Disentangling Political Instability: 
Concepts and Measurement

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Abstract

Existing measures of political instability focus on a myriad of indicators ranging from number of coups or assassination attempts, leadership changes, government duration, and outright regime changes. These substantial discrepancies are sometimes due to differing understandings of the concept of instability, but also to periodic concept-measure inconsistency. Moreover, there has not been a substantial debate in the literature on what the concept of political instability should really entail. In this paper, I survey the typical understandings represented in the literature, and thereafter propose a two-dimensional structure of political instability to systematize our understanding of what that concept entails. The two dimensions put forth are i) the minimalist-maximalist continuum, capturing the extent of the concept definitions, and ii) the leader centric-regime centric continuum, capturing whether the focal point of a given understanding of instability is based on leadership or complete regimes. Thereafter, I propose a four-field typology to guide measurement choices. The central idea guiding this piece is that a clear typology of political instability is a valuable tool for making informed conceptual choices on which understanding of the term to use, and thereby an equally valuable tool for making both informed and consistent measurement choices. We cannot be judges of good measurement, without knowing on which concept’s grounds to base that judgement. After classifying some prominent studies’ conceptualizations in the proposed typology, I use a construct-validation framework to assess the consistency of the measures and conclude that a call for better and more concept-specific measurement is in order.
To the reader: This is a lot more of a draft of a draft, rather than a proper draft, than I was hoping for it to be at this point. I am therefore extra grateful for any and all thoughts and comments you might have, and for the time you spend reading/making sense of it. I am not entirely sure how to move on from here: to be able to eventually publish something based on this, I would have to bring out some sort of clear novelty - perhaps in the form of the replication effort that I describe a proposition for in the end of the paper. Alternatively, the literature review and conceptualization efforts made here will serve as a part of my (eventual) PhD summary, in which case time spent on replication and/or other "second steps would be a lot less fruitful. Any and all thoughts on this are therefore also warmly appreciated.
1 Introduction

The importance of measurement to studies of political instability has been illustrated in the political economy, and the more strictly economic, literature, with important ramifications for issues of concern for a wide array of political scientists. It is therefore overdue that this issue is appropriately handled within the political science literature. In this paper, I focus on concepts and measures of political instability within studies of regime breakdown and studies of the economic consequences of instability. Even though studies of instability can measure and concentrate on phenomena that are only loosely connected, they do speak to each other (see, i.e., Gates et al 2006 and Bueno De Mesquita 2005).

Drawing inspiration from the seminal work by Munck and Verkuilen (2002), I address both conceptualization issues and construct validity of measures used when applied to the stability-growth and regime stability literature. Furthermore, I extend their use of the maximalist and minimalistic terms to analyze and evaluate these different measures. Specifically, I place the common measures of instability on a maximalist-minimalist continuum where the first end represents conceptualizations eager to include any and all forms of instability, and the second represents conceptualizations that are, rather, reluctant to include even clear cases of instability. The importance of measurement to findings in the political instability literature (broadly) has already been established by Wright and Bak (2016). Moreover, the concept, causes and effects of instability feature prominently in a solid body of literature (see, e.g., Ahmed (2012); Bunce (1981); Bermeo (2011); Bueno de Mesquita and Smith (2010); Chiozza and Goemans (2003); Debs and Goemans (2010); Magaloni (2008); Smith (2008)). Accordingly, further investigating the sensitivity of previous findings to alternative specifications is crucial.

In this paper, I will propose to replicate previous work on the effects of instability and use this to do out-of-sample prediction. The studies to be used for construct validation in this paper are Alesina et al. (1996) and Aisen and Veiga (2013). These studies are part of the literature on instability’s effects on economic growth. Both studies conclude and emphasize that political stability, in itself, is crucial for the emergence of stable economic growth.

Given that the different uses of the instability concept differ substantially, what is it that each of them are trying to capture? And how crucial must “instability-events” be for them to capture something important about ongoing change in their respective political systems? In other words; what thresholds should we establish for including an event in our...
conceptualization of instability, and under what circumstances? And finally, what features should be included in the definition and what is a consequence and/or precipitant? These are the questions to be explored in this paper.

