sig	neg	never sig
Progression to 2ary sch. (fem)	non sig	neg	1-14 yrs.
Enrolment 1ary	sig	neg	1-33 yrs.
Enrolment 1ary (fem)	sig	neg	1-32 yrs.
Enrolment 2ary	sig	neg	1-19 & >84 yrs.
Enrolment 2ary (fem)	sig	neg	1-16 yrs.

DV	CA*Consolidation		
	Int. T.	Sign	Mg. Eff.
Health spending (% gdp)	non sig	neg	never sig
Health spending (% gov budget)	non sig	neg	never sig
Life expectancy	non sig	neg	1-30 yrs.
Life expectancy (fem)	non sig	neg	1-37 yrs.
Child Mortality (<5)	non sig	neg	1-22 yrs.
Infant mortality (<1)	sig	neg	1-22 yrs.
Neonatal mortality	sig	neg	1-20 yrs.
Safe drinking water	non sig	neg	never sig
Immunization measles	non sig	pos	never sig
Immunization DPT	non sig	pos	never sig

**Table 3.B.7. Hp. 4 : Short-term effects (by region).**

DV	Model	CA vs. Aut (short-term effects)									
		Africa		Rest		Asia		ex-Soc.		Latin America	
Spending on education(% gdp)	c.-FE	-0.051	No	-0.033	No	-0.083	No	0.02	No	0.041	No
	no-FE	-0.005	No	0.042	No	-0.05	No	0.302	Yes*	0.072	No
	t.-FE	-0.095	No	0.035	No	-0.034	No	0.201	No	0.026	No
1ary school completion rate	c.-FE	2.371	Yes**	1.116	No	1.915	No	2.833	No	0.081	No
	no-FE	2.134	Yes***	0.708	No	1.943	No	1.755	No	-0.14	No
	t.-FE	2.01	Yes	0.785	No	1.878	No	1.758	No	-0.117	No
Enrolment 2ary (fem)	c.-FE	0.738	Yes***	-0.202	No	0.165	No	1.333	No	-0.686	No
	no-FE	0.508	Yes**	-0.4	No	0.167	No	-1.114	No	-0.444	No
	t.-FE	0.487	Yes	-0.357	No	0.167	No	-1.26	No	-0.429	No
Spending on health (% gdp)	c.-FE	0.107	No	-0.044	No	-0.128	No	-0.107	No	0.338	No
	no-FE	0.028	No	-0.049	No	-0.119	No	-0.005	No	-0.099	No
Life expectancy	c.-FE	0.046	Yes***	0.04	Yes**	0.029	No	0.306	Yes***	0.016	No
	no-FE	0.04	Yes***	0.024	No	0.004	No	0.146	No	0.011	No
	t.-FE	0.027	Yes	0.024	No	0.004	No	0.141	No	0.01	No
Child Mortality (<5)	c.-FE	0.209	No	-0.381	No	-0.556	No	-0.001	No	0.057	No
	no-FE	0.247	No	0.179	No	-0.098	No	0.033	No	0.289	No

**Table 3.B.8. Hp. 4 : Long-term effects (by region).**

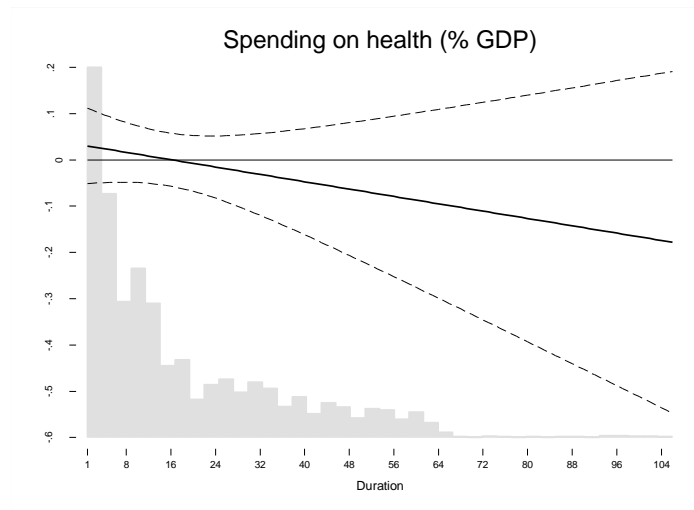
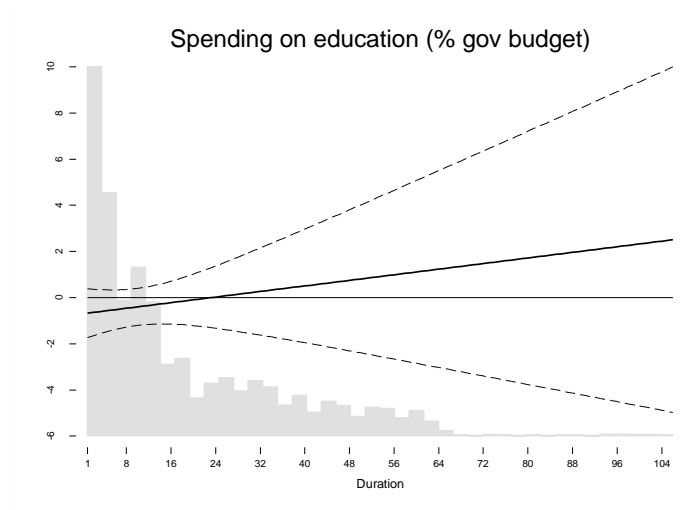
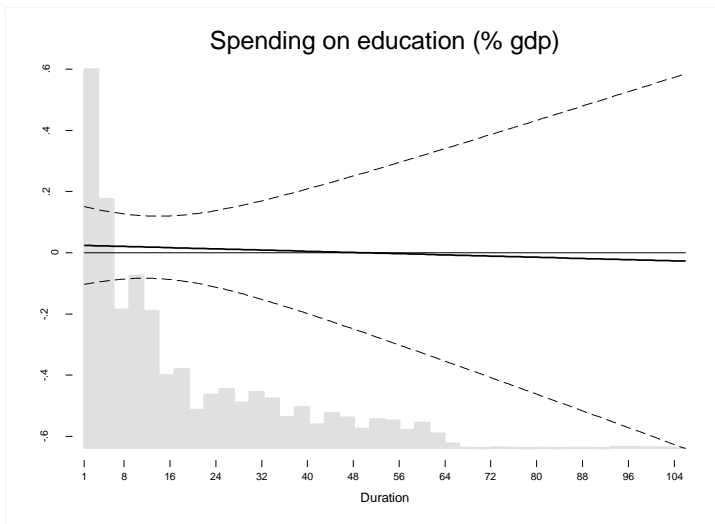
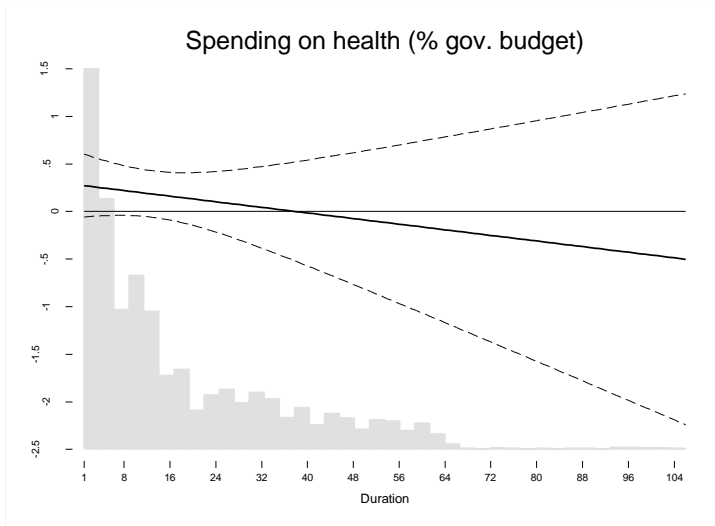
DV	Model	CA vs Aut (long-term effects)									
		Africa		Rest		Asia		ex-Soc.		Latin America	
Spending on education(% gdp)	c.-FE	-0.766	No (-)	-0.004	No	0.169	No	-1.124	No (-)	-3.1	No
	no-FE	-1.191	No	1.614	No	0.482	No	-0.257	No	-12.929	No (-)
	t.-FE	-2.73	No	1.21	No	0.646	No	-2.376	No	-11.019	No (-)
1ary school completion rate	c.-FE	12.436	Yes**	4.871	No	4.092	No	3.205	No	10.828	Yes**
	no-FE	26.687	Yes***	0.208	No	8.911	No	-0.977	No	23.333	Yes**
	t.-FE	24.573	Yes	-0.302	No	7.965	No	-0.964	No	15.2	Yes*
Enrolment 2ary (fem)	c.-FE	22.468	Yes***	1.688	No	17.729	Yes*	9.886	Yes***	3.136	No
	no-FE	712.08	Yes**	2.74	No	39.053	No	-14.333	No (-)	31.818	Yes**
	t.-FE	630.86	Yes	-2.297	No	24.289	No	-16.153	No	18.603	No
Spending on health (% gdp)	c.-FE	0.714	Yes*	-0.232	No	-0.235	No	-0.566	No	0.212	No
	no-FE	-0.007	No	0.51	No	-1.004	No	0.832	No	-6.739	No
Life expectancy	c.-FE	3.476	Yes***	2.544	Yes**	11.354	No	2.766	Yes**	1.481	No
	no-FE	6.759	Yes***	1.131	No	0.568	No	12.96	Yes***	-0.069	No
	t.-FE	4.868	Yes	1.237	No	0.372	No	12.799	Yes***	-0.54	No
Child Mortality (<5)	c.-FE	-11.25	No	-20.371	No	-23.674	Yes*	-10.872	No	4.108	No
	no-FE	-86.24	Yes**	-4.877	Yes*	-22.094	Yes***	-5.276	No	12.621	Yes**

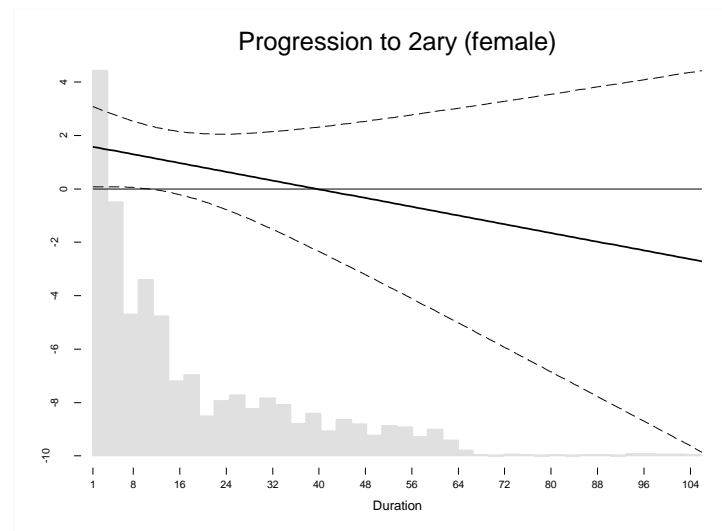
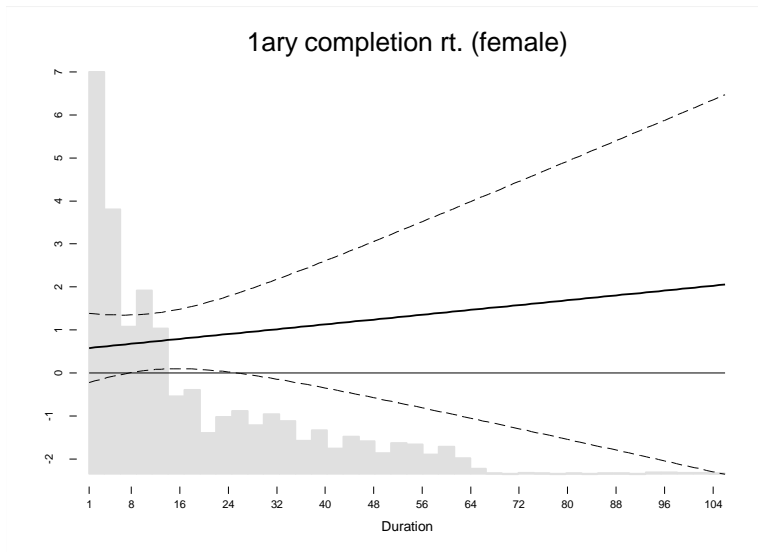
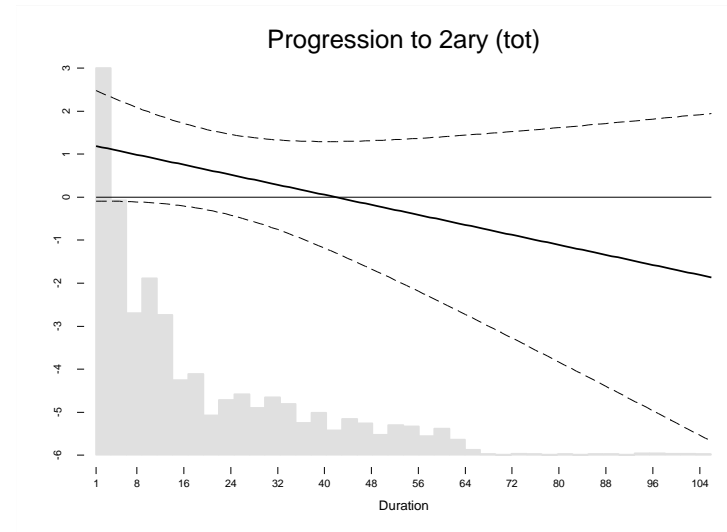
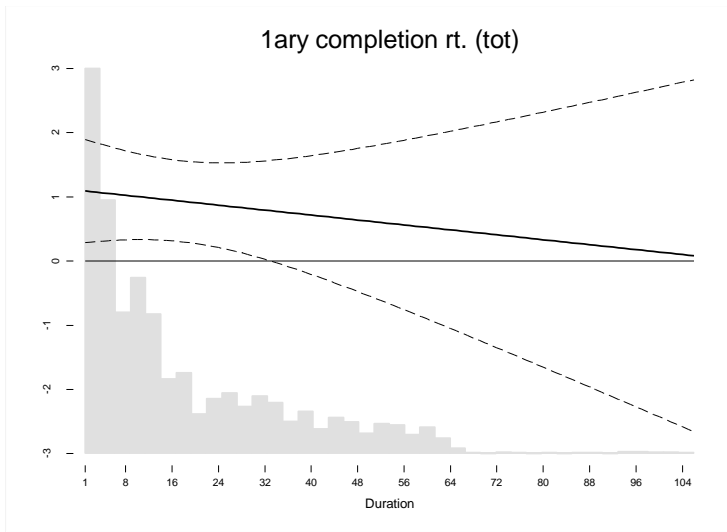


