Understanding Risk and Resilience to Violent Conflicts

Empirical Studies of Conflict Project

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1. Summary and Recommendations

This research aims to establish potential opportunities for policy intervention by asking the following question: if we could predict conflict 5-years out, what would separate the predictable failures from the unexpected successes (i.e. places where conflict was expected but did not happen) and what would separate the predictable successes from the unexpected failures (i.e. places where conflict was not expected that experience it). The idea is to move beyond standard conflict prediction variables to identify previously-unrecognized opportunities for preventive action within a time-frame sufficiently long for significant action by the UN, World Bank, and other international organizations. Put differently, our goal is to provide policy recommendations by examining what led to unexpected resilience to conflict in some countries and what happened in places with low risk based on observable characteristics.

Existing studies focus in on a set of states which *did* become affected by violent conflict without comparing them to a set of peers based on objective and replicable criteria. This study addresses this issue by looking at the set of developing countries at the end of the Cold War, predicting *a priori* which ones would be most likely to become affected by violent conflict, and identifying surprising successes and surprising failures. Essentially, we use machine learning to approximate what a country team would do in terms of predicting conflict risk five years out. This approach allows us to compare states which did become affected by violent conflicts (or remained in violent conflict) to states which did not (or that emerged from violent conflict). On the basis of careful comparison between matched cases, we highlight systemic differences and assess potential policies that can reduce the risk of conflict.

To take an example which would have been predicted to be stable as of 2000 but fell into conflict by 2012, consider Syria. For a state which seemed at risk in 2000 but has remained stable consider Indonesia or Ethiopia (indeed, according to the 2014 Political Instability Task Force (PITF) rankings, Ethiopia was ranked among the countries most likely to suffer instability, above Syria). This exercise thus forces us to consider the interplay between domestic and systemic forces in predicting violent conflict outcomes as well as to explicitly address outliers.

We formalize this process by using a machine learning approach to predict conflict onset five years ahead of time. We define conflict using the PRIO Armed Conflict Dataset (ACD) as either one year with 1,000 or more battle deaths or three or more

years of consecutive conflict with at least 25 battle deaths in each year. These defini-
tions captures both high-intensity conflict and prolonged low-intensity conflict, both of
which international organizations may seek to prevent. We predict conflict using the
levels and 5-year trends in a broad range of variables measured five years before the
conflict (as described in detail below) with the goal of maximizing out of sample pre-
diction while minimizing sensitivity to specific modeling choices (e.g. how the folds for
cross-validation are chosen). We considered a variety of models, including both para-
metric and non-parametric approaches, and report results using Linear Discriminant
Analysis (LDA) with 10% upsampling.[1] The final model predicts outcomes five years
out with 96% accuracy.

From these predictions, we classify countries into surprising successes—False Pos-
itives (FP), i.e. places that would have been expected to end up in conflict but did
not—and surprising failures—False Negatives (FN), i.e. places that would have been
expected to be peaceful but ended up in conflict. In many cases, false positives include
country-year observations which *did* fall into conflict at a slightly later date. Notable
cases where conflict was predicted and yet did not fall into conflict between 1995 and
2015 include Burundi in 2004, and 2007-2010 as well as Nepal in 2007.

For our qualitative analysis we select four country-year observations from both of
these categories and use a matching algorithm to find the most analogous observation
in which conflict did or did not occur (i.e. we match a false positive to the closest
country year observation in which onset did occur and match false negatives with the
nearest observation in which conflict did not occur). Using a vector of time varying and
constant country characteristics as well as trends, we generate the following matched
pairs:

False Positive (FP)	Actual Onset	False Negative (FN)	Actual Peace
Burundi, 2008	CAR, 2009	CAR, 2009	Djibouti, 2003
Egypt, 2005	Pakistan, 2011	Côte d'Ivoire, 2002	Tanzania, 2003
Nepal, 2007	Mali, 2007	Mali, 2007	Burkina Faso, 2007
Syria, 1996	Dem. Rep. Congo, 1996	Thailand, 2003	Egypt, 2006

Some of these matches may appear surprising at first glance. Pairing Syria in 1996
to the Democratic Republic of the Congo, then Zaire, in the same year might seem
a poor comparison from this side of history. However, keep in mind that we match
countries based on characteristics and trends five years prior to the onset of conflict.
Looking at 1991, however, the countries look fairly similar. Both had recently lost
their cold war donors and both had largely resource dependent economies. They also
had similar levels of state and media freedom. Three things really set these countries
apart in the five years in advance of conflict onset; theoretically the period in which
international actors might have been able to implement policy changes. First, Syria

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[1]Upsampling is a standard technique used in machine learning models predicting rare outcomes. It
involves repeating certain observations to increase the proportion of in-conflict countries in the training
data. Models without upsampling onsets tend to under-predict onset and have more false negatives and
fewer false positives.

saw a renewal of aid following its decision to side with the United States and Saudi Arabia in the first Gulf War. Second, the countries employed very different strategies in relation to the distribution of natural resource rents and other government income. Syria used its oil income in part to provide subsidies to the majority of the population, particularly for basic foodstuffs.[2] In Zaire, rents went mainly to elites, exacerbating ethnic tensions and incentivizing armed capture.[3] Third, and most importantly, unsustainable policy choices by the Mobutu government as it attempted to manage a transition to limited democracy led to hyperinflation and a broad economic breakdown in Zaire, a process with no analogue in Syria in the early 1990s.[4]