2 The need for conceptualization

The importance of measurement to findings in the political instability literature has already been established by both Wright and Bak (2016) and (Jong-A-Pin 2009). Moreover, the concept, causes and effects of instability feature prominently in a solid body of literature (see, e.g., Ahmed (2012); Bunce (1981); Bermeo (2011); Bueno de Mesquita and Smith (2010); Chiozza and Goemans (2003); Debs and Goemans (2010); Magaloni (2008); Smith (2008)) assessing a variety of hypotheses. Accordingly, further investigating the sensitivity of previous findings to alternative specifications is crucial, as well as emphasizing more broadly a general focus on conceptualization issues in the instability literature. What I therefore aim to do as part of this paper is systematically survey not only the measurements used in the literature, but the conceptual and theoretical discussions that underpin them. I echo the call from Wright and Bak (2016) to pay close attention to, and evaluate, the different conceptualizations used.

I focus my attention here on building a framework of instability measures based on two separate dimensions; one pertaining to the extensiveness of the definitional criteria used (minimalist-maximalist), and one pertaining to whether the instability concept is leader-centric or regime-centric. The framework is meant to help analyse different conceptualizations and thereby contribute towards greater concept-measure consistency within research on political instability.

To reach the far ends of the literature, I look at political instability broadly. I treat the concept of instability not as a dichotomous concept, but as a continuous one. To survey the different conceptualizations of political instability as applied in the literature, I do however include conceptualizations that measure duration and instability in various ways, e.g. through count variables counting leadership or regime changes within a given period, survival-structure data giving specific time durations and panel-structured data recording whether or not a regime or leadership change took place in each year. I include studies and contributions that study the phenomenon in various ways, i.e. as both causes and outcomes in various settings. The sample is, however, constrained to studies that include...
non-democratic cases. The concepts and measures included in this survey are represented in Bueno de Mesquita and Smith (2010); Goemans, Gleditsch and Chiozza (2009); Alesina et al. (1996); Gurr, Marshall and Jaggers (2010); Geddes, Wright and Frantz (2014); Wig and Rød (2016); Gates et al. (2006) and Svolik (2012) and illustrate the vast variation that persists in measuring instability.

2.1 Latent instability and breakdown as an outcome

In prominent contributions to the literature on regime types and propensity for breakdown, the concept of instability features in theoretical frameworks as both a structural explanation, a characteristic of certain regimes, and a manifest outcome (Sanhueza 1999; De Mesquita 2005; Gates et al. 2006; Brownlee 2009; Knutsen and Nygård 2015). In Gates et al. (2006), for example, it is hypothesized that institutionally consistent polities are significantly more stable than their inconsistent counterparts. They claim and find that the most vulnerable systems are dictatorships that still feature high levels of political participation. Here, the dependent variable, based on both the Polity IV (2010) dataset and Vanhanen (2000), and is defined as the time between substantial changes in of the three factors constituting the independent variable.

Moreover, it can be argued that yet another perspective on instability is featured in the literature on coup attempts. In Wig and Rød (2016), elections are treated as information transactions, where either the ruling coalition makes itself vulnerable through increasing oppression, or the inner fragility of the regime is revealed. In other words, electoral outcomes are signals that contain information about opposition strength, and indirectly about the likelihood of a successful full-scale regime removal that would compromise the positions of sitting elites. I argue that an underlying assumption in this scenario is that strong opposition serves as an analogue concept to that of instability; the only phenomena then separating the sitting regime from danger is an election.

2.2 Instability and economic outcomes

Though the importance of stability for economic growth is supported by notable contributions to the literature (see, e.g. Barro (1991); Alesina et al. (1996); Asteriou and Price (2001); Roe and Siegel (2011); Aisen and Veiga (2013)), the same is, to a large extent, also true for the opposite (see, e.g. Bueno de Mesquita (2000); Bueno de Mesquita et al. (2001);
Campos and Nugent (2002); Jong-A-Pin (2009)). Through both coherent argumentation and with a varying degree of methodological scrutiny, scholars have, in other words, gathered quite contradictory evidence on the matter.

A quite recent literature has pointed our attention towards the way in which instability is measured in these analyses. Wright and Bak (2016) illustrates that, for the literature linking non-tax revenue and unearned foreign income to political instability, choice of measurement is quite essential. They examine data on executive leadership, political authority, and autocratic regimes and illustrate the conceptual differences between these variables. For the specific field of economic effects of instability, Jong-A-Pin (2009) found four underlying dimensions of instability - namely, politically motivated violence, mass civil protest, instability within the political regime, and instability of the political regime, to have fundamentally differing effects on growth. Only the instability of the political regime has a robust and significant negative effect.