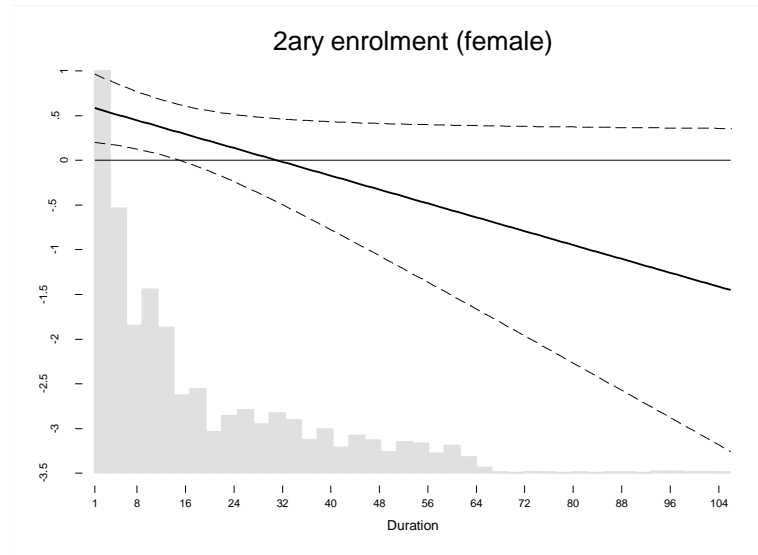
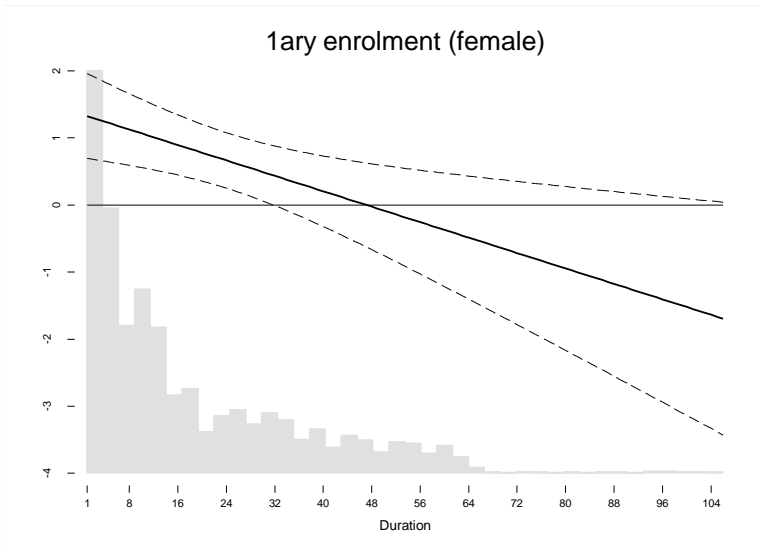
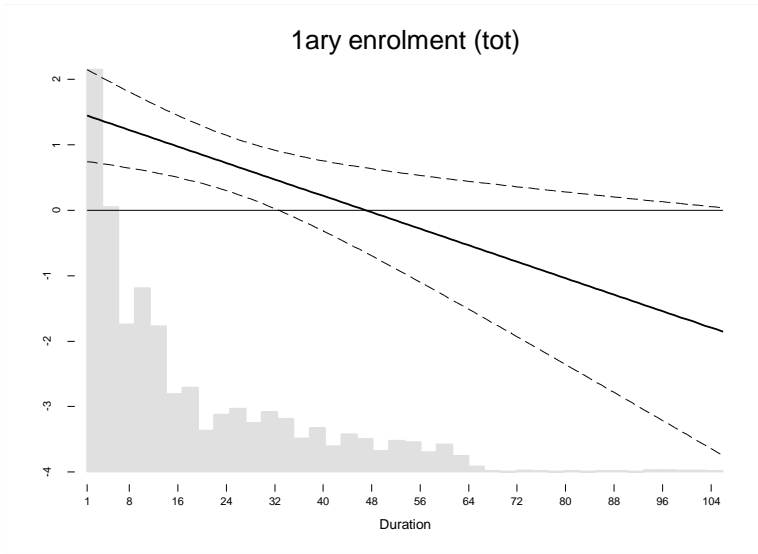
**Table 3.B.9. Hp. 4 : Comparison across models.**

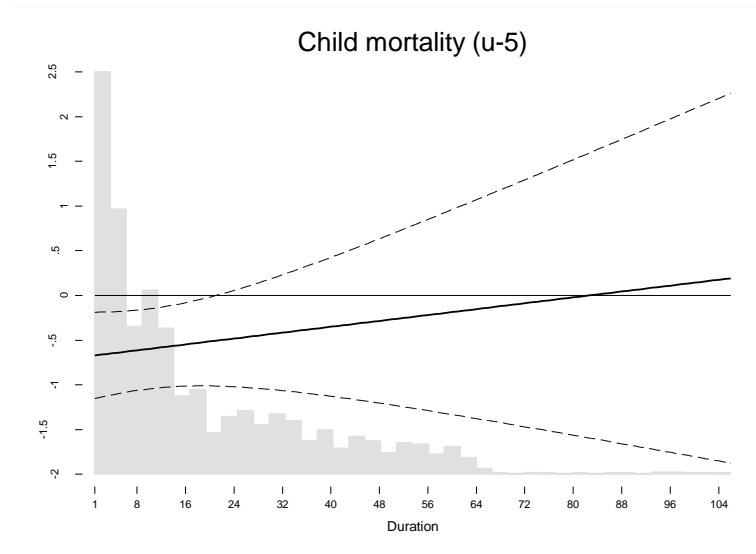
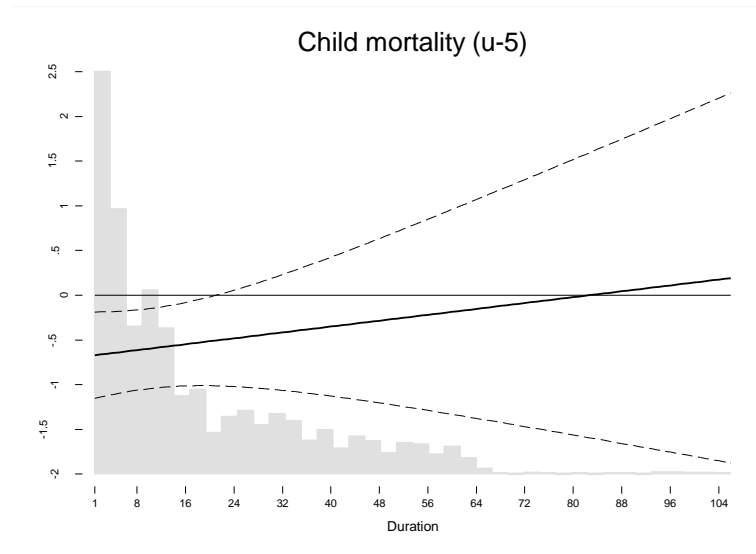
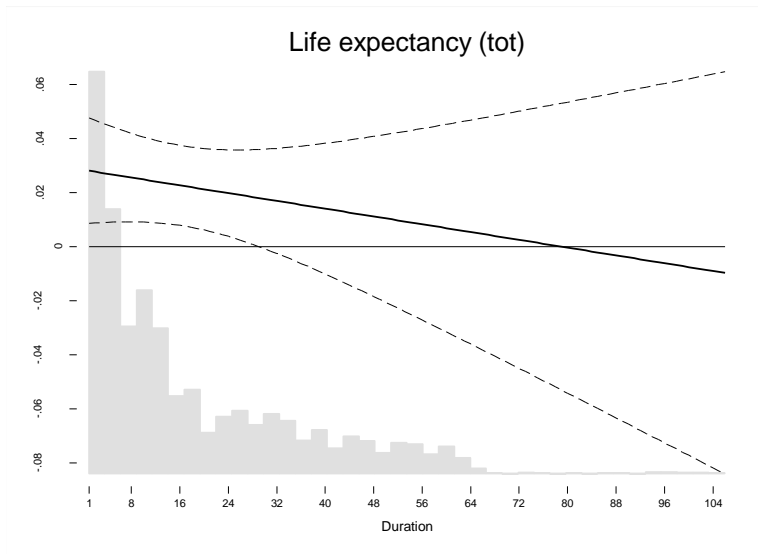
DV	CA vs. ...	Africa	Rest	Asia	ex-Soc.	Latin Am.
Spending on education (% gdp)		<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES*</b> short OLS	<b>NO</b>
1ary school completion rate		<b>YES***</b> both	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES***</b> long
Enrolment 2ary (fem)		<b>YES***</b> both	<b>NO</b>	<b>YES*</b> long FE	<b>YES*</b> long FE	<b>YES*</b> long OLS
Spending on health (% gdp)		<b>YES*</b> long FE	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
Life expectancy		<b>YES***</b> both	<b>YES*</b> both FE	<b>NO</b>	<b>YES***</b> ~ long both	<b>NO</b>
Child Mortality (<5)		<b>YES*</b> long OLS	<b>YES*</b> long OLS	<b>YES**</b> long both	<b>NO</b>	<b>NO</b>

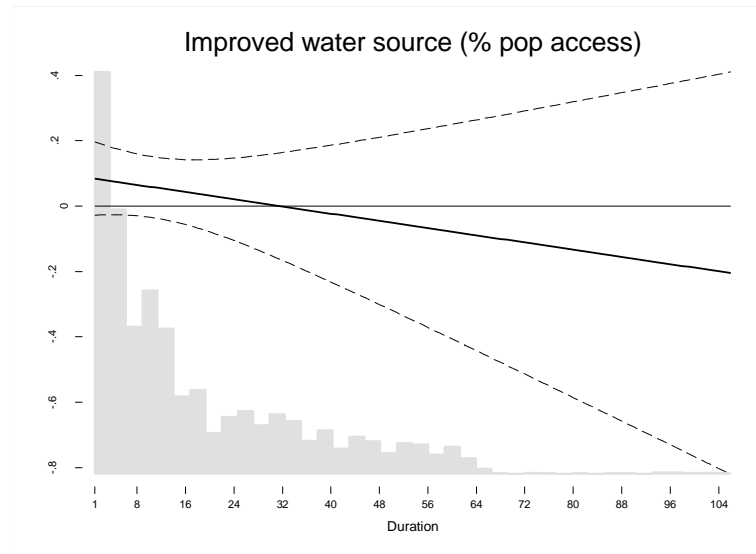
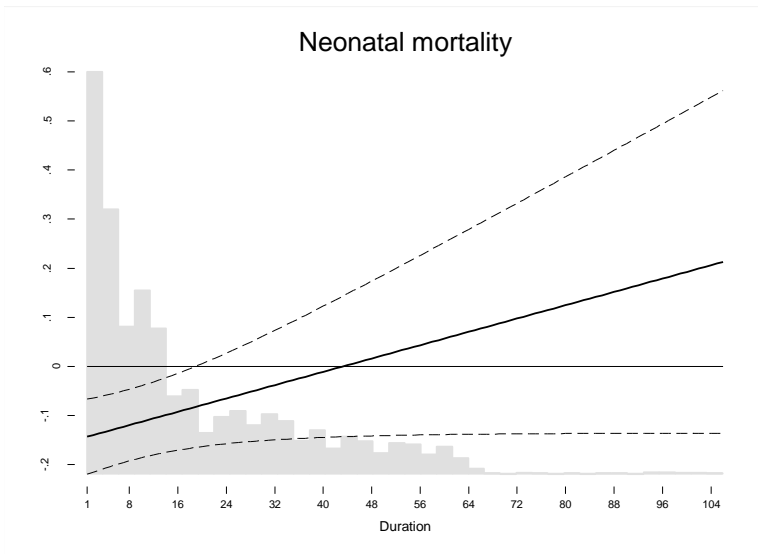
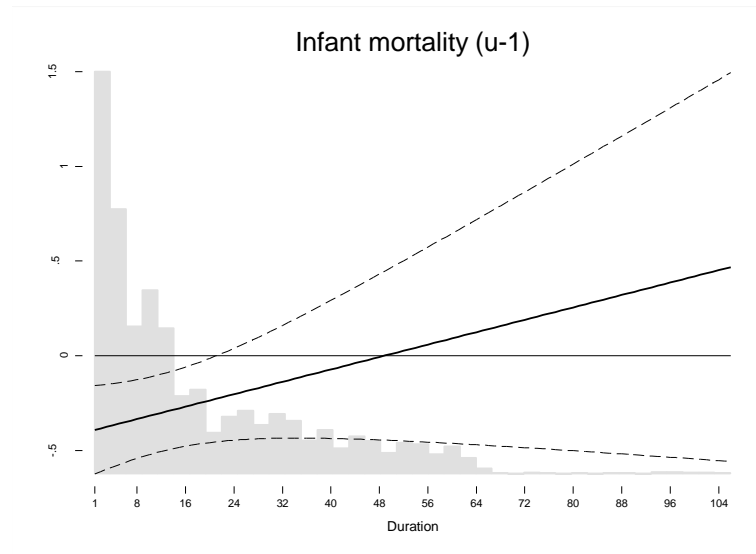
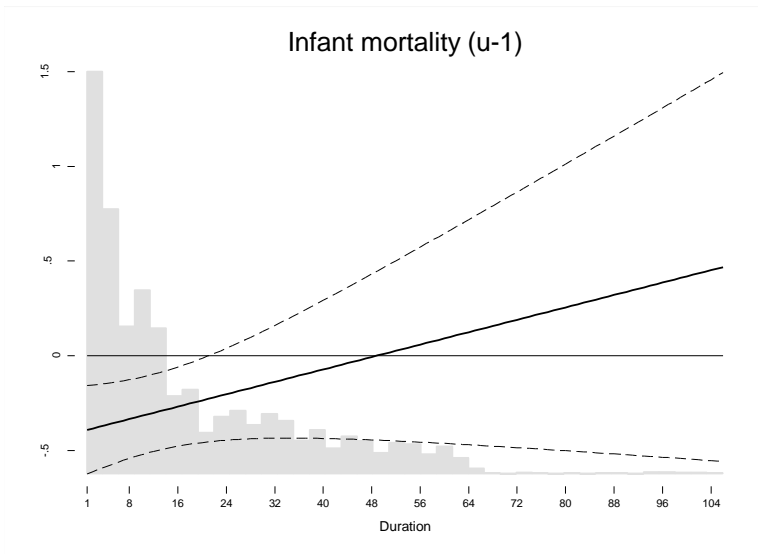
## Appendix 3.C Marginal Effects Analyses