Comparing Burundi in 2008–a false positive–to the Central African Republic (CAR)–a true positive–also presents an interesting example. Burundi in 2008 was expected to fall into conflict but did not meet our criteria for conflict using the ACD data. In 2008 the *Forces Nationales de Libération* (FNL), a Hutu political party and rebel group, broke the 2000 Arusha Peace and Reconciliation agreement for Burundi[5] leading to small-scale conflict which the BBC reported as leaving "at least 100 people dead."[6] So in fact, there *was* conflict. However, the government of Burundi and the rebel group were able to come to an agreement in which 33 government positions were given to FNL leaders, stopping the conflict before it reached a sufficient level in that year to enter as a conflict in our dataset. In contrast, the CAR–which also had previously signed peace agreements in 2007 and 2008–was unable develop a lasting peace accord in part due to logistical challenges and in part due to competing demands by the many disparate groups in conflict.

Key Take-Aways and Areas for Further Research: systematic differences, key take-aways, and policy areas which merit further attention:

- Whether through power-sharing or political liberalization, provide mechanisms for minority groups (broadly defined) to address grievances and participate politically. In a number of cases the factors which separate conflict from peace appears to be the implementation of policies that enabled previously excluded groups to influence government policy.

- Increase political engagement during economic downturns. In several cases conflict onset appears to be related to sharp changes in the economy. These may be moments where international support to political bargaining could moderate conflicts that would otherwise turn violent.

- Push back against major policy initiatives that would have predictable differential impacts on aggrieved groups. We noted one major case of surprising conflict

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[2]These subsidies were being rolled back in the 1990s, but remained significant (Fiorillo and Vercueil 2003).

[3]Oil production increased almost 20% in Syria from 1991 to 1996, while mining collapsed in Zaire.

[4]For a good brief summary see Beaugrand (1997).

[5]Note that the original agreement was signed in 2000, however, the FNL only signed in 2006.

[6]BBC, 2017. *Burundi Profile – Timeline*.

		Panel A: **False Negatives**
False Negative	**Actual Peace**	**Key Differences**
Côte d'Ivoire 2002	Tanzania 2003	• Côte d'Ivoire experienced a sharp reversal of economic growth (+3% to -3% in 5 years). • Tanzania had a relatively established power-sharing system in contrast to Côte d'Ivoire where the president acted to exclude marginalized groups in the North from political affairs.
Mali 2007	Burkina Faso 2007	• Regional grievances and conflict in neighboring Niger led a small group of Tuareg insurgents to defect from previously signed peace agreements. • Overall, Mali and Burkina Faso appeared very similar in the years leading up to 2007.
Thailand 2003	Egypt 2005	• Egypt promised reforms which temporarily mollified opposition groups. • Thailand implemented an aggressive anti-drug campaign which differentially affected the already aggrieved Muslim minority South.
CAR 2009	Djibouti 2003	• Djibouti was able to arrive at a stable power-sharing arrangement between the two dominant clans and other minority groups using legislative reserves and government appointments. • In CAR, peace agreements designed to accommodate competing demands by a large number of rebel groups were difficult to implement in a low capacity environment. Unsatisfied with the outcomes of the agreement, many groups reneged.

		Panel B: **False Positives**
False Positive	**Actual Onset**	**Key Differences**
Burundi 2008	CAR 2009	• The government of Burundi and the rebel group were able to come to an agreement in which 33 government positions were given to FNL leaders, stopping conflict before it reached a sufficient level to enter into our dataset. • CAR was unable develop a lasting peace accord in part due to logistical challenges and in part due to competing demands by the many disparate groups in conflict.
Egypt 2005	Pakistan 2011	• Economic conditions in Pakistan deteriorated quickly in advance of 2011 while Egypt's economy leading to 2005 was relatively stable and the government had made attempts to pass economic reforms. • Pakistan allowed armed groups targeting neighboring countries to operate from its territory and the government attempted a policy of accommodation with insurgents in some areas during the period before conflict onset (e.g. the failed peace deals in Swat and Malakand).
Nepal 2007	Mali 2007	• Maoist rebels played a key role in designing the new political system. • In Mali, several Tuareg grievances, notably poverty in the Kidal province, were not addressed by the existing peace deal, leading one group to defect.
Syria 1996	DRC (Zaire) 1996	• In Syria, economic rents from oil extractions were used in part to provide broad subsidies. In Zaire, rents went mainly to elites, exacerbating ethnic tensions and incentivizing armed capture. • Zaire experienced a major economic downturn due to political instability. • Syria's economy was bolstered by extensive aid from Arab and Western States after the First Gulf War.

that appears to have been driven by a particular action which further harmed an already-disenfranchised group.

- Support efforts to manage the spillovers from neighboring conflicts. In two of our cases political breakdowns in neighboring countries (one of which was unexpected) appear to have played a major role in stoking conflict.