2.3 Formation of dimensions

Overall, these examples illustrate the need for clear conceptualization because the demarcation of boundaries between the concepts is crucial to avoid tautological explanations. The fact that very different measures of instability are used in the literature can hence be a fundamental issue, but it can also be trivial. If the applied conceptualization of instability in a given study is clear and well-connected to the measure used, and thereby theoretically sound and informative, we would easily accept it. This illustrates the difficulty, or even impossibility of, of settling on a “correct” definition of any concept. Drawing on the framework elaborated in Munck and Verkuilen (2002), I therefore contend that the most useful, though quite flexible, methodological recommendation that can be made is to avoid both “maximalist” and “minimalist” extremes. That is, to avoid both including too much and too little in a definitional framework relative to each study’s theoretical goals. I argue that conceptualizations of instability approaching the maximalist extreme can be defined as such by their tendency to include excessive rules and attributes in their definition of instability. The minimalistic extreme will be so unspecified that it is in danger of including theoretically irrelevant instances in its definition.

I therefore suggest that most common measures of instability can, at least to a certain extent, be placed on a spatial “minimalist” to “maximalist” continuum. Each extreme rep-
resents conceptualizations of instability that are either very hesitant to regard an incident as constituting instability or, oppositely, very willing to. In addition, I separate the conceptualizations based on whether they take as the unit of analysis either leadership changes or regime changes. Figure 2 illustrates how I place each of the conceptualizations and measures within these two dimensions.

3 Maximalist conceptualizations

The first conceptualization is by Bueno de Mesquita (2000) and begins by outlining that autocracies have more stable leadership than democracies - thereby introducing that the kind of instability he is interested in goes beyond the notion of complete regime breakdown. This conceptualization would therefore be, as placed on the aforementioned continuum, closer to a minimalist than a maximalist application. The concept of instability he defines is made up of, as he puts it, a minimum of two dimensions. Those two are, 1) leadership duration (longevity in office), and 2) political institutional duration (longevity of national political institutions). It is longevity in office as a factor that features prominently in his
later analysis and this is theoretically underpinned. Through very related logic, Aisen and Veiga (2013) sets out to operationalize their conceptualization of instability through looking at the number of cabinet changes happening in a given year - specifically the number of times in a year in which a new premier is named and/or 50 percent or more of the cabinet posts are occupied by new ministers.

In Bueno de Mesquita and Smith (2010), leadership change is equally prominent in the applied operationalization of instability. They find that tests of leader survival indicate that threats from revolutions increase the likelihood of removal for non-democratic leaders. Moreover they find that leaders with access to resources such as foreign aid or natural resources deal more easily with these threats, even avoiding them altogether. However, Wright and Bak (2016) find that when the leadership changes that do not coincide with regime change are removed, the substantive effect is much smaller. In fact, they conclude that non-tax revenue only stabilizes autocracies when the incumbent regime does not lose power.

Bueno de Mesquita and Smith (2010) is based on Archigos, a dataset of political leaders, as introduced by Goemans, Gleditsch and Chiozza (2009). Their conceptualization is consistently fixated on leaders, their duration, and their fate once they’ve lost office. Although they emphasize leader dynamics, they also claim that “Irregular leader changes can help identify political change in autocracies not apparent from data that consider only the democratic nature of institutions” (Goemans, Gleditsch and Chiozza 2009). Of course, leadership changes in autocracies can either be caused by, or lead to, substantial political change. But, as in the cases of PRI Mexico, leadership change had very little, or even nothing, to do with actual political change. This is therefore an inherent challenge to studies using leadership changes to capture substantial change in autocratic regimes. Nevertheless, the highly specified nature of the measure places Archigos within the maximalist-realm, and naturally the leader-centric part.

In a similar application, Alesina et al. (1996) specifies their Political Instability Equation by applying two distinct operationalizations of government change. They use one measure that counts all regular or irregular transfers of executive power and one that restricts the count to all “irregular” transfers, but only “regular” transfers which entail a change in the ruling coalition. They note that the second measure substantially reduces the number of changes counted and thereby the variation in their variable, making this application more of a middle ground on my maximalist-minimalist continuum and the leader/regime division
4 Minimalist conceptualizations

Another very widely used operationalization of instability is based on the regime change dataset by Geddes, Wright and Frantz (2014). Here, events of autocratic instability are only recorded when a regime ends; that is, when formal and informal rules change substantially - including when one particular autocratic regime is replaced by another. This conceptualization is closely linked to the one applied by Svolik (2012) because both of these focus on who holds de facto power. In other words, leadership changes that do not relate to regime change - such as the ones that occur in PRI Mexico, or in present-day China - are not included.