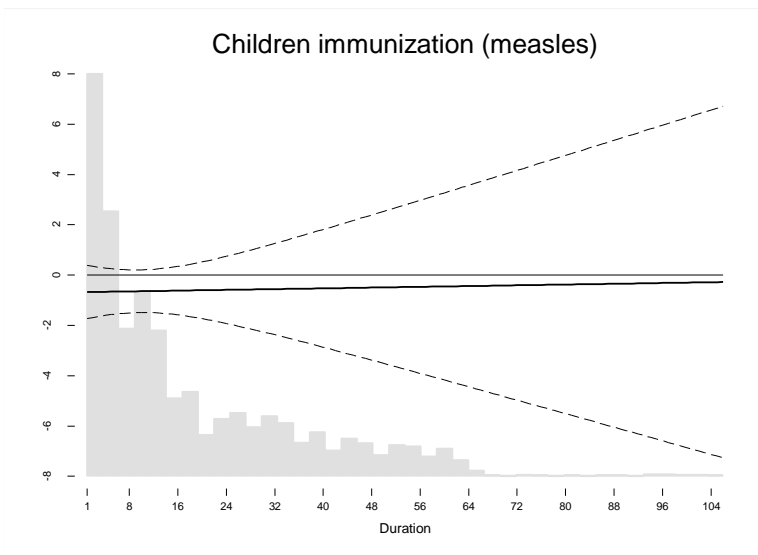
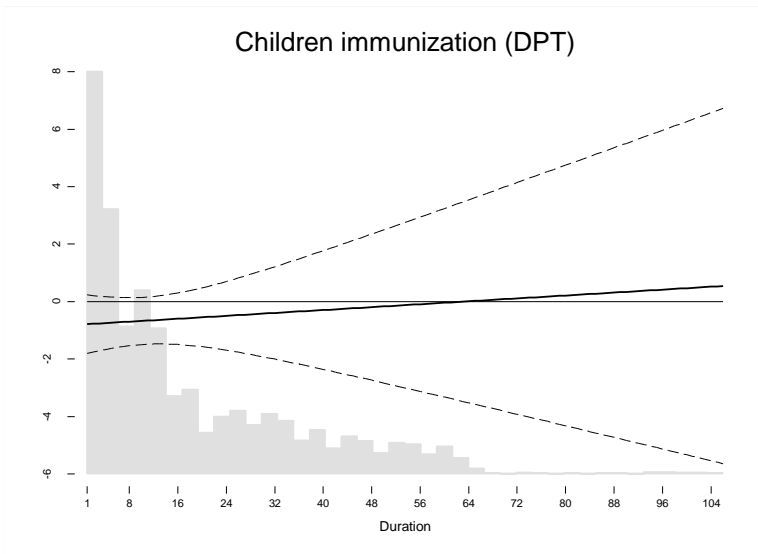












## Appendix 3.D Regression Analyses

### Public Spending on Education (% government budget)

	c-FE(1)	c-FE(2)	no-FE	no-FE(i.t.)
(L.) d.v.	-0.547 (7.97)***	-0.562 (7.66)***	-0.130 (4.13)***	-0.133 (4.38)***
(L.) CA	0.812 (0.76)	1.075 (1.35)	0.531 (0.57)	-0.706 (1.36)
(D.) CA	0.417 (0.60)	-0.409 (0.76)	-0.930 (1.25)	-0.540 (0.92)
(L.) Democracy	2.195 (1.60)	2.377 (3.31)***	0.657 (0.69)	-0.316 (0.86)
(D.) Democracy	0.682 (0.80)	-0.134 (0.24)	-0.576 (0.67)	-0.172 (0.20)
(L.) Duration	0.056 (1.81)*	0.080 (1.65)	-0.002 (0.18)	0.001 (0.11)
(D.) Duration	0.030 (0.96)	0.055 (1.24)	-0.016 (0.97)	0.002 (0.08)
(L.) Income pc (log)	-2.042 (0.94)	-2.421 (1.02)	0.006 (0.02)	-0.031 (0.11)
(D.) Income pc (log)	5.435 (1.05)	4.959 (0.92)	4.054 (1.03)	4.254 (1.03)
(L.) Agriculture	0.011 (0.15)	0.027 (0.42)	0.010 (0.51)	0.007 (0.34)
(D.) Agriculture	-0.066 (1.03)	-0.059 (0.92)	-0.067 (0.87)	-0.082 (1.05)
(L.) Econ. growth	-0.083 (1.43)	-0.072 (1.26)	-0.047 (1.07)	-0.057 (1.28)
(D.) Econ. growth	-0.100 (2.01)**	-0.097 (1.97)*	-0.087 (2.21)**	-0.092 (2.25)**
(L.) Hereditary		3.269 (4.26)***	1.419 (1.38)	
(D.) Hereditary		-1.403 (2.59)**	-1.619 (1.61)	
(L.) Other reg.		1.822 (1.27)	1.042 (0.98)	
(D.) Other reg.		-0.080 (0.08)	-0.336 (0.32)	
(L.) Single-p.		-1.532 (0.51)	0.794 (0.72)	
(D.) Single-p.		-3.018 (1.37)	-1.722 (1.36)	
(L.) CA*(L.) Duration				0.030 (0.84)
_cons	23.868 (1.32)	26.157 (1.30)	1.403 (0.50)	2.763 (1.05)
R <sup>2</sup>	0.32	0.35	0.11	0.10
N	415	415	415	415

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$



## Public Spending on Education (% GDP)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.268 (5.54)***	-0.267 (5.43)***	-0.267 (5.40)***	-0.062 (2.89)***	-0.065 (3.02)***	-0.061 (2.91)***
(L.) CA	-0.031 (0.44)	-0.022 (0.25)	-0.020 (0.22)	0.027 (0.39)	-0.036 (0.46)	0.024 (0.40)
(D.) CA	-0.005 (0.06)	-0.139 (1.91)*	-0.134 (1.82)*	-0.053 (0.65)	-0.093 (1.14)	0.032 (0.40)
(L.) Democracy	0.163 (1.16)	0.177 (1.33)	0.184 (1.30)	0.058 (0.77)	0.006 (0.07)	0.051 (0.95)
(D.) Democracy	0.206 (1.21)	0.092 (0.66)	0.096 (0.67)	0.083 (0.77)	0.051 (0.47)	0.160 (1.43)
(L.) Duration	0.002 (0.68)	0.002 (0.65)	0.002 (0.70)	0.005 (2.85)***	0.005 (2.68)***	0.005 (2.64)***
(D.) Duration	0.001 (0.39)	0.002 (0.60)	0.002 (0.50)	0.003 (1.12)	0.004 (1.32)	0.003 (1.16)
(L.) Income pc (log)	-0.188 (1.25)	-0.179 (1.17)	-0.191 (1.22)	-0.026 (0.57)	-0.026 (0.55)	-0.035 (0.73)
(D.) Income pc (log)	0.470 (0.52)	0.462 (0.51)	0.457 (0.51)	0.883 (1.19)	0.754 (1.02)	0.889 (1.20)
(L.) Agriculture	-0.034 (3.37)***	-0.033 (3.26)***	-0.033 (3.24)***	-0.004 (1.02)	-0.003 (0.98)	-0.004 (1.13)
(D.) Agriculture	-0.014 (1.13)	-0.013 (1.03)	-0.012 (0.97)	-0.001 (0.12)	-0.001 (0.08)	-0.002 (0.17)
(L.) Econ. growth	-0.013 (1.11)	-0.012 (1.03)	-0.012 (1.04)	-0.006 (0.82)	-0.006 (0.71)	-0.007 (0.87)
(D.) Econ. growth	-0.019 (1.83)*	-0.018 (1.80)*	-0.018 (1.82)*	-0.018 (2.35)**	-0.017 (2.28)**	-0.018 (2.37)**
(L.) Hereditary		-0.278 (2.56)**	-0.274 (2.56)**	0.015 (0.15)	-0.017 (0.17)	
(D.) Hereditary		-0.609 (7.06)***	-0.605 (6.94)***	-0.536 (4.77)***	-0.556 (4.56)***	
(L.) Other reg.		0.190 (1.00)	0.196 (1.01)	-0.054 (0.56)	-0.093 (0.94)	
(D.) Other reg.		-0.080 (0.61)	-0.075 (0.56)	-0.112 (0.94)	-0.142 (1.20)	
(L.) Single-p.		-0.003 (0.02)		0.041 (0.45)	0.026 (0.28)	
(D.) Single-p.		-0.312 (1.58)		-0.211 (1.24)	-0.229 (1.37)	
(L.) One-p.			0.059 (0.36)			
(D.) One-p.			0.074 (0.38)			
((L.) Other single-p.			-0.029 (0.16)			
(D.) Other single-p.			-0.366 (1.62)			
(L.) Post Cold War					0.102 (2.12)**	
(L.) CA*(L.) Duration						-0.000 (0.16)
_cons	3.227 (2.28)**	3.133 (2.17)**	3.229 (2.19)**	0.463 (1.04)	0.436 (0.98)	0.540 (1.19)
R <sup>2</sup>	0.16	0.16	0.17	0.06	0.07	0.06
N	975	975	975	975	975	975

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Primary Completion Rate (total)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.182 (6.64)***	-0.184 (6.62)***	-0.184 (6.54)***	-0.059 (4.99)***	-0.059 (5.00)***	-0.060 (5.07)***
(L.) CA	1.500 (2.78)***	0.739 (1.16)	0.739 (1.16)	1.439 (3.57)***	1.230 (2.91)***	1.102 (2.87)***
(D.) CA	1.803 (2.70)***	1.478 (2.21)**	1.510 (2.19)**	1.936 (2.76)***	1.757 (2.47)**	1.777 (2.83)***
(L.) Democracy	1.948 (3.07)***	1.169 (1.65)	1.172 (1.65)	1.404 (3.17)***	1.190 (2.40)**	0.804 (2.37)**
(D.) Democracy	1.996 (2.69)***	1.620 (1.97)*	1.654 (1.98)*	1.996 (2.51)**	1.828 (2.24)**	1.748 (2.39)**
(L.) Duration	-0.007 (0.41)	-0.011 (0.66)	-0.011 (0.64)	-0.006 (0.71)	-0.006 (0.70)	0.001 (0.14)
(D.) Duration	0.061 (2.29)**	0.059 (1.98)*	0.059 (1.97)*	0.060 (2.49)**	0.061 (2.53)**	0.056 (2.54)**
(L.) Income pc (log)	1.575 (1.61)	1.445 (1.48)	1.443 (1.47)	0.459 (1.70)*	0.508 (1.82)*	0.657 (2.38)**
(D.) Income pc (log)	2.051 (1.01)	2.059 (1.01)	2.041 (1.00)	2.587 (1.28)	2.328 (1.13)	2.652 (1.31)
(L.) Pop. young (log)	4.753 (4.17)***	4.958 (4.26)***	5.045 (3.98)***	0.280 (3.21)***	0.272 (3.18)***	0.253 (2.93)***
(D.) Pop. young (log)	-22.882 (1.58)	-24.345 (1.67)*	-24.305 (1.67)*	-22.538 (2.50)**	-19.710 (2.12)**	-19.415 (2.17)**
(L.) Pop. urban	0.043 (0.76)	0.053 (0.93)	0.053 (0.92)	0.004 (0.46)	0.002 (0.26)	0.003 (0.43)
(D.) Pop. urban	0.579 (1.17)	0.623 (1.28)	0.622 (1.27)	0.433 (1.44)	0.513 (1.68)*	0.331 (1.10)
(L.) Hereditary		nc	nc	1.696 (3.07)***	1.470 (2.51)**	
(D.) Hereditary		4.627 (6.01)***	4.656 (5.93)***	5.888 (7.22)***	5.616 (6.72)***	
(L.) Other reg.		-3.023 (3.22)***	-3.025 (3.20)***	1.173 (2.04)**	0.994 (1.69)*	
(D.) Other reg.		-1.866 (2.02)**	-1.872 (2.02)**	0.507 (0.68)	0.364 (0.48)	
(L.) Single-p.		-0.806 (1.13)		0.086 (0.19)	0.018 (0.04)	
(D.) Single-p.		-0.902 (0.93)		-0.531 (0.59)	-0.641 (0.70)	
(L.) One-p.			-0.692 (0.68)			
(D.) One-p.			-1.153 (0.77)			
(L.) Other single-p.			-0.957 (1.31)			
(D.) Other single-p.			-0.826 (0.69)			
(L.) Post Cold War					0.441 (1.24)	
(L.) CA*(L.) Duration						-0.010 (0.68)
_cons	-71.912 (3.59)***	-73.471 (3.57)***	-74.705 (3.36)***	-3.846 (1.81)*	-4.238 (1.90)*	-4.530 (2.03)**
R <sup>2</sup>	0.12	0.13	0.13	0.06	0.06	0.05
N	1,599	1,599	1,599	1,599	1,599	1,599

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Primary School Completion Rate (female)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.150 (4.69)***	-0.153 (4.70)***	-0.154 (4.71)***	-0.046 (5.15)***	-0.046 (5.14)***	-0.046 (5.18)***
(L.) CA	0.969 (1.84)*	0.241 (0.37)	0.238 (0.36)	1.407 (3.49)***	1.310 (2.88)***	0.568 (1.46)
(D.) CA	2.122 (2.56)**	1.794 (2.20)**	1.772 (2.14)**	2.494 (3.09)***	2.410 (2.94)***	2.234 (3.02)***
(L.) Democracy	1.171 (1.87)*	0.410 (0.56)	0.407 (0.56)	1.336 (2.80)***	1.241 (2.23)**	0.433 (1.20)
(D.) Democracy	2.367 (2.67)***	1.969 (2.17)**	1.949 (2.13)**	2.621 (2.90)***	2.541 (2.73)***	2.301 (2.66)***
(L.) Duration	-0.017 (0.89)	-0.023 (1.17)	-0.022 (1.14)	-0.002 (0.24)	-0.003 (0.27)	0.005 (0.50)
(D.) Duration	0.070 (2.23)**	0.064 (1.90)*	0.064 (1.91)*	0.074 (2.59)***	0.075 (2.59)***	0.081 (3.20)***
(L.) Income pc (log)	1.057 (0.95)	0.960 (0.87)	0.955 (0.86)	0.192 (0.79)	0.208 (0.84)	0.342 (1.41)
(D.) Income pc (log)	3.314 (1.46)	3.337 (1.45)	3.351 (1.45)	3.558 (1.74)*	3.489 (1.67)*	3.469 (1.70)*
(L.) Pop. young (log)	4.407 (3.14)***	4.745 (3.29)***	4.817 (3.27)***	0.269 (2.66)***	0.264 (2.68)***	0.251 (2.50)**
(D.) Pop. young (log)	-27.720 (1.97)*	-30.458 (2.13)**	-30.230 (2.09)**	-16.381 (1.85)*	-15.254 (1.63)	-14.556 (1.65)
(L.) Pop. urban	0.063 (1.19)	0.071 (1.31)	0.071 (1.31)	0.011 (1.24)	0.010 (1.19)	0.012 (1.34)
(D.) Pop. urban	0.699 (1.40)	0.741 (1.48)	0.737 (1.46)	0.380 (1.25)	0.417 (1.34)	0.304 (1.00)
(L.) Hereditary				1.816 (3.36)***	1.733 (3.00)***	
(D.) Hereditary		5.089 (5.51)***	5.068 (5.43)***	6.116 (6.54)***	6.002 (6.24)***	
(L.) Other reg.		-3.013 (3.02)***	-2.982 (2.93)***	1.395 (2.23)**	1.322 (2.03)**	
(D.) Other reg.		-1.933 (1.74)*	-1.912 (1.71)*	0.466 (0.53)	0.405 (0.46)	
(L.) Single-p.		-0.654 (0.91)		0.489 (1.13)	0.459 (1.03)	
(D.) Single-p.		-0.563 (0.53)		-0.186 (0.20)	-0.236 (0.26)	
(L.) One-p.			-0.529 (0.50)			
(D.) One-p.			-0.276 (0.20)			
(L.) Other single-p.			-0.794 (1.22)			
(D.) Other single-p.			-0.764 (0.61)			
(L.) Post Cold War					0.188 (0.44)	
(L.) CA*(L.) Duration						0.014 (0.65)
_cons	-65.274 (2.57)**	-68.859 (2.66)***	-69.856 (2.65)***	-3.056 (1.36)	-3.156 (1.36)	-3.280 (1.43)
R <sup>2</sup>	0.10	0.10	0.10	0.06	0.06	0.05
N	1,408	1,408	1,408	1,408	1,408	1,408