The remainder of this report is organized as follows. Chapter 2 begins by presenting a detailed overview of study design and motivation. Chapter 3 presents the results of these predictions, categorizing country cases into one of four potential baskets: (1) True Positives, or countries that were predicted to be in conflict and were observed to be in conflict; (2) False Positives, those that were predicted to be in conflict and were not; (3) True Negatives, countries predicted to be in a state of peace and were observed to be at peace; and (4) False Negatives, or countries which were predicted to be stable, but were observed to fall into conflict. Finally, chapter 4 presents detailed case comparisons between matched pairs, highlighting systematic differences between countries that fell into conflict unexpectedly with those that did not as well as between countries that were surprising successes and countries in which conflict was predicted and occurred. From these differences, we distinguish those that are amenable to actions that the UN, the World Bank, or other international organizations can take.

2. The Case Selection Process

This chapter summarizes the methodology used to identify cases of instability. Recall that we hope to assess potential policies to reduce risk on the basis of careful comparisons between cases that had similar predicted instability during the period $1995-2015$ based on their histories from five years prior.[1] In more technical terms, for an observation in country i and year t, we are attempting to predict conflict onset using data up to $t-5$.

Using these predictions, we curate all country-years into four categories: predicted onset and actual onset (true positives); predicted onset and actual stability (false positives); predicted stability and actual onset (false negatives); and predicted stability and actual stability (true negatives). See Table 2.1.

Table 2.1: Four categories relating to predicted and actual onsets.

		Actual	
		Onset	**Stability**
Predicted	**Onset**	True positive (TP)	False positive (FP)
	Stability	False negative (FN)	True negative (TN)

We rely on matching procedures to identify the closest comparison cases between true positives and false positives, as well as between true negatives and false negatives. After conducting a qualitative deep dive with 1-page shadow cases for each country in each of the above baskets, we can report on observed differences between (a) predicted onsets and surprising onsets and (b) between predicted peace and surprising peace. We then assess whether any of the identified factors differentiating these categories are amenable to (i) the action of external actors, including the World Bank, UN, and bilateral actors; or (ii) deliberate policy actions of national governments.

The selection of comparison cases requires several steps of data-based work:

- Identification of conflict onsets
- Creation of country-year data
- Prediction of conflict onsets
- Matching of comparison cases

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[1]As noted above, we will use the comparison to assess potential policies to reduce risk of conflict.

We take these in turn.

I. Identifying Conflict Onsets

We require a replicable standard to identify cases of conflict onset. As noted above, we rely on PRIO's Armed Conflict Dataset (ACD). The ACD contains information on conflicts since 1946. The dataset's unit of analysis is the conflict-year. As such, multiple distinct conflicts involving different actors can be recorded in a country during a given year.

For each conflict-year, the ACD codes intensities as either 1 (25 or more battle deaths in a year) or 2 (1,000 or more battle deaths in a year). For the purposes of this study, we define instability as the union of three situations which countries could have experienced during the period $1995 - 2015$:

- Any sequence of conflict intensities that contains at least one 2
- A sequence of at least *three* consecutive 1's
- Other episodes of instability identified in conversations with the World Bank/United Nations team that led to large-scale political violence but were missing from the ACD.[2]

Table 2.2 lists the 47 onsets identified using these criteria.[3] Because the ACD tracks conflict-years, note that a new onset can occur in a country while another conflict is already active.

These actual onsets are the outcome that we seek to predict. To perform predictions of conflict five years into the future, we require country-year data that can help build a statistical model of conflict onset.

II. Creating Country-Year Data

Recall that we want to predict conflict onset in country i on year t by using data up to $t - 5$. Since our goal is prediction, we opt to add as many variables with reliable information into our model as possible. Table 2.3 lists the variables that are recorded using information from $t - 5$ (if time is relevant).

We also create variables that capture medians and linear trends for a variety of measures, using data from $t - 9$ to $t - 5$.[4] So, for example, an observation from 1998

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[2]DR Congo 2008 and Egypt 2011 were added through this criterion.

[3]The onset for South Sudan 2011 is not included in the analysis because the country was only founded in 2011, disallowing the creation of trend measures described below.

[4]These measures are commonly used in cross-national regressions predicting conflict risk.

uses data from 1989 to 1993 for these measures. Table 2.4 lists those variables.

The data cover the years 1995 to 2015. Each year contains between 139 and 161 countries, resulting in 3,237 observations.

About 3.8% of the cells in the dataset are missing. We utilize multiple imputation to fill in these gaps.[5] This process creates five imputed and slightly different datasets. In the subsequent analysis, we want to that the specific imputation does not unduly affect the predictions. As we describe in the next section, we run the analysis described below on each of the five datasets, and the final list of case studies is based on all five sets of findings.

III. Predicting Conflict Onsets

After evaluating several approaches (random forests, boosted logit, etc.) we employ a linear discriminant analysis (LDA) model to generate predictions of conflict onset. This model is a relatively common method that provides a healthy balance between flexibility and generalizabilty. Since the model is linear in nature, it captures a natural relationship between any variable and its impact on conflict onset. Moreover, it is less likely to overfit the data. In contrast, far more flexible models, such as the random forest, tend to overfit and be very sensitive to the imputation procedure and specific test/train partition of the data. A model that attempts to make informed "guesses," even if some prove incorrect, is preferable in this setting where we want to use machine learning to approximate what a country team would do in terms of predicting conflict risk five years out. We believe the LDA model reasonably proxies how an informed individual would process information on trends in these countries to predict the probability of conflict.

Following standard practice we center and scale all continuous variables so that they have a mean of 0 and variance of 1. As our interest is in prediction we use 8-fold repeated cross-validation to assess each model's performance. Given the rarity of onsets in the data, we upsample—that is, we increase the number of onsets in the data by randomly re-sampling the onsets. We estimate models varying the percentage of onsets in the overall data ranges across five values: raw data (about 1%), 2.5%, 5%, 10%, and 15%.