Another measure used to capture instability is Polity’s Durable variable (Gurr, Marshall and Jaggers 2010). In contrast to the preceding operationalizations, the Durable variable is not at all based on leadership changes, but on changes of three points or more in the combined Polity score. Furthermore, it also includes ends of interregnum and transition periods. Using the Durable variable will, in complete contrast to the more maximalist definitions, not be susceptible to including non-substantial cases of instability. However, as the variable will also exclude, for example, all cases where one particular autocratic regime is toppled by another, this application will not capture changes that to most scholars indeed constitute instability. Furthermore, as this conceptualization is very much concerned with one particular type of change (that between degrees of “democraticness”), its usefulness is severely limited compared to the other conceptualizations surveyed here.

The question is, then, whether measuring instability in autocratic regimes should include rather than ignore leadership changes that do not coincide with regime change. Will analyses not excluding leadership changes also include important sources of information for instability research? If, for example, instability as a phenomenon is detrimental to economic growth, because of the insecurity regime instability entails for investors, does that, from logic, make it reasonable to expect that this concerns also “milder” forms of instability?

I argue that, as can be extended from the above mentioned framework, it is reasonable to expect that the phenomena are connected. Furthermore, I uphold the mentioned recommendation posed by Munck and Verkuilen (2002) to avoid both ends of that continuum. However, as Wright and Bak (2016) show, the more minimalist definitions, at least in certain applications, seem to be quite sensitive to more restrictive specifications. Accordingly, I place
my own conceptualization alternative for substantive political instability in non-democratic contexts, as based on the data contribution described below, in the regime-centric, more maximalist, upper right corner of the figure.

5 A possible typology

To not only distinguish between dimensions of the concept, but move beyond that to an actual typology of the concept, I propose the following four categories of instability; leadership turnover, latent leader instability, latent structural instability, and regime duration/breakdown. The types feature leader-centrism and regime-centrism at the outer extremes, and latent forms of instability as the ”milder form of each of these phenomena. My current idea to develop this framework is to illustrate that the maximalist-minimalist measurement dimension proposed in the previous section can in fact be present within each of these four conceptual types.

| A: Leadership turnover | B: Latent leader instability | C: Latent structural instability | D: Regime duration/breakdown |

Figure 2: Typology

The typology is meant to chisel out some demarcation lines between common understandings of instability and illustrate that the terms often used in the literature - worded similarly as the two middle categories - are often measured in ways far more consistent with the outer two categories. Reasonable measurements already existing in the literature to be positioned within the middle categories would then rather include proxy phenomena such as opposition strength (B+C), attempts at leadership removal (B), and institutional characteristics (C).
6 The basis for construct validation

I am considering to expand this paper by replicating previous work on the effects of instability and use this to do out-of-sample prediction - thereby being able to say something substantial and concrete about the importance of concept-measure consistency. Studies that can be used for construct validation in this paper are Alesina et al. (1996) and Aisen and Veiga (2013). These studies are part of the literature on instability’s effects on economic growth. Both studies conclude and emphasize that political stability, in itself, is crucial for the emergence of stable economic growth. As described in the preceding section, both of these studies apply quite wide, maximalist-like, measures of instability. Whilst Alesina et al. (1996) attempts to limit the consequences of the maximalist measure by introducing a more limited alternative, Aisen and Veiga (2013) consistently apply a measure of instability that counts cabinet changes. The cabinet changes measure counts the number of times in a year in which a new premier is named and/or 50 percent or more of the cabinet posts are occupied by new ministers - across both democracies, hybrid regimes, and outright dictatorships.

The preferred strategy for construct validation is to base analysis on a hypothesis that we assume to be true. As I suspect the hypothesis in question to be sensitive to measurement changes, this is a notable drawback of this analysis. However, the utility of applying thorough construct validation in both showing if and how the measures differ in this important field and the ability to investigate measures’ loss of precision due to lower coverage, it is nevertheless pursued here.

7 Validation method

For my application of construct validation, I intend to apply K-fold cross-validation (K-fold CV). K-fold CV sets out to investigate the out-of-sample predictive power of a regression model (James et al. 2013:181-186). This is done by dividing the data into k folds (parts), with no observations overlapping. Then, k-1 folds are used to estimate the regression coefficients, and then these are used to predict the dependent variable in the excluded fold. Finally the process is repeated k times, so that all folds have been predicted by combination of the others. Because the measures differ in their number of observations, a second step is added to the analysis, where all data sets are reduced to the data set with the lowest number of observations to minimize the impact of differently sized Ns. This is solved best by drawing
observations a number of times from the data sets of the alternative measures. The K-fold
CV analysis should then be repeated on all samples of each of the measures so the results
are not affected by the specific sample that is drawn.

8  K-fold cross-validation

To be executed.

9  Conclusion

To be concluded.
References


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