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Progression to Secondary School (total)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.361 (5.14)***	-0.364 (5.23)***	-0.367 (5.25)***	-0.082 (7.24)***	-0.089 (7.75)***	-0.079 (7.21)***
(L.) CA	0.793 (0.81)	-0.596 (0.53)	-0.690 (0.61)	1.809 (1.90)*	1.024 (1.02)	1.219 (1.99)**
(D.) CA	0.674 (0.62)	-0.251 (0.17)	-0.734 (0.49)	1.565 (1.23)	1.042 (0.79)	0.570 (0.64)
(L.) Democracy	0.055 (0.05)	-1.411 (0.96)	-1.484 (1.00)	1.482 (1.56)	0.675 (0.66)	0.400 (0.94)
(D.) Democracy	0.804 (0.63)	-0.222 (0.14)	-0.704 (0.43)	1.776 (1.35)	1.149 (0.84)	0.728 (0.69)
(L.) Duration	-0.022 (0.70)	-0.014 (0.42)	-0.014 (0.42)	0.002 (0.20)	0.003 (0.22)	0.015 (1.11)
(D.) Duration	0.023 (0.40)	0.009 (0.25)	0.011 (0.28)	0.053 (1.37)	0.049 (1.27)	0.071 (1.11)
(L.) Income pc (log)	4.882 (2.90)***	4.925 (2.84)***	5.001 (2.89)***	0.406 (1.32)	0.639 (2.02)**	0.592 (1.81)*
(D.) Income pc (log)	4.453 (1.31)	4.112 (1.26)	4.316 (1.30)	4.972 (1.76)*	4.049 (1.42)	5.275 (1.87)*
(L.) Pop. young (log)	9.859 (4.22)***	9.771 (4.14)***	9.893 (4.28)***	0.075 (0.64)	0.033 (0.28)	0.052 (0.47)
(D.) Pop. young (log)	-27.540 (1.51)	-27.558 (1.45)	-27.642 (1.47)	-28.132 (2.99)***	-20.930 (2.17)**	-22.485 (2.57)**
(L.) Pop. urban	0.296 (2.72)***	0.306 (2.83)***	0.307 (2.87)***	0.004 (0.29)	-0.001 (0.10)	0.002 (0.15)
(D.) Pop. urban	-1.445 (1.68)*	-1.386 (1.63)	-1.431 (1.66)	0.005 (0.01)	0.275 (0.64)	-0.052 (0.12)
(L.) Hereditary		-6.593 (4.90)***	-6.680 (4.94)***	2.198 (2.06)**	1.372 (1.21)	
(D.) Hereditary		-6.333 (3.68)***	-6.775 (4.17)***	-0.976 (0.68)	-1.728 (1.15)	
(L.) Other reg.		-1.260 (0.55)	-1.239 (0.57)	1.166 (0.95)	0.551 (0.44)	
(D.) Other reg.		-1.252 (0.57)	-1.296 (0.62)	0.880 (0.47)	0.421 (0.23)	
(L.) Single-p.		-2.377 (1.49)		0.841 (0.77)	0.502 (0.45)	
(D.) Single-p.		-0.058 (0.02)		2.423 (0.94)	2.152 (0.83)	
(L.) One-p.			-2.478 (1.36)			
(D.) One-p.			3.793 (0.81)			
(L.) Other single-p.			-2.152 (1.07)			
(D.) Other single-p.			-2.000 (0.90)			
(L.) Post Cold War					1.652 (2.97)***	
(L.) CA*(L.) Duration						-0.029 (1.43)
_cons	-170.833 (4.46)***	-168.254 (4.30)***	-170.414 (4.33)***	0.877 (0.28)	-0.331 (0.11)	0.328 (0.10)
R <sup>2</sup>	0.21	0.22	0.22	0.06	0.07	0.06
N	1,215	1,215	1,215	1,215	1,215	1,215

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Progression to Secondary School (female)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.387 (4.85)***	-0.389 (4.95)***	-0.393 (4.97)***	-0.098 (7.52)***	-0.104 (7.95)***	-0.095 (7.52)***
(L.) CA	0.684 (0.55)	-0.518 (0.36)	-0.768 (0.53)	2.134 (1.74)*	1.340 (1.03)	1.618 (2.23)**
(D.) CA	0.203 (0.15)	-0.844 (0.37)	-1.472 (0.64)	1.742 (1.02)	1.237 (0.70)	0.872 (0.88)
(L.) Democracy	0.861 (0.67)	-0.376 (0.20)	-0.584 (0.31)	1.829 (1.50)	1.079 (0.84)	0.789 (1.72)*
(D.) Democracy	1.721 (1.18)	0.631 (0.29)	0.057 (0.03)	2.700 (1.56)	2.140 (1.19)	1.822 (1.56)
(L.) Duration	-0.036 (0.90)	-0.032 (0.83)	-0.030 (0.79)	0.012 (0.84)	0.009 (0.65)	0.024 (1.63)
(D.) Duration	0.049 (0.76)	0.039 (0.81)	0.045 (0.87)	0.094 (1.95)*	0.087 (1.80)*	0.103 (1.37)
(L.) Income pc (log)	3.795 (2.38)**	3.904 (2.34)**	3.863 (2.37)**	0.508 (1.53)	0.674 (1.99)**	0.648 (1.88)*
(D.) Income pc (log)	2.471 (0.59)	2.115 (0.53)	2.313 (0.55)	5.636 (1.61)	5.233 (1.49)	5.787 (1.66)*
(L.) Pop. young (log)	7.279 (2.78)***	7.393 (2.79)***	7.931 (3.08)***	0.054 (0.42)	0.010 (0.08)	0.041 (0.34)
(D.) Pop. young (log)	-9.312 (0.52)	-11.215 (0.60)	-11.492 (0.62)	-26.104 (2.62)***	-19.360 (1.86)*	-22.187 (2.33)**
(L.) Pop. urban	0.499 (3.40)***	0.496 (3.44)***	0.499 (3.46)***	0.018 (1.17)	0.014 (0.91)	0.016 (1.08)
(D.) Pop. urban	-1.457 (2.01)**	-1.436 (2.03)**	-1.420 (2.01)**	-0.222 (0.50)	0.043 (0.09)	-0.220 (0.49)
(L.) Hereditary		-6.817 (4.38)***	-7.045 (4.54)***	1.809 (1.35)	1.243 (0.89)	
(D.) Hereditary		-7.255 (2.97)***	-7.784 (3.36)***	-0.978 (0.54)	-1.620 (0.85)	
(L.) Other reg.		-1.108 (0.43)	-1.062 (0.43)	0.942 (0.61)	0.416 (0.27)	
(D.) Other reg.		-1.351 (0.56)	-1.424 (0.59)	0.606 (0.29)	0.193 (0.09)	
(L.) Single-p.		-1.729 (0.95)		0.924 (0.66)	0.613 (0.43)	
(D.) Single-p.		-0.396 (0.12)		1.947 (0.55)	1.733 (0.49)	
(L.) One-p.			-1.161 (0.66)			
(D.) One-p.			2.769 (0.46)			
(L.) Other single-p.			-2.523 (1.05)			
(D.) Other single-p.			-2.396 (0.81)			
(L.) Post Cold War					1.615 (2.38)**	
(L.) CA*(L.) Duration						-0.041 (1.15)
_cons	-131.138 (3.26)***	-131.502 (3.17)***	-138.823 (3.35)***	0.711 (0.21)	-0.085 (0.03)	0.426 (0.12)
R <sup>2</sup>	0.23	0.24	0.24	0.08	0.09	0.08
N	1,004	1,004	1,004	1,004	1,004	1,004

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Primary Scholl Enrolment (total)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.063 (2.60)**	-0.063 (2.68)***	-0.064 (2.72)***	-0.029 (4.56)***	-0.030 (4.57)***	-0.029 (4.34)***
(L.) CA	1.820 (3.28)***	2.305 (4.08)***	2.336 (4.09)***	1.680 (4.97)***	1.467 (3.98)***	1.476 (4.40)***
(D.) CA	1.390 (2.68)***	1.696 (2.96)***	1.673 (3.00)***	1.578 (3.53)***	1.420 (3.09)***	1.219 (3.38)***
(L.) Democracy	1.897 (3.22)***	2.378 (3.82)***	2.352 (3.82)***	1.428 (4.02)***	1.244 (3.30)***	0.787 (3.14)***
(D.) Democracy	1.406 (2.55)**	1.797 (2.95)***	1.734 (2.93)***	1.538 (3.07)***	1.406 (2.78)***	1.010 (2.32)**
(L.) Duration	0.003 (0.25)	-0.001 (0.04)	0.001 (0.05)	0.004 (0.70)	0.005 (0.85)	0.014 (1.95)*
(D.) Duration	0.003 (0.15)	0.016 (0.78)	0.021 (1.01)	0.011 (0.57)	0.012 (0.62)	0.001 (0.09)
(L.) Income pc (log)	-0.679 (0.43)	-0.492 (0.33)	-0.419 (0.29)	-0.505 (2.84)***	-0.465 (2.56)**	-0.289 (1.75)*
(D.) Income pc (log)	2.740 (1.19)	3.112 (1.49)	3.150 (1.54)	4.552 (2.48)**	4.287 (2.32)**	4.498 (2.18)**
(L.) Pop. young (log)	1.828 (0.92)	1.972 (1.05)	1.290 (0.71)	0.034 (0.53)	0.031 (0.48)	0.016 (0.25)
(D.) Pop. young (log)	-25.344 (1.48)	-27.953 (1.70)*	-26.582 (1.67)*	-5.586 (1.10)	-2.773 (0.52)	-0.409 (0.08)
(L.) Pop. urban	-0.019 (0.30)	-0.033 (0.56)	-0.027 (0.47)	0.004 (0.68)	0.002 (0.31)	0.003 (0.53)
(D.) Pop. urban	0.372 (0.88)	0.440 (1.01)	0.476 (1.11)	0.267 (1.46)	0.341 (1.89)*	0.177 (0.95)
(L.) Hereditary		4.196 (1.72)*	3.979 (1.65)	1.759 (3.81)***	1.566 (3.22)***	
(D.) Hereditary		-9.950 (1.11)	-9.965 (1.12)	-10.512 (1.16)	-10.755 (1.20)	
(L.) Other reg.		2.960 (1.71)*	2.839 (1.61)	2.380 (3.95)***	2.237 (3.56)***	
(D.) Other reg.		3.116 (2.46)**	3.095 (2.44)**	2.972 (3.50)***	2.841 (3.31)***	
(L.) Single-p.		0.439 (0.54)		0.067 (0.18)	0.010 (0.03)	
(D.) Single-p.		0.287 (0.33)		-0.035 (0.04)	-0.081 (0.09)	
(L.) One-p.			-0.649 (0.70)			
(D.) One-p.			0.283 (0.25)			
(L.) Other single-p.			1.721 (1.86)*			
(D.) Other single-p.			0.860 (1.13)			
(L.) Post Cold War					0.455 (2.09)**	
(L.) CA*(L.) Duration						-0.031 (2.94)***
_cons	-15.671 (0.43)	-19.523 (0.56)	-10.094 (0.30)	5.325 (3.13)***	4.949 (2.86)***	4.359 (2.64)***
R <sup>2</sup>	0.06	0.08	0.08	0.08	0.08	0.05
N	2,560	2,560	2,560	2,560	2,560	2,560

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Primary School Enrolment (female)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.055 (3.47)***	-0.054 (3.50)***	-0.054 (3.53)***	-0.024 (5.68)***	-0.025 (5.81)***	-0.025 (5.64)***
(L.) CA	1.635 (3.48)***	2.104 (4.03)***	2.110 (4.02)***	1.687 (5.17)***	1.401 (3.93)***	1.356 (4.47)***
(D.) CA	1.434 (3.28)***	1.720 (3.37)***	1.697 (3.36)***	1.518 (3.53)***	1.284 (2.88)***	1.248 (3.44)***
(L.) Democracy	1.711 (2.98)***	2.181 (3.49)***	2.126 (3.43)***	1.346 (3.85)***	1.091 (2.95)***	0.590 (2.50)**
(D.) Democracy	1.708 (3.27)***	2.115 (3.61)***	2.053 (3.54)***	1.644 (3.27)***	1.450 (2.84)***	1.171 (2.61)***
(L.) Duration	-0.006 (0.49)	-0.014 (1.09)	-0.014 (1.07)	-0.002 (0.44)	-0.001 (0.24)	0.010 (1.47)
(D.) Duration	0.012 (0.61)	0.025 (1.20)	0.028 (1.38)	0.020 (0.98)	0.022 (1.08)	0.007 (0.44)
(L.) Income pc (log)	1.166 (1.64)	1.178 (1.69)*	1.268 (1.84)*	-0.287 (1.85)*	-0.233 (1.50)	-0.102 (0.70)
(D.) Income pc (log)	3.327 (1.77)*	3.833 (2.43)**	3.924 (2.50)**	4.298 (2.60)***	3.982 (2.40)**	4.158 (2.16)**
(L.) Pop. young (log)	3.441 (3.06)***	3.490 (3.45)***	2.888 (2.97)***	0.104 (2.11)**	0.098 (1.98)**	0.082 (1.69)*
(D.) Pop. young (log)	-17.796 (1.40)	-21.438 (1.75)*	-20.155 (1.70)*	-1.364 (0.30)	2.232 (0.45)	3.169 (0.66)
(L.) Pop. urban	-0.073 (1.94)*	-0.080 (2.22)**	-0.074 (2.10)**	-0.005 (1.07)	-0.008 (1.54)	-0.005 (1.03)
(D.) Pop. urban	0.302 (0.73)	0.348 (0.87)	0.368 (0.94)	0.257 (1.53)	0.359 (2.17)**	0.176 (1.03)
(L.) Hereditary		3.665 (1.55)	3.481 (1.49)	1.930 (4.33)***	1.672 (3.58)***	
(D.) Hereditary		-9.670 (1.11)	-9.677 (1.12)	-10.251 (1.13)	-10.606 (1.18)	
(L.) Other reg.		1.263 (1.04)	1.206 (1.00)	1.823 (3.86)***	1.625 (3.29)***	
(D.) Other reg.		2.320 (2.50)**	2.323 (2.52)**	2.556 (3.44)***	2.355 (3.17)***	
(L.) Single-p.		0.832 (1.16)		0.436 (1.23)	0.364 (1.02)	
(D.) Single-p.		0.090 (0.11)		-0.311 (0.38)	-0.379 (0.46)	
(L.) One-p.			-0.120 (0.17)			
(D.) One-p.			0.017 (0.01)			
(L.) Other single-p.			1.952 (2.27)**			
(D.) Other single-p.			0.565 (0.72)			
(L.) Post Cold War					0.611 (2.98)***	
(L.) CA*(L.) Duration						-0.029 (2.99)***
_cons	-52.603 (2.97)***	-53.898 (3.28)***	-45.792 (2.95)***	2.550 (1.80)*	2.076 (1.47)	1.967 (1.44)
R <sup>2</sup>	0.06	0.08	0.08	0.08	0.09	0.06
N	2,368	2,368	2,368	2,368	2,368	2,368