Table 2.5 shows several common criteria used to evaluate these models. All measures can range between 0 and 1, with higher values indicating better predictive performance. Accuracy is a simple proportion of cases that were predicted correctly:

$$Accuracy = \frac{TP + TN}{TP + FP + TN + FN}$$

Accuracy may produce overly inflated assessments models that predict rare events. For example, if an event occurs 1% of the time, a model that blindly predicts no event

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[5]We use the R package `mice` (van Buuren and Groothuis-Oudshoorn 2011).

would have an accuracy of 99% but would also be entirely useless. Without going into too much detail, the F_1 and F_2 scores are weighted measures that account for false negatives. Specifically, where $\beta = 1$ or 2,

$$F_\beta = \frac{(1 + \beta^2) \times TP}{(1 + \beta^2) \times TP + \beta^2 \times FN + FP}$$

The kappa coefficient is a measure of agreement between actual and predicted outcomes, accounting for the possibility that some agreements may occur by chance. Formally,

$$\kappa = 1 - \frac{1 - p_o}{1 - p_e}$$

where p_o is accuracy, and p_e is the hypothetical probability of agreement by chance.

For prediction we use an LDA model with upsampling to 10%. Models with lower up-sampling tend to under-predict onsets, having far more false negatives and fewer false positives.

IV. Matching Cases

From the model predictions, we qualitatively select four false positives and four false negatives that are substantively interesting and varied across economic, demographic, and geographic characteristics. We compare these eight cases to countries with the opposite outcome (i.e. for false positives, we match with countries that actually did fall into conflict and for false negatives, countries that were actually stable), identifying which comparator minimizes the Mahalanobis distance metric. We calculate this distance as:

$$d^2(f, g) = (\mathbf{X}_f - \mathbf{X}_g)\mathbf{`}\sum {}^{-1}(\mathbf{X}_f - \mathbf{X}_g)$$

where $\mathbf{X}_f$ is the vector of observable characteristics and trends used in the prediction for the selected case (a false positive or false negative) and $\mathbf{X}_f$ is the same vector for the comparison. Note that we are matching on characteristics and trends starting at least 5 years prior to the onset (or non-onset) of conflict. For example, to match Egypt in 2005, we use characteristics of Egypt in and prior to the year 2000. This exercise allows the researchers to identify pairs which are most similar on observable characteristics within a timeframe that international actors would theoretically be able to implement policy changes. Thus, qualitative analysis can more effectively distinguish potential differences that are not captured in the quantitative data.

Table 2.2: Conflict onsets between 1995 and 2015.

Angola 1996	Indonesia 1999	Pakistan 2011
Angola 1998	Iran 1999	Peru 2007
CAR 2009	Iran 2005	Philippines 1999
Chad 1997	Israel 2000	Russia 2007
Chad 2005	Israel 2014	Rwanda 1996
Congo 1997	Liberia 2000	Rwanda 2009
DR Congo 1996	Libya 2011	Somalia 2006
DR Congo 2006	Mali 2007	Sri Lanka 2005
DR Congo 2011	Mali 2012	Syria 2011
Côte D'Ivoire 2002	Myanmar 2000	Syria 2013
Egypt 2011	Myanmar 2005	Thailand 2003
Ethiopia 1998	Myanmar 2011	Uganda 2013
India 1996	Nepal 1996	Ukraine 2014
India 2001	Nigeria 2011	Yemen 2009
India 2003	Nigeria 2015	Yugoslavia 1998
Indonesia 1997	Pakistan 2006	

Table 2.3: Variables in analysis from $t-5$.

Variable	Data Source
Previous conflict	Gleditsch et al. 2002 (ACD)
Conflict onset in contiguous countries	Stinnett et al. 2002
Coups	Powell and Thyne 2011
Oil country	Fearon and Laitin 2003
Elections	Hyde and Marinov 2012 (NELDA)
Ethnic fractionalization	Fearon 2003
Instability (a change of 3 or more over the last 3 years in Polity score)	Marshall, Gurr, and Jaggers 2016 (Polity)
First two years after country's founding	Gleditsch and Ward 1999
Terrain ruggedness	Nunn and Puga 2012
Colonial legacy	Nunn and Puga 2012
Legal origins	Nunn and Puga 2012
Region	World Bank

Table 2.4: Variables in analysis with medians and linear trends from $t - 9$ to $t - 5$.

Variable	Data Source
Battle-related deaths	Lacina, Gleditsch, and Russett 2006
One-sided violence	Eck and Hultman 2007
Human rights (torture, political prisoners, rule of law, etc.)	Cingranelli, Richards, and Clay 2014 (CIRI)
Democracy (executive constraints)	Marshall, Gurr, and Jaggers 2016 (Polity)
GDP per capita	Feenstra, Inklaar, and Timmer 2015 (Penn World Tables)
Agricultural productivity	WB World Development Indicators
Mortality rates	WB World Development Indicators
Phone service/subscriptions	WB World Development Indicators
Development aid/assistance	WB World Development Indicators
FDI	WB World Development Indicators
Imports/Exports	WB World Development Indicators
Total population	WB World Development Indicators

Table 2.5: Average performance metrics for upsampled LDA.