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Secondary School Enrolment (total)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.072 (5.91)***	-0.072 (5.91)***	-0.071 (5.82)***	-0.022 (5.54)***	-0.023 (5.82)***	-0.023 (5.70)***
(L.) CA	0.810 (3.31)***	0.711 (3.06)***	0.724 (3.10)***	0.792 (4.40)***	0.556 (2.95)***	0.773 (4.51)***
(D.) CA	0.308 (1.09)	0.173 (0.59)	0.174 (0.58)	0.258 (0.99)	0.104 (0.39)	0.170 (0.71)
(L.) Democracy	0.604 (1.69)*	0.509 (1.41)	0.512 (1.42)	0.730 (3.63)***	0.527 (2.63)***	0.384 (2.41)**
(D.) Democracy	0.036 (0.13)	-0.095 (0.34)	-0.095 (0.34)	0.038 (0.14)	-0.094 (0.34)	-0.094 (0.37)
(L.) Duration	0.003 (0.21)	0.004 (0.27)	0.004 (0.27)	0.003 (0.71)	0.004 (0.88)	0.011 (2.72)***
(D.) Duration	0.014 (0.97)	0.013 (0.87)	0.015 (0.92)	0.009 (1.02)	0.010 (1.17)	0.014 (1.48)
(L.) Income pc (log)	1.904 (3.67)***	1.905 (3.64)***	1.926 (3.71)***	0.416 (3.59)***	0.462 (3.98)***	0.501 (4.17)***
(D.) Income pc (log)	0.963 (0.74)	0.992 (0.75)	1.027 (0.78)	1.386 (1.21)	1.131 (0.97)	1.485 (1.30)
(L.) Pop. young (log)	0.743 (1.17)	0.752 (1.19)	0.545 (0.85)	0.071 (2.02)**	0.066 (1.93)*	0.063 (1.79)*
(D.) Pop. young (log)	-18.795 (1.69)*	-18.863 (1.69)*	-18.657 (1.67)*	-11.861 (2.56)**	-8.746 (1.83)*	-10.003 (2.19)**
(L.) Pop. urban	0.056 (2.11)**	0.057 (2.10)**	0.057 (2.11)**	0.001 (0.14)	-0.001 (0.18)	0.001 (0.36)
(D.) Pop. urban	0.416 (1.24)	0.411 (1.22)	0.422 (1.27)	0.491 (3.74)***	0.548 (4.18)***	0.444 (3.31)***
(L.) Hereditary		-0.641 (1.77)*	-0.653 (1.79)*	0.938 (3.09)***	0.710 (2.29)**	
(D.) Hereditary		0.331 (0.97)	0.322 (0.91)	1.502 (1.19)	1.101 (0.82)	
(L.) Other reg.		-0.218 (0.51)	-0.263 (0.63)	0.575 (1.84)*	0.333 (1.09)	
(D.) Other reg.		-0.454 (1.49)	-0.474 (1.60)	0.070 (0.22)	-0.121 (0.37)	
(L.) Single-p.		-0.148 (0.51)		0.256 (1.38)	0.170 (0.91)	
(D.) Single-p.		-0.159 (0.47)		0.219 (0.81)	0.154 (0.56)	
(L.) One-p.			-0.444 (1.22)			
(D.) One-p.			-0.289 (0.73)			
(L.) Other single-p.			0.173 (0.49)			
(D.) Other single-p.			0.021 (0.05)			
(L.) Post Cold War					0.510 (4.09)***	
(L.) CA*(L.) Duration						-0.025 (3.01)***
_cons	-24.672 (2.50)**	-24.709 (2.49)**	-21.805 (2.21)**	-3.033 (3.16)***	-3.435 (3.55)***	-3.389 (3.61)***
R <sup>2</sup>	0.07	0.07	0.07	0.05	0.06	0.05
N	2,064	2,064	2,064	2,064	2,064	2,064

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$



## Secondary School Enrolment (female)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.065 (5.84)***	-0.065 (5.88)***	-0.065 (5.80)***	-0.016 (4.20)***	-0.017 (4.42)***	-0.017 (4.33)***
(L.) CA	0.584 (2.14)**	0.668 (2.46)**	0.675 (2.48)**	0.805 (4.11)***	0.580 (2.84)***	0.602 (3.28)***
(D.) CA	0.178 (0.63)	0.248 (0.83)	0.264 (0.86)	0.299 (1.18)	0.160 (0.63)	0.068 (0.29)
(L.) Democracy	0.571 (1.49)	0.665 (1.76)*	0.665 (1.75)*	0.734 (3.46)***	0.532 (2.48)**	0.255 (1.56)
(D.) Democracy	0.287 (0.84)	0.352 (1.02)	0.364 (1.03)	0.318 (1.24)	0.187 (0.72)	0.058 (0.24)
(L.) Duration	-0.005 (0.45)	-0.005 (0.42)	-0.005 (0.43)	0.002 (0.47)	0.003 (0.63)	0.009 (1.96)*
(D.) Duration	0.015 (0.98)	0.014 (0.89)	0.015 (0.91)	0.013 (1.42)	0.014 (1.53)	0.018 (1.93)*
(L.) Income pc (log)	1.972 (3.49)***	1.938 (3.40)***	1.959 (3.44)***	0.411 (3.56)***	0.452 (3.89)***	0.482 (4.03)***
(D.) Income pc (log)	0.294 (0.23)	0.286 (0.22)	0.337 (0.26)	0.997 (0.86)	0.717 (0.62)	1.175 (1.02)
(L.) Pop. young (log)	0.894 (1.22)	0.858 (1.18)	0.743 (1.04)	0.070 (1.83)*	0.066 (1.76)*	0.066 (1.74)*
(D.) Pop. young (log)	-12.286 (1.12)	-12.534 (1.13)	-12.393 (1.12)	-7.356 (1.59)	-4.626 (0.97)	-6.012 (1.34)
(L.) Pop. urban	0.063 (2.15)**	0.065 (2.18)**	0.065 (2.18)**	-0.001 (0.27)	-0.003 (0.56)	-0.000 (0.02)
(D.) Pop. urban	0.325 (1.08)	0.314 (1.04)	0.319 (1.06)	0.575 (4.08)***	0.628 (4.44)***	0.537 (3.76)***
(L.) Hereditary		-0.758 (2.04)**	-0.763 (2.04)**	0.943 (3.07)***	0.737 (2.33)**	
(D.) Hereditary		0.257 (0.66)	0.267 (0.66)	1.367 (1.04)	1.009 (0.73)	
(L.) Other reg.		0.108 (0.19)	0.093 (0.17)	0.906 (2.72)***	0.677 (2.05)**	
(D.) Other reg.		0.051 (0.14)	0.046 (0.13)	0.482 (1.67)*	0.314 (1.05)	
(L.) Single-p.		0.226 (0.74)		0.419 (2.15)**	0.341 (1.73)*	
(D.) Single-p.		0.148 (0.43)		0.393 (1.42)	0.342 (1.22)	
(L.) One-p.			0.049 (0.15)			
(D.) One-p.			-0.104 (0.27)			
(L.) Other single-p.			0.406 (0.91)			
(D.) Other single-p.			0.336 (0.78)			
(L.) Post Cold War					0.470 (3.51)***	
(L.) CA*(L.) Duration						-0.019 (2.18)**
_cons	-28.060 (2.46)**	-27.315 (2.41)**	-25.783 (2.32)**	-3.277 (3.38)***	-3.648 (3.73)***	-3.452 (3.71)***
R <sup>2</sup>	0.06	0.06	0.06	0.05	0.05	0.04
N	1,773	1,773	1,773	1,773	1,773	1,773

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Public Spending on Health (% government budget)

	c-FE(1)	c-FE(2)	no-FE	no-FE(i.t.)
(L.) d.v.	-0.389 (7.29)***	-0.389 (7.19)***	-0.124 (4.73)***	-0.124 (4.75)***
(L.) CA	0.281 (0.91)	0.194 (0.42)	0.211 (0.73)	0.279 (1.75)*
(D.) CA	-0.066 (0.19)	-0.177 (0.54)	-0.146 (0.42)	-0.129 (0.42)
(L.) Democracy	0.368 (0.75)	0.286 (0.46)	0.486 (1.61)	0.496 (3.57)***
(D.) Democracy	0.236 (0.46)	0.128 (0.24)	0.367 (0.75)	0.387 (0.82)
(L.) Duration	-0.002 (0.29)	-0.001 (0.15)	0.010 (2.30)**	0.010 (2.29)**
(D.) Duration	0.000 (0.04)	0.001 (0.08)	0.003 (0.35)	0.003 (0.34)
(L.) Income pc (log)	-0.125 (0.39)	-0.137 (0.42)	-0.080 (1.51)	-0.079 (1.60)
(D.) Income pc (log)	-0.547 (0.36)	-0.529 (0.35)	-1.277 (0.92)	-1.277 (0.93)
(L.) Econ. growth	0.026 (1.08)	0.026 (1.09)	0.029 (1.33)	0.029 (1.33)
(D.) Econ. growth	-0.002 (0.09)	-0.002 (0.09)	-0.002 (0.14)	-0.002 (0.14)
(L.) Pop. dep. (log)	1.337 (1.37)	1.360 (1.39)	-0.032 (1.11)	-0.026 (0.95)
(D.) Pop. dep. (log)	-7.853 (1.05)	-8.107 (1.09)	0.222 (0.08)	0.100 (0.04)
(L.) Hereditary		-0.388 (0.76)	-0.070 (0.20)	
(D.) Hereditary		-0.081 (0.12)	0.141 (0.10)	
(L.) Other reg.		0.009 (0.02)	0.072 (0.22)	
(D.) Other reg.		-0.123 (0.32)	0.033 (0.08)	
(L.) Single-p.		-0.193 (0.34)	0.006 (0.02)	
(D.) Single-p.		-0.190 (0.40)	-0.033 (0.06)	
(L.) CA*(L.) Duration				-0.007 (0.85)
_cons	-15.625 (1.02)	-15.767 (1.03)	1.884 (2.84)***	1.794 (2.94)***
R <sup>2</sup>	0.21	0.21	0.09	0.09
N	1,556	1,556	1,556	1,556

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Public Spending on Health (% GDP)

	c-FE(1)	c-FE(2)	no-FE	no-FE(i.t.)
(L.) d.v.	-0.327 (10.64)***	-0.326 (10.65)***	-0.043 (2.26)**	-0.044 (2.27)**
(L.) CA	0.129 (1.75)*	0.152 (1.84)*	0.063 (1.11)	0.032 (0.82)
(D.) CA	0.058 (0.90)	0.107 (1.48)	0.076 (1.30)	-0.004 (0.08)
(L.) Democracy	0.146 (1.26)	0.171 (1.36)	0.141 (2.26)**	0.096 (2.73)***
(D.) Democracy	0.043 (0.53)	0.096 (1.03)	0.099 (1.18)	0.018 (0.22)
(L.) Duration	-0.000 (0.22)	-0.000 (0.08)	0.003 (1.92)*	0.003 (1.77)*
(D.) Duration	0.001 (0.65)	0.001 (0.61)	0.002 (0.91)	0.001 (0.85)
(L.) Income pc (log)	0.128 (1.28)	0.123 (1.21)	-0.025 (1.64)	-0.026 (1.79)*
(D.) Income pc (log)	0.213 (0.57)	0.218 (0.58)	-0.348 (0.91)	-0.359 (0.94)
(L.) Econ. growth	-0.005 (0.88)	-0.005 (0.91)	-0.000 (0.10)	-0.000 (0.03)
(D.) Econ. growth	-0.011 (2.42)**	-0.011 (2.47)**	-0.009 (1.97)**	-0.008 (1.89)*
(L.) Pop. dep. (log)	0.330 (1.48)	0.324 (1.45)	-0.009 (1.31)	-0.007 (0.97)
(D.) Pop. dep. (log)	-2.296 (1.18)	-2.328 (1.21)	-0.749 (0.99)	-0.875 (1.20)
(L.) Hereditary		0.034 (0.38)	0.011 (0.14)	
(D.) Hereditary		0.054 (0.61)	0.058 (0.23)	
(L.) Other reg.		0.058 (0.34)	0.096 (1.38)	
(D.) Other reg.		0.087 (0.81)	0.137 (1.67)*	
(L.) Single-p.		0.007 (0.07)	0.052 (0.79)	
(D.) Single-p.		0.077 (0.73)	0.141 (1.41)	
(L.) CA*(L.) Duration				-0.002 (1.06)
_cons	-5.169 (1.46)	-5.059 (1.43)	0.399 (2.10)**	0.416 (2.24)**
R <sup>2</sup>	0.18	0.18	0.04	0.04
N	1,552	1,552	1,552	1,552

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Life Expectancy (total)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.021 (5.58)***	-0.021 (5.52)***	-0.021 (5.50)***	-0.005 (6.73)***	-0.005 (6.70)***	-0.005 (6.69)***
(L.) CA	0.046 (3.48)***	0.056 (3.45)***	0.056 (3.44)***	0.028 (2.40)**	0.023 (1.92)*	0.028 (3.03)***
(D.) CA	0.036 (3.23)***	0.040 (3.09)***	0.038 (3.03)***	0.032 (2.68)***	0.029 (2.42)**	0.031 (2.52)**
(L.) Democracy	0.041 (2.51)**	0.052 (2.92)***	0.051 (2.90)***	0.016 (1.35)	0.013 (1.06)	0.012 (1.60)
(D.) Democracy	0.017 (1.29)	0.022 (1.65)	0.020 (1.55)	0.011 (0.90)	0.008 (0.70)	0.008 (0.68)
(L.) Duration	0.000 (1.02)	0.001 (1.22)	0.001 (1.28)	0.000 (1.83)*	0.000 (1.84)*	0.000 (2.46)**
(D.) Duration	0.000 (1.06)	0.001 (1.71)*	0.001 (1.81)*	0.001 (2.49)**	0.001 (2.55)**	0.001 (2.41)**
(L.) Income pc (log)	0.014 (0.79)	0.015 (0.88)	0.014 (0.86)	0.018 (3.28)***	0.019 (3.33)***	0.021 (3.67)***
(D.) Income pc (log)	-0.005 (0.13)	-0.003 (0.07)	-0.004 (0.11)	-0.027 (0.35)	-0.033 (0.42)	-0.030 (0.38)
(L.) Pop. growth	-0.018 (1.25)	-0.018 (1.25)	-0.018 (1.26)	-0.022 (4.25)***	-0.022 (4.26)***	-0.021 (4.23)***
(D.) Pop. growth	0.038 (2.67)***	0.038 (2.62)***	0.038 (2.64)***	0.037 (2.80)***	0.037 (2.80)***	0.038 (2.87)***
(L.) Pop. urban	0.006 (3.29)***	0.006 (3.07)***	0.006 (3.03)***	0.001 (2.59)***	0.000 (2.40)**	0.001 (2.60)***
(D.) Pop. urban	0.043 (1.91)*	0.043 (1.94)*	0.044 (1.96)*	0.002 (0.29)	0.004 (0.47)	0.002 (0.20)
(L.) Hereditary		-0.051 (1.82)*	-0.052 (1.86)*	0.016 (1.08)	0.012 (0.83)	
(D.) Hereditary		-0.017 (0.34)	-0.018 (0.37)	0.022 (0.57)	0.018 (0.46)	
(L.) Other reg.		0.052 (1.76)*	0.052 (1.78)*	0.029 (2.12)**	0.026 (1.81)*	
(D.) Other reg.		0.043 (2.18)**	0.044 (2.28)**	0.030 (2.32)**	0.028 (2.07)**	
(L.) Single-p.		0.008 (0.40)		-0.007 (0.56)	-0.008 (0.64)	
(D.) Single-p.		-0.015 (0.54)		-0.018 (0.82)	-0.019 (0.86)	
(L.) One-p.			0.007 (0.32)			
(D.) One-p.			0.019 (0.63)			
(L.) Other single-p.			0.013 (0.49)			
(D.) Other single-p.			-0.024 (0.79)			
(L.) Post Cold War					0.010 (1.49)	
(L.) CA*(L.) Duration						-0.000 (0.94)
_cons	0.898 (4.96)***	0.899 (4.96)***	0.899 (4.92)***	0.181 (4.89)***	0.174 (4.73)***	0.166 (5.04)***
R <sup>2</sup>	0.80	0.81	0.81	0.83	0.83	0.83
N	3,215	3,215	3,215	3,215	3,215	3,215