Upsampling	Acc.	F1	F2	Kappa
None (~1%)	0.979	0.274	0.270	0.263
2.5%	0.976	0.233	0.242	0.221
5%	0.973	0.255	0.289	0.242
10%	0.963	0.248	0.327	0.232
15%	0.951	0.236	0.350	0.219

3. Model Predictions and Outcomes

As previously mentioned, this analysis relies on imputed data and upsampling of onsets. To ensure that the randomness injected from either process unduly affects the main results, we run the same analysis twenty times using different random seeds on each of the five imputed datasets.[1] In effect, this means the prediction analysis is done 100 times, producing 100 lists of predicted onsets and non-onsets.

Table 3.1 shows the country-years that appear at least 50 times in the 100 runs. The first column lists cases of actual onsets that the model correctly and frequently predicted to have an onset using data from five years prior; these are true positives. The third column lists cases of actual onsets that the model commonly and incorrectly predicted to be peaceful country-years; these are false negatives. The second column lists cases of actual peace that were incorrectly predicted to have conflict onset; these are false positives. (True negatives are omitted, given how long that list is.)

Not all false positives are equally noteworthy. Many of them are simply countries that did experience onset, but onsets are being falsely predicted on nearby years. For example, we see that Angola had actual onsets in 1996 and 1998; the model is incorrectly predicting onsets in 1997, 1999, 2000, 2001, and 2002. "Ideal" cases of false positives would involve (1) countries that had no actual onsets between 1995 and 2015, or (2) countries that did have onsets, but falsely predicted onsets occur at least three years before or after any actual onset. These two more unique cases are marked on Table 3.1 using bold and italicized text, respectively.

To obtain pairs of comparison cases that we can study qualitatively, we first select several false positives and false negatives that we consider to be substantively interesting and varied. See Table 3.2.

For each of the false positives and negatives, we find either a true positive or true negative that is "closest" in distance according to all the variables listed earlier in the document.[2] In essence, we are searching for a true case that is most similar across all variables. This will allow our qualitative analysis to more effectively focus on other potential differences that are not captured by the cross-national data.

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[1]Using different seeds ensures that random splits made in the data for training and testing our models are not "lucky" in the sense of producing uniquely good or bad results.

[2]See details above.

Table 3.1: Predictions and Actual Outcomes

TP	FP	FN
Angola 1996	Angola 1997	CAR 2009
Angola 1998	Angola 1999-2002	Chad 1997
DR Congo 1996	**Burundi 2004**	Chad 2005
DR Congo 2006	**Burundi 2007-2010**	Congo 1997
DR Congo 2011	DR Congo 1995	Côte D'Ivoire 2002
Egypt 2011	DR Congo 1997-2001	Iran 1999
Ethiopia 1998	*DR Congo 2003*	Israel 2000
India 1996	DR Congo 2004-2005	Liberia 2000
India 2001	DR Congo 2007-2008	Libya 2011
India 2003	DR Congo 2010	Mali 2007
Indonesia 1997	DR Congo 2012	Mali 2012
Indonesia 1999	*DR Congo 2015*	Myanmar 2000
Iran 2005	*Egypt 2005-2006*	Myanmar 2005
Nigeria 2015	Egypt 2012	Myanmar 2011
Pakistan 2006	Ethiopia 1997	Nepal 1996
Rwanda 1996	Ethiopia 1999	Nigeria 2011
Yugoslavia 1998	India 1995	Pakistan 2011
	India 1997-2000	Peru 2007
	India 2002	Philippines 1999
	India 2004-2008	Russia 2007
	Indonesia 1995-1996	Rwanda 2009
	Indonesia 1998	Somalia 2006
	Indonesia 2000-2002	Sri Lanka 2005
	Iran 2006-2007	Syria 2011
	Iraq 2015	Syria 2013
	Nepal 2007	Thailand 2003
	Nigeria 2004	Uganda 2013-2014
	Pakistan 1996	Yemen 2009
	Pakistan 1998-2003	
	Pakistan 2005	
	Pakistan 2007	
	Pakistan 2013-2015	
	Rwanda 1997-1998	
	Somalia 1998-1999	
	Syria 1996	
	Syria 2005	
	Yemen 1997-1998	

Note: Results from a linear discriminant analysis model with upsampling (10%). Country-years in **bold** are false positives where the country had no actual onset between 1995 and 2015. Country-years in *italics* are false positives where a country did have an onset between 1995 and 2015, but the predicted year is at least three years before or after an actual onset (see Table 2.2).

Table 3.2: False positives and negatives chosen for qualitative study.

FP	FN
Burundi 2008	CAR 2009
Egypt 2005	Côte D'Ivoire 2002
Nepal 2007	Mali 2007
Syria 1996	Thailand 2003

Table 3.3 displays the final list of cases and their matched counterparts.

Table 3.3: Matched observations used for qualitative analysis.

| FP	Closest Actual Onset	FN	Closest Actual Peace
Burundi 2008	CAR 2009	CAR 2009	Djibouti 2003
Egypt 2005	Pakistan 2011	Côte D'Ivoire 2002	Tanzania 2003
Nepal 2007	Mali 2007	Mali 2007	Burkina Faso 2007
Syria 1996	DR Congo 1996	Thailand 2003	Egypt 2006

Predicted Probability Plots

Below are plots of predicted probabilities of conflict onset in the countries we utilize for the qualitative analysis. These estimates are based on an LDA with upsampling to 10%. Recall that this model was run 100 times (20 times on five imputed datasets).