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Life Expectancy (female)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.018 (5.51)***	-0.018 (5.49)***	-0.018 (5.46)***	-0.004 (6.70)***	-0.004 (6.72)***	-0.004 (6.69)***
(L.) CA	0.046 (3.94)***	0.054 (3.79)***	0.054 (3.80)***	0.031 (2.98)***	0.024 (2.21)**	0.030 (3.58)***
(D.) CA	0.030 (3.00)***	0.034 (2.98)***	0.033 (2.92)***	0.029 (2.77)***	0.025 (2.33)**	0.026 (2.51)**
(L.) Democracy	0.043 (2.78)***	0.052 (3.20)***	0.052 (3.19)***	0.022 (2.02)**	0.017 (1.53)	0.018 (2.46)**
(D.) Democracy	0.010 (0.82)	0.016 (1.32)	0.015 (1.24)	0.007 (0.62)	0.004 (0.31)	0.003 (0.27)
(L.) Duration	0.001 (1.49)	0.001 (1.73)*	0.001 (1.76)*	0.000 (2.28)**	0.000 (2.29)**	0.001 (3.08)***
(D.) Duration	0.000 (0.87)	0.001 (1.41)	0.001 (1.48)	0.001 (1.73)*	0.001 (1.82)*	0.001 (1.89)*
(L.) Income pc (log)	0.009 (0.64)	0.011 (0.75)	0.010 (0.71)	0.014 (2.73)***	0.016 (2.88)***	0.017 (3.22)***
(D.) Income pc (log)	-0.007 (0.18)	-0.006 (0.16)	-0.007 (0.18)	-0.019 (0.25)	-0.027 (0.36)	-0.019 (0.25)
(L.) Pop. growth	-0.021 (1.41)	-0.021 (1.42)	-0.021 (1.43)	-0.023 (4.57)***	-0.022 (4.56)***	-0.022 (4.51)***
(D.) Pop. growth	0.030 (2.21)**	0.030 (2.17)**	0.030 (2.18)**	0.031 (2.52)**	0.030 (2.50)**	0.031 (2.58)**
(L.) Pop. urban	0.005 (3.28)***	0.005 (3.00)***	0.005 (2.96)***	0.001 (2.81)***	0.000 (2.51)**	0.001 (2.82)***
(D.) Pop. urban	0.037 (1.80)*	0.038 (1.84)*	0.038 (1.84)*	0.001 (0.09)	0.003 (0.37)	-0.000 (0.04)
(L.) Hereditary		-0.054 (2.04)**	-0.055 (2.08)**	0.018 (1.41)	0.012 (0.97)	
(D.) Hereditary		-0.026 (0.56)	-0.027 (0.58)	0.021 (0.67)	0.015 (0.47)	
(L.) Other reg.		0.052 (1.89)*	0.053 (1.93)*	0.023 (2.33)**	0.018 (1.73)*	
(D.) Other reg.		0.040 (2.19)**	0.041 (2.29)**	0.023 (2.14)**	0.019 (1.71)*	
(L.) Single-p.		0.004 (0.20)		-0.005 (0.42)	-0.006 (0.56)	
(D.) Single-p.		-0.006 (0.22)		-0.006 (0.29)	-0.008 (0.37)	
(L.) One-p.			0.006 (0.32)			
(D.) One-p.			0.022 (0.78)			
(L.) Other single-p.			0.003 (0.15)			
(D.) Other single-p.			-0.015 (0.51)			
(L.) Post Cold War					0.015 (2.32)**	
(L.) CA*(L.) Duration						-0.000 (0.69)
_cons	0.833 (4.60)***	0.834 (4.58)***	0.836 (4.56)***	0.182 (5.09)***	0.171 (4.80)***	0.168 (5.24)***
R <sup>2</sup>	0.82	0.82	0.82	0.85	0.85	0.85
N	3,215	3,215	3,215	3,215	3,215	3,215

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Child Mortality (under 5)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	no-FE(i.t)
(L.) d.v.	-0.034 (2.04)**	-0.037 (1.84)*	-0.037 (1.89)*	-0.015 (2.32)**	-0.013 (1.93)*
(L.) CA	-1.166 (3.27)***	-2.321 (1.83)*	-2.303 (1.82)*	-1.879 (1.82)*	-0.679 (2.96)***
(D.) CA	-0.524 (1.54)	-1.416 (1.42)	-1.371 (1.38)	-0.911 (1.20)	-0.057 (0.16)
(L.) Democracy	-1.008 (2.08)**	-2.188 (2.02)**	-2.163 (2.00)**	-1.906 (1.80)*	-0.597 (3.16)***
(D.) Democracy	-0.500 (1.43)	-1.385 (1.58)	-1.335 (1.53)	-0.882 (1.16)	-0.036 (0.10)
(L.) Duration	0.023 (0.76)	0.025 (0.71)	0.024 (0.69)	-0.003 (0.39)	-0.005 (0.90)
(D.) Duration	0.022 (0.77)	0.029 (0.83)	0.029 (0.82)	0.031 (1.46)	0.026 (1.55)
(L.) Income pc (log)	-0.427 (0.64)	-0.525 (0.65)	-0.555 (0.69)	0.638 (5.81)***	0.648 (6.32)***
(D.) Income pc (log)	-12.492 (1.17)	-12.586 (1.15)	-12.466 (1.13)	-12.706 (1.76)*	-12.910 (1.75)*
(L.) Fertility (5-y. avg.)	1.300 (1.53)	1.378 (1.46)	1.371 (1.45)	-0.044 (0.24)	-0.052 (0.28)
(D.) Fertility (5-y. avg.)	-0.692 (0.43)	-0.829 (0.53)	-0.875 (0.55)	-1.637 (0.94)	-1.166 (0.88)
(L.) Hiv (log)	0.562 (1.55)	0.608 (1.54)	0.623 (1.58)	0.156 (5.50)***	0.148 (5.00)***
(D.) Hiv (log)	1.109 (2.50)**	1.041 (2.33)**	0.997 (2.30)**	1.336 (2.72)***	1.358 (2.90)***
(L.) Hereditary		-2.450 (0.99)	-2.456 (1.00)	-1.242 (0.91)	
(D.) Hereditary		-3.608 (1.16)	-3.590 (1.16)	-2.147 (1.31)	
(L.) Other reg.		-1.841 (1.66)	-1.812 (1.64)	-1.860 (1.48)	
(D.) Other reg.		-1.583 (1.47)	-1.606 (1.48)	-1.399 (1.47)	
(L.) Single-p.		-1.719 (0.75)		-1.678 (1.47)	
(D.) Single-p.		-1.520 (0.92)		-1.379 (1.21)	
(L.) One-p.			-0.239 (0.09)		
(D.) One-p.			-1.689 (0.73)		
(L.) Other single-p.			-2.074 (0.91)		
(D.) Other single-p.			-1.575 (0.96)		
(L.) CA*(L.) Duration					0.008 (0.84)
_cons	-6.316 (2.00)**	-4.862 (1.49)	-4.742 (1.46)	-5.536 (5.40)***	-6.844 (8.30)***
R <sup>2</sup>	0.10	0.11	0.11	0.19	0.18
N	1,801	1,801	1,801	1,801	1,801

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Infant mortality (under 1)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	no-FE(i.t)
(L.) d.v.	-0.019 (2.55)**	-0.020 (2.70)***	-0.021 (2.89)***	-0.012 (4.45)***	-0.011 (4.03)***
(L.) CA	-0.682 (3.65)***	-1.137 (1.96)*	-1.121 (1.94)*	-0.992 (3.29)***	-0.400 (3.59)***
(D.) CA	-0.342 (2.01)**	-0.693 (1.46)	-0.666 (1.41)	-0.433 (1.49)	-0.035 (0.21)
(L.) Democracy	-0.557 (2.45)**	-1.034 (2.00)**	-1.015 (1.96)*	-0.921 (3.03)***	-0.233 (2.67)***
(D.) Democracy	-0.282 (1.75)*	-0.637 (1.51)	-0.608 (1.44)	-0.387 (1.31)	0.009 (0.05)
(L.) Duration	0.009 (0.74)	0.009 (0.64)	0.009 (0.61)	-0.001 (0.50)	-0.003 (1.50)
(D.) Duration	0.008 (0.74)	0.010 (0.77)	0.010 (0.75)	0.012 (1.64)	0.010 (1.69)*
(L.) Income pc (log)	-0.064 (0.29)	-0.087 (0.35)	-0.104 (0.42)	0.335 (7.76)***	0.341 (8.07)***
(D.) Income pc (log)	-2.471 (1.24)	-2.470 (1.18)	-2.403 (1.14)	-3.423 (2.18)**	-3.519 (2.14)**
(L.) Fertility (2-y. avg.)	0.461 (1.51)	0.473 (1.45)	0.467 (1.44)	0.039 (0.90)	0.041 (0.96)
(D.) Fertility (2-y. avg.)	-0.585 (1.13)	-0.696 (1.15)	-0.660 (1.09)	-0.369 (1.24)	-0.137 (0.57)
(L.) Hiv (log)	0.231 (1.58)	0.247 (1.56)	0.254 (1.61)	0.076 (5.22)***	0.071 (4.89)***
(D.) Hiv (log)	0.781 (3.36)***	0.758 (3.31)***	0.732 (3.32)***	0.772 (3.91)***	0.783 (4.02)***
(L.) Hereditary		-0.964 (0.91)	-0.958 (0.92)	-0.694 (1.71)*	
(D.) Hereditary		-1.445 (1.21)	-1.428 (1.20)	-0.887 (1.67)*	
(L.) Other reg.		-0.902 (1.83)*	-0.883 (1.80)*	-0.926 (2.70)***	
(D.) Other reg.		-0.726 (1.59)	-0.735 (1.60)	-0.628 (1.93)*	
(L.) Single-p.		-0.588 (0.58)		-0.886 (2.62)***	
(D.) Single-p.		-0.551 (0.77)		-0.643 (1.36)	
(L.) One-p.			0.344 (0.32)		
(D.) One-p.			-0.516 (0.54)		
(L.) Other single-p.			-0.785 (0.77)		
(D.) Other single-p.			-0.586 (0.82)		
(L.) CA*(L.) Duration					0.008 (1.65)*
_cons	-3.666 (1.80)*	-3.110 (1.95)*	-3.037 (1.84)*	-3.343 (7.01)***	-4.038 (10.14)***
R <sup>2</sup>	0.09	0.10	0.11	0.21	0.20
N	1,809	1,809	1,809	1,809	1,809

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Neonatal Mortality

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	no-FE(i.t)
(L.) d.v.	-0.005 (0.53)	-0.006 (0.61)	-0.005 (0.53)	-0.004 (2.05)**	-0.003 (1.93)*
(L.) CA	-0.220 (2.42)**	-0.316 (1.64)	-0.312 (1.63)	-0.288 (2.26)**	-0.147 (4.05)***
(D.) CA	-0.107 (1.59)	-0.172 (1.38)	-0.163 (1.33)	-0.112 (1.16)	-0.004 (0.09)
(L.) Democracy	-0.185 (2.19)**	-0.289 (1.56)	-0.283 (1.55)	-0.283 (2.22)**	-0.101 (3.46)***
(D.) Democracy	-0.095 (1.33)	-0.163 (1.28)	-0.154 (1.22)	-0.110 (1.13)	0.000 (0.01)
(L.) Duration	0.004 (1.19)	0.004 (1.13)	0.003 (1.09)	0.001 (1.18)	-0.000 (0.54)
(D.) Duration	0.001 (0.68)	0.001 (0.82)	0.001 (0.75)	0.003 (1.65)*	0.002 (1.66)*
(L.) Income pc (log)	-0.020 (0.31)	-0.023 (0.34)	-0.022 (0.31)	0.092 (4.98)***	0.088 (4.82)***
(D.) Income pc (log)	1.009 (0.98)	1.021 (1.00)	1.054 (1.03)	0.482 (0.71)	0.451 (0.67)
(L.) Fertility	0.087 (0.92)	0.085 (0.91)	0.076 (0.83)	0.039 (3.61)***	0.042 (3.72)***
(D.) Fertility	-0.482 (0.98)	-0.574 (1.03)	-0.617 (1.11)	0.445 (2.08)**	0.598 (3.20)***
(L.) Hiv (log)	0.038 (1.28)	0.043 (1.34)	0.046 (1.49)	0.015 (3.64)***	0.014 (3.53)***
(D.) Hiv (log)	0.092 (1.37)	0.084 (1.22)	0.076 (1.15)	0.060 (1.02)	0.081 (1.44)
(L.) Hereditary		-0.366 (1.12)	-0.363 (1.13)	-0.306 (1.99)**	
(D.) Hereditary		-0.286 (1.38)	-0.280 (1.38)	-0.165 (0.77)	
(L.) Other reg.		-0.214 (1.33)	-0.209 (1.32)	-0.207 (1.55)	
(D.) Other reg.		-0.152 (1.38)	-0.156 (1.41)	-0.154 (1.46)	
(L.) Single-p.		-0.100 (0.48)		-0.220 (1.61)	
(D.) Single-p.		-0.092 (0.72)		-0.157 (1.35)	
(L.) One-p.			0.256 (1.72)*		
(D.) One-p.			-0.024 (0.17)		
(L.) Other single-p.			-0.170 (0.78)		
(D.) Other single-p.			-0.106 (0.81)		
(L.) CA*(L.) Duration					0.003 (2.09)**
_cons	-0.882 (1.82)*	-0.764 (1.50)	-0.818 (1.54)	-1.163 (4.82)***	-1.301 (8.04)***
R <sup>2</sup>	0.08	0.08	0.09	0.08	0.07
N	1,811	1,811	1,811	1,811	1,811