The presentation of these plots aligns with Table 3.3. Figures 3.1 and 3.2 display the false positives from our predictive model (left column) and their true positive matches (right column). Figures 3.3 and 3.4 display false negatives from our predictive model (left column) and their true negative matches (right column).

On each plot, the main black lines represent mean predicted probabilities. The inner, darker band represents the $25 - 75$ percentiles of predicted probabilities. The outer, lighter band represents the $2.5 - 97.5$ percentiles. Red vertical lines indicate actual onsets. Green bars at the top of the figures indicate false positives (years that the model incorrectly predicted to have a conflict onset). Blue bars at the bottom of the figures indicate false negatives (years that the model incorrectly predicted not to have a conflict onset).

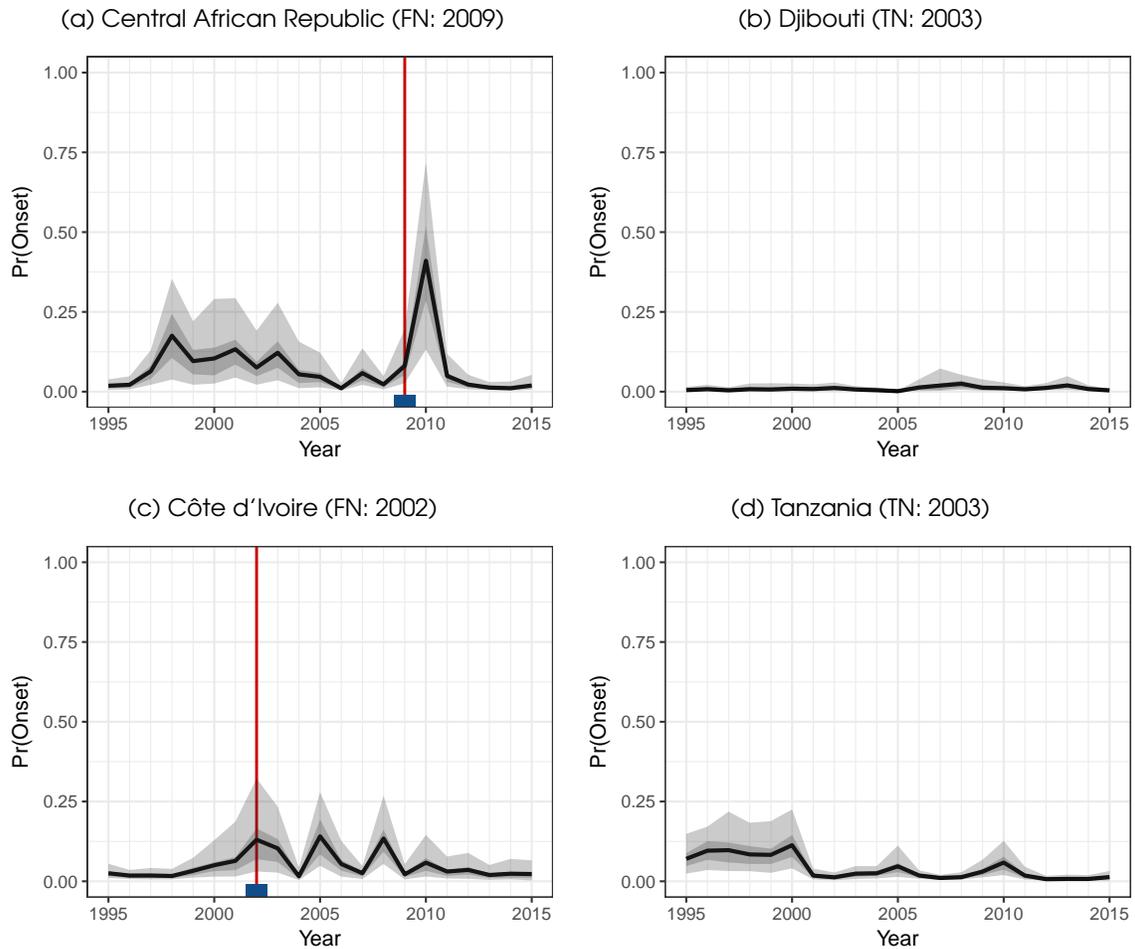Figure 3.1: Predicted Probabilities of Conflict Onset I
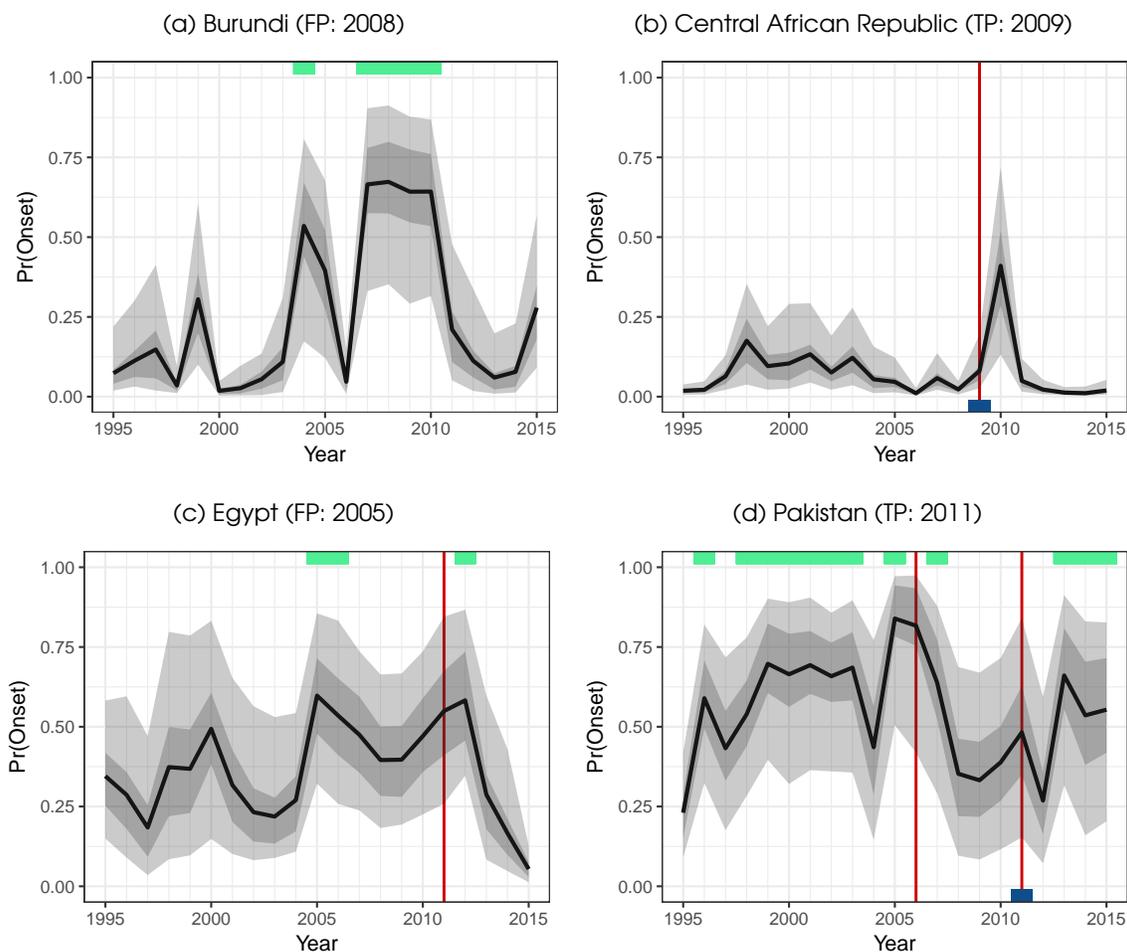
Note: Predicted probabilities of conflict onset from the LDA model with upsampling to 10%. False positives (left column) and their matched true positives (right column). Black lines are mean predicted probabilities; inner bands represent $25 - 75$ percentiles for predictions; outer bands represent 2.5 to 97.5 percentiles. Vertical red lines mark actual onsets (see Table 2.2). Green bars on top indicate false positives from the LDA model; blue bars on bottom indicate false negatives from the LDA model.