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$



## Access to Improved Water Source

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	no-FE(i.t)
(L.) d.v.	-0.012 (2.27)**	-0.013 (2.37)**	-0.012 (2.33)**	-0.015 (13.04)***	-0.015 (12.98)***
(L.) CA	0.077 (1.64)	0.037 (0.49)	0.038 (0.50)	0.196 (2.39)**	0.087 (1.62)
(D.) CA	0.028 (0.44)	0.070 (0.86)	0.069 (0.84)	0.081 (0.70)	-0.025 (0.31)
(L.) Democracy	0.008 (0.16)	-0.031 (0.39)	-0.030 (0.37)	0.305 (3.62)***	0.166 (3.81)***
(D.) Democracy	-0.066 (0.86)	-0.020 (0.22)	-0.022 (0.23)	0.086 (0.63)	-0.017 (0.15)
(L.) Duration	0.002 (1.24)	0.003 (1.60)	0.003 (1.56)	0.002 (1.71)*	0.004 (3.53)***
(D.) Duration	-0.000 (0.07)	0.001 (0.58)	0.001 (0.52)	0.000 (0.15)	0.002 (0.53)
(L.) Econ. growth	0.008 (2.40)**	0.008 (2.43)**	0.007 (2.42)**	0.007 (2.73)***	0.007 (2.66)***
(D.) Econ. growth	0.003 (1.13)	0.003 (1.12)	0.003 (1.17)	0.003 (1.03)	0.002 (0.90)
(L.) Pop. tot (log)	0.480 (3.15)***	0.502 (3.09)***	0.505 (3.12)***	0.015 (1.56)	0.014 (1.45)
(D.) Pop. tot (log)	-2.729 (2.62)***	-2.711 (2.62)**	-2.717 (2.62)***	-3.855 (3.77)***	-3.658 (3.67)***
(L.) Pop. urban	-0.016 (1.98)*	-0.016 (1.98)*	-0.017 (2.06)**	-0.003 (2.87)***	-0.002 (2.69)***
(D.) Pop. urban	0.247 (2.11)**	0.251 (2.17)**	0.253 (2.19)**	0.249 (5.20)***	0.208 (4.45)***
(L.) Hereditary		-0.315 (2.09)**	-0.313 (2.08)**	0.251 (2.41)**	
(D.) Hereditary		-0.171 (0.95)	-0.165 (0.94)	-0.097 (0.27)	
(L.) Other reg.		-0.000 (0.00)	-0.004 (0.03)	-0.122 (1.25)	
(D.) Other reg.		0.126 (1.14)	0.128 (1.16)	-0.020 (0.13)	
(L.) Single-p.		-0.100 (1.15)		0.294 (3.17)***	
(D.) Single-p.		-0.012 (0.11)		0.212 (1.31)	
(L.) One-p.			0.200 (2.23)**		
(D.) One-p.			0.433 (2.67)***		
(L.) Other single-p.			-0.100 (1.18)		
(D.) Other single-p.			-0.030 (0.26)		
(L.) CA*(L.) Duration					-0.003 (0.93)
_cons	-5.609 (2.65)***	-5.890 (2.58)**	-5.929 (2.62)***	1.327 (6.83)***	1.455 (7.58)***
R <sup>2</sup>	0.03	0.03	0.03	0.18	0.17
N	2,037	2,037	2,037	2,037	2,037

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Children Immunization (DPT)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.216 (11.60)***	-0.218 (11.74)***	-0.218 (11.61)***	-0.120 (12.94)***	-0.106 (11.08)***	-0.115 (12.82)***
(L.) CA	-0.470 (0.82)	0.049 (0.08)	0.115 (0.18)	0.149 (0.24)	0.683 (1.07)	-0.798 (1.62)
(D.) CA	-0.488 (0.59)	0.412 (0.37)	0.489 (0.44)	0.502 (0.46)	0.868 (0.79)	-0.484 (0.60)
(L.) Democracy	0.395 (0.56)	0.921 (1.18)	1.007 (1.28)	0.865 (1.38)	1.221 (1.91)*	-0.076 (0.21)
(D.) Democracy	-1.229 (1.16)	-0.339 (0.27)	-0.244 (0.19)	-0.193 (0.17)	0.065 (0.06)	-1.189 (1.24)
(L.) Duration	0.002 (0.14)	0.001 (0.07)	-0.002 (0.10)	0.001 (0.09)	-0.003 (0.33)	0.010 (1.07)
(D.) Duration	-0.007 (0.22)	-0.004 (0.10)	-0.007 (0.20)	0.006 (0.17)	0.002 (0.06)	0.017 (0.51)
(L.) Income pc (log)	-0.955 (0.83)	-0.997 (0.87)	-1.123 (1.00)	0.020 (0.09)	-0.209 (0.96)	0.166 (0.78)
(D.) Income pc (log)	6.791 (1.18)	6.757 (1.17)	6.865 (1.19)	5.044 (1.26)	5.607 (1.40)	5.470 (1.37)
(L.) Fertility (2-y. avg.)	-1.294 (3.27)***	-1.311 (3.28)***	-1.367 (3.24)***	-0.681 (4.72)***	-0.733 (5.11)***	-0.599 (4.26)***
(D.) Fertility (2-y. avg.)	-6.913 (2.81)***	-6.762 (2.76)***	-6.828 (2.80)***	-5.905 (2.40)**	-5.712 (2.32)**	-6.265 (2.53)**
(L.) Pop. urban	0.159 (2.18)**	0.158 (2.18)**	0.160 (2.19)**	-0.001 (0.09)	0.003 (0.30)	-0.001 (0.10)
(D.) Pop. urban	1.596 (2.16)**	1.610 (2.21)**	1.502 (2.09)**	0.441 (1.29)	0.273 (0.81)	0.342 (1.02)
(L.) Hereditary		-0.576 (0.58)	-0.357 (0.34)	2.188 (2.83)***	2.640 (3.35)***	
(D.) Hereditary		2.106 (1.19)	2.310 (1.29)	3.960 (2.00)**	4.628 (2.24)**	
(L.) Other reg.		1.029 (0.80)	1.259 (0.98)	0.665 (0.68)	1.105 (1.09)	
(D.) Other reg.		2.256 (1.47)	2.358 (1.55)	1.689 (1.28)	2.045 (1.53)	
(L.) Single-p.		0.903 (0.99)		1.044 (1.49)	1.097 (1.58)	
(D.) Single-p.		0.920 (0.68)		1.056 (0.82)	1.170 (0.92)	
(L.) One-p.			2.206 (1.78)*			
(D.) One-p.			1.177 (0.64)			
(L.) Other single-p.			-0.210 (0.25)			
(D.) Other single-p.			0.278 (0.21)			
(L.) Post Cold War					-1.751 (4.38)***	
(L.) CA*(L.) Duration						0.013 (0.42)
_cons	21.629 (2.35)**	21.744 (2.43)**	22.856 (2.54)**	11.609 (5.54)***	13.560 (6.54)***	10.553 (5.37)***
R <sup>2</sup>	0.16	0.16	0.17	0.11	0.11	0.10
N	3,001	3,001	3,001	3,001	3,001	3,001

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Children Immunization (measles)

	c-FE(1)	c-FE(2)	c-FE(3)	no-FE	t-FE	no-FE(i.t.)
(L.) d.v.	-0.244 (13.89)***	-0.245 (13.99)***	-0.245 (13.99)***	-0.156 (15.18)***	-0.142 (13.36)***	-0.149 (14.92)***
(L.) CA	-0.776 (1.47)	-0.124 (0.19)	-0.084 (0.13)	0.517 (0.81)	1.000 (1.50)	-0.677 (1.32)
(D.) CA	-0.239 (0.31)	0.374 (0.40)	0.416 (0.45)	0.743 (0.77)	1.055 (1.09)	-0.123 (0.16)
(L.) Democracy	0.435 (0.55)	1.103 (1.24)	1.161 (1.30)	1.283 (1.93)*	1.614 (2.36)**	-0.034 (0.08)
(D.) Democracy	0.679 (0.64)	1.387 (1.23)	1.446 (1.30)	1.780 (1.53)	2.006 (1.72)*	0.799 (0.75)
(L.) Duration	-0.001 (0.07)	-0.002 (0.10)	-0.004 (0.25)	0.003 (0.22)	-0.000 (0.02)	0.018 (1.56)
(D.) Duration	0.033 (1.03)	0.060 (1.76)*	0.057 (1.68)*	0.071 (2.04)**	0.069 (1.99)**	0.064 (1.89)*
(L.) Income pc (log)	-1.082 (1.33)	-1.178 (1.52)	-1.281 (1.68)*	0.046 (0.20)	-0.127 (0.56)	0.263 (1.15)
(D.) Income pc (log)	5.298 (1.03)	5.570 (1.07)	5.643 (1.09)	4.647 (1.23)	5.043 (1.34)	4.847 (1.29)
(L.) Fertility (2-y. avg.)	-1.821 (3.88)***	-1.833 (3.88)***	-1.877 (3.88)***	-0.978 (7.14)***	-1.016 (7.45)***	-0.873 (6.63)***
(D.) Fertility (2-y. avg.)	-4.426 (2.71)***	-4.125 (2.52)**	-4.206 (2.58)**	-3.437 (2.22)**	-3.351 (2.15)**	-4.085 (2.61)***
(L.) Pop. urban	0.142 (2.17)**	0.138 (2.08)**	0.140 (2.08)**	0.002 (0.20)	0.003 (0.30)	0.001 (0.12)
(D.) Pop. urban	1.298 (1.68)*	1.320 (1.74)*	1.238 (1.61)	0.467 (1.31)	0.295 (0.82)	0.321 (0.91)
(L.) Hereditary		-0.748 (0.77)	-0.576 (0.62)	3.001 (3.81)***	3.379 (4.21)***	
(D.) Hereditary		-0.841 (0.36)	-0.671 (0.29)	1.844 (0.74)	2.456 (0.97)	
(L.) Other reg.		1.535 (1.34)	1.708 (1.53)	1.294 (1.27)	1.654 (1.58)	
(D.) Other reg.		3.131 (2.12)**	3.225 (2.21)**	2.772 (2.03)**	3.060 (2.23)**	
(L.) Single-p.		1.056 (1.36)		1.431 (1.93)*	1.464 (1.98)**	
(D.) Single-p.		-0.967 (0.73)		-0.618 (0.47)	-0.547 (0.41)	
(L.) One-p.			2.115 (1.98)*			
(D.) One-p.			-0.408 (0.21)			
(L.) Other single-p.			0.155 (0.20)			
(D.) Other single-p.			-1.581 (1.19)			
(L.) Post Cold War					-1.523 (3.23)***	
(L.) CA*(L.) Duration						0.004 (0.11)
_cons	27.900 (3.71)***	28.443 (3.92)***	29.313 (4.05)***	14.730 (6.79)***	16.153 (7.48)***	13.250 (6.40)***
R <sup>2</sup>	0.18	0.18	0.19	0.13	0.14	0.12
N	2,963	2,963	2,963	2,963	2,963	2,963

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

## Chapter 4

### **Whether, how and to what extent competitive authoritarianism counts: Drawing conclusions.**

The analysis reported in the present manuscript addressed three main research questions, namely whether, how and to what extent competitive authoritarianism makes a difference for citizens' wellbeing. In the previous chapters the issue has been tackled from a theoretical (see Chapter 2) and then an empirical (see Chapter 3) point of view. The goal of this last chapter is to finally answer the above questions. We will sum up the research main findings, and advance some generalizations. While interpreting the results, special attention will be paid to three major issues, namely what findings tell about the theory advanced, the phenomenon of competitive authoritarianism in general, and the theory of the consequences of democratization.

The task is somehow facilitated by the analysis' results themselves. In order to offer a comprehensive overview, the empirical analysis focused, as proxies of citizens' wellbeing, on a relatively large number of alternative indicators. The advantage of an augmented amount of evidence at disposal comes at the cost of a higher likelihood of getting contrasting results, thus hampering out ability to arrive at a synthesis. Here the benefits associated with this research strategy outnumber the potential drawbacks. More often than not, for each hypothesis the analysis highlighted the existence of a prevailing pattern consistent with expectations.

#### *Whether CA counts.*

The main question that this research has tried to answer may sound very naive: does it make a difference, from a socioeconomic point of view, to live in a competitive authoritarian regime? The theoretical analysis of the phenomenon led to the

formulation of two comparative hypotheses. Both of them have been confirmed by the empirical tests that has been performed, although the need of a few specifications has also been highlighted.

As regards the first hypothesis, only when government spending is concerned we can safely conclude that democratic regimes do more than competitive autocracies. The two regime types, on the contrary, do not display sizeable differences in terms of performance. This holds true either if we focus on the developing world, or if advanced (arguably democratic) countries are taken into consideration. Also in this latter case – i.e. by lumping together countries characterized by very different levels of development – it is not regime type that explains the difference.

In a similar but diametrically opposite way, the stronger evidence supporting the second hypothesis derives from the analysis of indicators of outputs, rather than spending. While it is not patent whether governments of competitive and full authoritarian regimes differ in the amount of resources allocated in the two sectors under examination, education and health care, they clearly do in terms of living conditions actually enjoyed by their respective citizens. Competitive authoritarian regimes provide more social welfare than other nondemocratic regimes. The comparison between competitive authoritarianism and the main nondemocratic subtypes adds some important qualifications. Competitive autocracies outperform military regimes, single-party dictatorships in general and pure one-party systems in particular. Yet there is no similar (or opposite) regularity in the comparison between competitive and hereditary monarchies.

The conclusion is that, yes, living in a competitive authoritarian regime does make a difference. Citizens of competitive autocracies enjoy better living conditions than citizens of most other authoritarian regimes. Surprisingly, however, it appears that the gap between competitive authoritarian and democratic regimes is less vast than expected. From a strictly socioeconomic point of view, citizens of competitive autocracies do as good as citizens ruled by democratic leaders. More precisely, when a difference exists, it is not about regime effects.

*How CA counts.*

The above findings also contribute to answer the second research question, or how to explain the differences detected. By identifying the relevant institutional dimensions of competitive authoritarianism, the conceptual analysis presented in the first chapter provided the foundations on which the argument underlying the first and second hypotheses – concerning the comparison between competitive authoritarian, democratic and full authoritarian regimes – has been built. Here we focus on its evaluation. Starting from empirical evidence, the predicted impact that competitive institutions have in a persistently authoritarian environment could be reappraised.

At a first glance, the idea of a compensatory effect is largely confirmed. Multiparty elections and legislatures open to opposition parties seem to be able to effectively correct for the distortions deriving from the communication gap and the small winning coalition that characterize authoritarian politics. The explanatory potential of the argument, however, should be weighed in the light of the contrasting evidence provided by the analysis of hypothesis 2 relative to government spending and of hypothesis 1. Here we may note that the lack of a significant difference between competitive and full authoritarian regimes in terms of investments, and the fact that this is the only significant difference between democracies and competitive autocracies, rule out one of the main competing explanations.

From a common but quite different perspective from the one adopted in the present research, it might be argued that full authoritarian, competitive authoritarian and democratic regimes lie along a continuum of citizens' empowerment. A oversimplified version of this competing argument is the following: the more political institutions empower citizens, the more citizens count, the more governments are concerned about their welfare. To be sure, this argument encourages expectations very similar to those expressed by the two hypotheses formulated in chapter 2: competitive autocracies do a better job than full authoritarian regimes, and a poorer one than democracies. Yet this argument just fails to explain the asymmetries in terms of spending and performance highlighted by the comparison of competitive autocracies with their full authoritarian and democratic counterparts

respectively. We could hardly explain why competitive autocracies do not invest more than full dictatorships and why they achieve about the same socioeconomic performance as democratic regimes, while spending less. If citizens' empowerment were the key, we should observe an increase in government spending in the first place, as predicted by most theories of the consequences of democratization (see Section 2.3.2).

Those findings and the argument presented in chapter 2, on the contrary, are in a more dialectical relationship. Rather than rejecting the explanation proposed, they corroborate and refine it at once. Competitive authoritarian governments, it has been said, seem to be able to offer citizens better living conditions than other non-democratic regimes, while investing about the same amount of resources. Improvements in the former neither correspond to, nor are the consequence of an increase in the latter. This piece of evidence indirectly confirms that the crucial difference between these regimes derives from competitive authoritarianism's ability to facilitate communication between government and citizens, thus making policy decisions more efficient. Competitive autocracies do not spend in social welfare more money than other non-democratic regimes, but they clearly invest it in a better way.

This latter point brings us to the theoretical implications of the results relative to the first hypothesis. Once again, competitive autocracies stand out for their ability to combine a relatively good performance with comparatively low economic effort. Contrary to expectations, we have to say, competitive authoritarian and democratic regimes show similar levels of human development. Hence the potential of the compensatory effects associated with competitive authoritarianism's formally democratic institutions has been initially underestimated. Even more surprisingly, the former achieve these results by investing in social welfare less than the latter. This suggests two important considerations. First, it confirms that an increase in social spending crucially depends on citizens' actual empowerment (see above), which has more than something to do with the dimension according to which these regimes differ from each other, namely the playing field (defined also in terms of civil and

political freedoms). Second, it demonstrates that, in this case, the relevance of this factor has been initially overestimated.

In conclusion, empirical evidence highlights the need, and provides the instruments to reconsider the role actually played in the relationship between regime type and citizens' wellbeing by the institutional attributes examined. These correspond to the dimensions that define competitive autocracies and distinguish them from other regime types: (1) inclusiveness, as represented by institutionalization of universal suffrage elections for access to executive and legislative offices; (2) competition, defined as opposition's participation to political life; and (3) evenness of the playing field, which we have just reviewed. As the table below illustrates, an important distinction that the empirical analysis has introduced is between two aspects of the relationship between politics and social welfare, namely government spending and achievement of concrete results. The two issues are not necessarily linked. For analytical purposes, then, they should be examined separately. As soon as we do it, previous asymmetries can be easily explained and incorporated within the same initial, but slightly more fine-grained, theoretical framework.

	<b>Elections</b>	<b>Competition</b>	<b>Playing Field</b>	<b>Investment</b>	<b>Performance</b>
<b>Full Aut</b>	No/Yes	No	Uneven/None	} CA $\cong$ Full Aut	CA > Full Aut
<b>Comp Aut</b>	Yes	Yes	Uneven		
<b>Democracy</b>	Yes	Yes	Even	} CA < Dem	CA $\cong$ Dem

As regards a country's socioeconomic performance, we may note that elections and competition are jointly necessary to determine an improvement in citizens' living conditions. These are the two institutional attributes that qualify open regimes, both competitive authoritarian and democratic ones.<sup>25</sup>

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<sup>25</sup> To be sure, the analysis does not clarify if elections are strictly necessary, since it was not possible to consider the case of regimes featuring competition in the absence of universal suffrage elections.



Although it is not advisable to push the reasoning too far, the two attributes also appear to be sufficient to produce the outcome, at least with respect to the third institutional dimension, the playing field. To put it in a softer way, according to the analysis' findings the latter is certainly a non-necessary condition, since competitive autocracies and democracies show similar levels of human development. The emphasis on elections and competition may also partly explain the results of the comparison between competitive authoritarian and hereditary regimes. Specifically, the failure to clarify whether a difference in terms of citizens' wellbeing exists and in favour of what regime it is may have to do with the 'broadened' nature that characterizes most contemporary hereditary regimes (see Section 1.3.3). Especially in the Middle-East and North Africa region, the recent opening in these regimes of legislatures and the call of multi-party elections may have triggered political dynamics similar to those examined.

As regards governments' inclination to invest a larger amount of state revenues in citizens' wellbeing, on the contrary, elections and political competition are not enough. Here an even playing field seems to be necessary to determine the outcome. Since it does not correspond to a concrete improvement in citizens' basic living conditions, one should ponder the two following alternative explanations. First, with exclusive reference to the relationship under examination, higher levels of executive constraints, more effective protection of citizens' right to protest, more realistic risk of being voted out of office – institutional features associated only with democratic regimes – tend to increase policy-making inefficiency. Governments invest more to appease voters, but they do it with little rationality. An alternative explanation would be that, for about the same reason, democratically elected governments' commitment to citizens' wellbeing goes beyond what can be measured by indicators of basic social services. Hence, higher investments are devoted to improve the quality of other aspects of the education and health sectors.

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Yet, in contemporary world, when there is political competition the institutionalization of universal suffrage elections for executive and legislative office is generally taken for granted.

*To what extent CA counts.*

The last major question to be evaluated has to do with the reach of previous conclusions. So far the discussion of empirical findings has focused on the relationship between competitive authoritarianism and citizens' wellbeing in general. Now it is time to specify the nature of this relationship by adding some qualifiers. In this respect, the most adequate way to capture the implications of the research findings is to define the compensatory effect of competitive authoritarian institutions as partial. The adjective however is still too vague and calls for a deeper scrutiny of three more specific issues, namely the dynamic nature of the examined effects, the implications of regime consolidation (see Hypothesis 3) and the influence of regional context (see Hypothesis 4).

One of the most relevant advantages of using an error correction model in the empirical analysis, it has been said, is to explore the exact dynamic nature of political processes under examination. The EC regression model allows for a separate but simultaneous treatment of the short- and long-term effects that an independent variable has on the outcome of interest. The analysis clarified that, when citizens' wellbeing is concerned, the 'regime effect' is mainly long-term. The positive impact that competitive authoritarian institutions have on the indicators of human development observed is not immediate and discloses over time. From a substantive point of view, all this means that previous considerations do not refer to the phenomenon of competitive authoritarianism in general. They are valid to the extent that we are looking at the (long-term) functioning of this form of political regime. More precisely, in most cases there's no transition effect associated with competitive authoritarianism. The mere change of regime from full to competitive authoritarian does not bring about any meaningful improvement in citizens' quality of life.

Empirical evidence also demonstrates that the compensatory effect associated with institutionalization of multi-party elections and legislatures and the opening of political arena to opposition parties is, at best, temporary. This is probably the most outstanding difference that the analysis highlighted between competitive authoritarian and democratic regimes. When the consequences of democratic

consolidation have been studied, researchers invariably concluded that the effect is positive. In some cases taking consolidation into account even proved essential to seize democracy's positive effect. For competitive authoritarianism it is just the opposite. Rather than boosting competitive authoritarian institutions' positive impact, regime consolidation tends to deteriorate it.

In chapter 2 this inhibitory effect has been explained by focusing on the practical implications that regime consolidation may have in the specific case of competitive authoritarianism. This process has been described as the progressive insulation of the ruling elite, favoured by the repeated practice of a formally democratic routine, and the systematic obstruction of its substantive functioning. This process impoverishes the quality of the communication between incumbents and society. The explanation is indirectly validated by empirical evidence. Once again, the analysis found no effect in the case of government spending. Hence, the positive effect on citizens' wellbeing associated with competitive authoritarianism tends to vanish regardless of the amount of government spending. Put another way, the negative effect of regime consolidation seem to be more about a general process of deterioration of politics than a direct consequence of a decrease in investments by a government that no longer needs to care about voters.

The analysis also confirmed the progressivity of this effect. Albeit (significantly) positive for even more than a decade of existence, competitive authoritarianism's effect follows a declining trend. Yet the analysis also clarified that in most cases, the results relative to the second hypothesis are not reverted. The effect of regime consolidation is not so pernicious as to make for citizens living in a competitive autocracy worse than in other dictatorships. Regime consolidation, in the case of competitive authoritarianism, just makes the difference from full authoritarianism thinner. When a competitive autocracy consolidates – a process that in raw terms of years may vary from case to case – the beneficial effects that distinguish it from other nondemocratic regimes just dissipate.

A third important specification pertains to the conclusions that can be drawn from analysis of the fourth hypothesis. Empirical evidence shows that the magnitude of

differences in terms of citizens' wellbeing between competitive and full authoritarian regimes are deeply affected by regional context. Competitive authoritarian institutions' compensatory effect is thus region-specific. Depending on where the relationship we are interested in is studied, we might come to different conclusions. It is nonetheless important to note that, also in this case, empirical analysis never led to a reversal of previous global-level conclusions. In none of the examined regions – Africa, Asia, Latin America and post-socialist countries – we found evidence that competitive autocracies do a poorer job than other nondemocratic regimes. In perfect accordance with the hypothesis, the analysis confirmed that, when citizens' wellbeing is concerned, regional context makes competitive authoritarianism more or less (positively) determinant. It does not make it either beneficial or harmful.

The most interesting finding of this last stage of analysis is certainly the existence of an African exceptionalism. First, African competitive autocracies turned out to represent the main drivers of global-level results. Second, as expected, Africa proved to be the region in which the recent emergence of competitive authoritarianism had the greatest influence on citizens' wellbeing. Outside the continent, either in general or in each specific other developing region, the consequences of competitive authoritarianism are not as good, if any.

With respect to the other hypotheses, in this case it is more difficult to evaluate the exact explanatory potential of the argument presented in chapter 2 (see Section 2.4.2). The analysis confirmed the hypothesis that has been drawn from the discussion of different regional contexts. To the extent that hypothesis and argument are consistent with each other, the empirical analysis corroborates the latter. Yet findings do not tell us much about the specific explanation proposed. The discussion highlighted the prevalence of neo-patrimonial practices in Africa, and the markedly predatory and anti-developmental nature that characterizes neopatrimonialism in the continent. The African regional context has been contrasted with Asia, Latin America and the post-communist region. Beyond the specific characterization of each single context, the discussion highlighted a major divide between Africa and rest of the world. Specifically, it has been argued that none of the other regions

surveyed displays as ‘favourable’ contextual factors as those characterizing Africa for competitive authoritarianism to exert its compensatory effect.

Here the analysis betrays its own exploratory origin. As it stands, the argument presented and the empirical analysis still remain too disconnected from each other. The discussion of the different regional contexts has certainly laid valid foundations to elaborate on: the regional legacies identified can hardly be considered wrong. Empirical evidence, in turn, revealed the existence of rather evident regional patterns that confirm the analysis as a promising line of research. Nevertheless I agree that the analysis only scratched the surface of the issue under examination. The black box of competitive authoritarianism’s region-specific effect has yet to be completely opened.

*Concluding remarks.*

The analysis showed that most expectations were well grounded, while it contributed to refine some others. Of course the topic we have been dealing with throughout this manuscript is far from being exhausted. Many other questions remain unanswered; many of the issues examined deserve further scrutiny; different research techniques should be applied.

A few important conclusions, however, have been drawn. The research main finding is that competitive authoritarian institutions have a compensatory effect on citizens’ wellbeing, albeit temporary and region-specific. Competitive autocracies provide more social welfare than their full authoritarian counterparts. Beyond the specific interest in this relationship, however, the research proved particularly fruitful, since it shed new light on several complementary issues. The present research links together, and thus adds to, two growing branches of democratization studies, namely the debate on the phenomenon of competitive authoritarianism and on the consequences of democratization.

As regards the debate on competitive autocracies, hybrid regimes more generally, the contribution of the present research refers to both the functioning and the future prospects of these regimes. The conclusions relative to the first and second

hypotheses corroborate the thesis of many authors concerning the ‘advantages’ deriving from interaction of democratic and authoritarian institutions. From an autocrat’s point of view, the analysis confirms that competitive authoritarianism represents quite a favourable setting. While the limited nature of political competition has no or little consequences on incumbent’s tenure, it is sufficiently operative to generate benefits in terms of information flow and cooperation. Competitive authoritarian leaders make their citizens better off than the citizens of other authoritarian regimes, by simply using about the same amount of state revenues in a more efficient way. In so doing they overcome some of the major obstacles to the pursue of their own goals. With respect to other dictators, they are in a more favourable position to solicit cooperation from the society and less concerned about personal safety. Even more important, all this comes at a relatively low cost; definitely lower than what democratically elected leaders pay in terms of uncertainty of their own position.

According to the analysis’ results, however, competitive authoritarian institutions potentially cause also some troubles to the ruling elite. Competitive authoritarianism, scholars now generally agree, does not represent an inherently unstable equilibrium. Yet competitive autocracies tend to experience a progressive deterioration of their socioeconomic performance. To the extent that this decline is unintended – meaning not the direct consequence of a decrease in social spending while possibly related to an impoverishment of communication (see Section 2.4.1) – it may lead to political crises and eventually to a regime collapse. If it were the case, democratization would be a likely indirect consequence. Descriptive statistics in section 1.5.2 support this claim (see Table 3). Modernization theory even provides some theoretical background to the supposition.

A further contribution of the present research refers to the broader debate on the consequences of democratization. When discussing the substantive relevance of empirical findings, the role of formally democratic institutions in persistently authoritarian settings has been highlighted. This suggests a promising, rather neglected research strategy, especially in quantitative research: to unpack democracy.

By analyzing democratic institutions separately within the same regression model, for instance, we may single out the effect of each of them. Our ability to explain the consequences of democratization could be remarkably improved by following a similar approach.

Finally, let us conclude from a different perspective. This is a research on the consequences of a specific political regime on citizens' wellbeing. So far, however, the discussion has rarely taken the point of view of the latter. In most cases, we have seen, competitive autocracies emerged from the crisis of other forms of authoritarian rule. For many citizens of developing countries, therefore, the transition to competitive authoritarianism represented a break with the past, an achievement. Not infrequently the institutionalization of these regimes was welcomed as a decisive leap toward democracy. As much frequently, however, expectations have been betrayed and these countries never completed their process of democratization.

The conclusions of the present research stand somewhere out of the crowd. They show that, although the third wave of democratization did not represent the democratic revolution that analysts forecast and hoped, it nonetheless caused a relevant change in the material life of many people. This is especially true for African citizens. Yet while it is important to underline the significance of the change that the emergence of competitive authoritarianism caused in political elites' attitude toward citizens' wellbeing, we should avoid superficially optimistic conclusions. This research findings just draw a more sober picture than others. They certainly reject the idea that these hybrid regimes represent, at once, the ideal environment for rulers and worse place to live for common people (cf. Bueno de Mesquita, 2003). Yet they should not obscure reality: in most cases political freedom still remains a mirage.

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