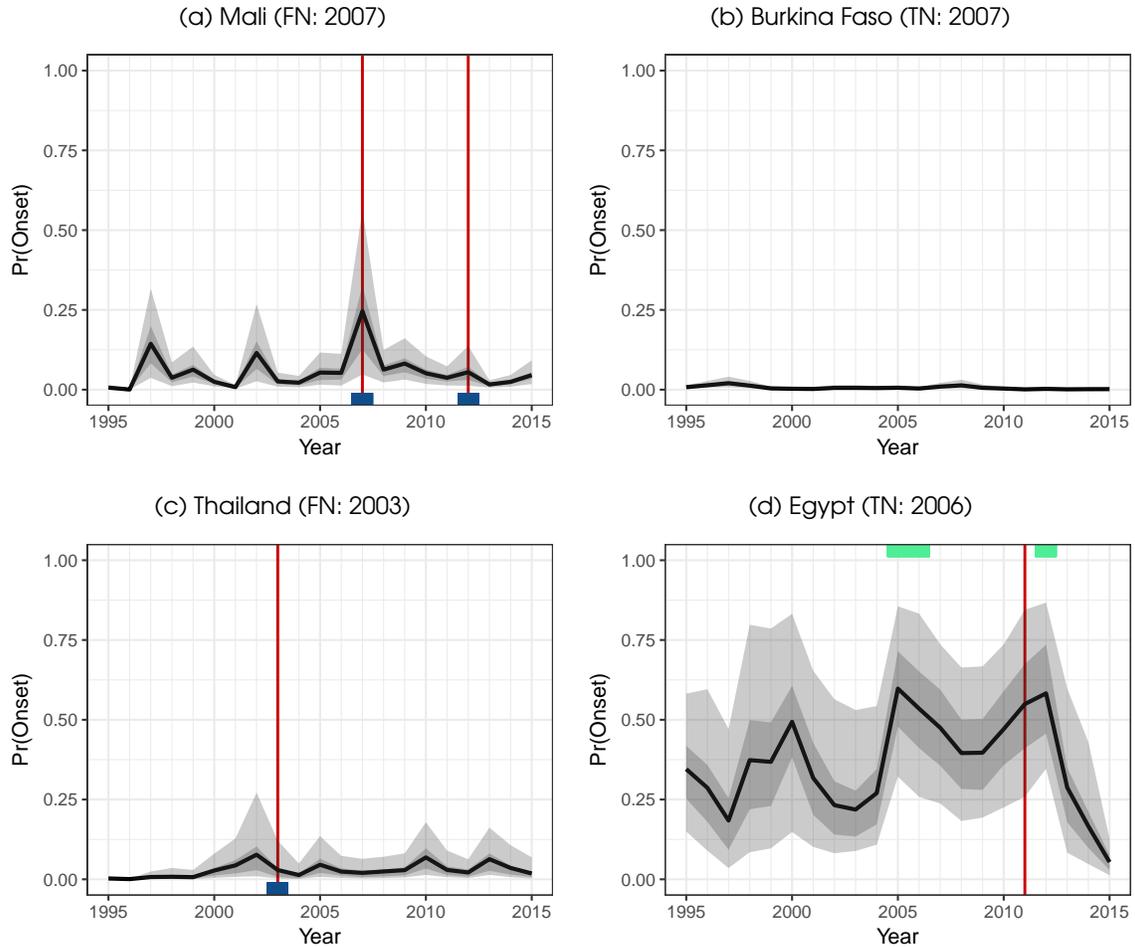Figure 3.2: Predicted Probabilities of Conflict Onset II
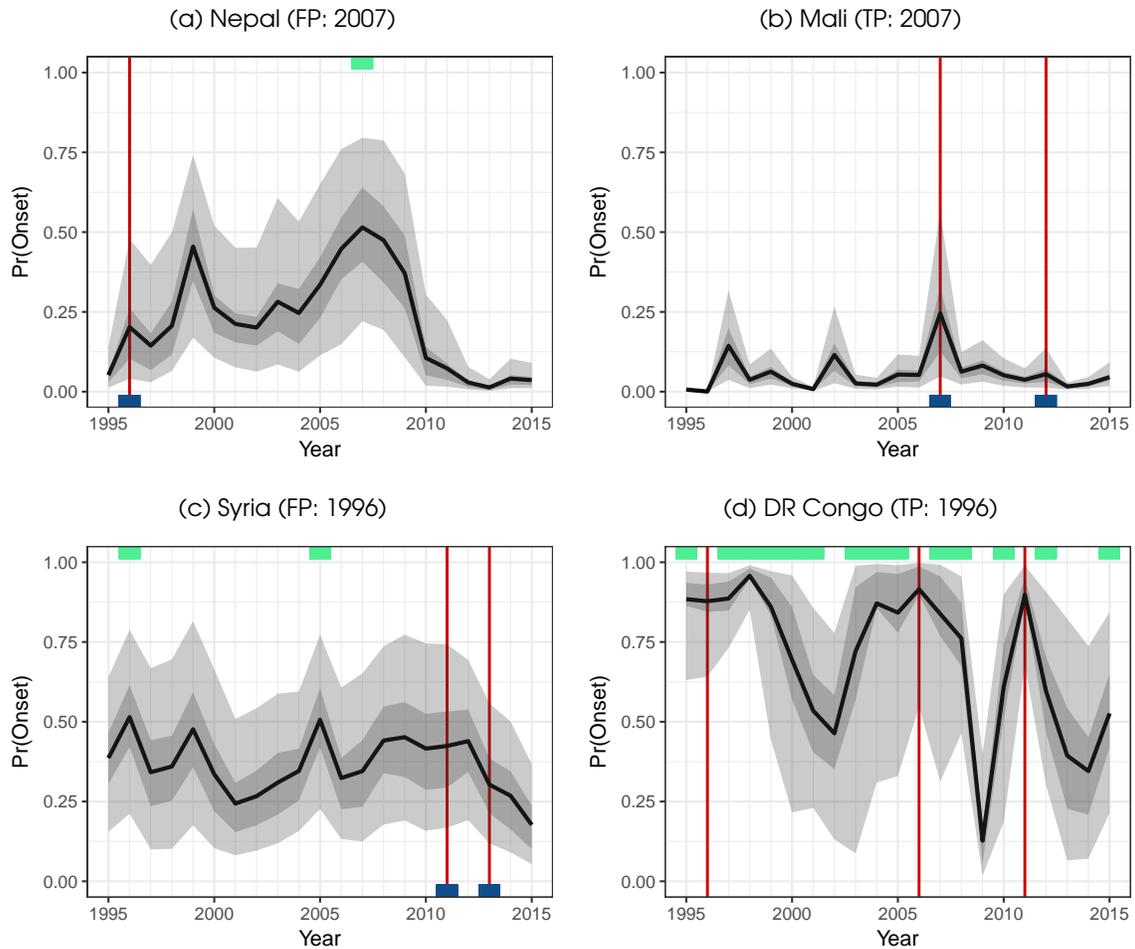
Note: Predicted probabilities of conflict onset from the LDA model with upsampling to 10%. False positives (left column) and their matched true positives (right column). Black lines are mean predicted probabilities; inner bands represent $25 - 75$ percentiles for predictions; outer bands represent 2.5 to 97.5 percentiles. Vertical red lines mark actual onsets (see Table 2.2). Green bars on top indicate false positives from the LDA model; blue bars on bottom indicate false negatives from the LDA model.

Figure 3.3: Predicted Probabilities of Conflict Onset III

(a) Central African Republic (FN: 2009)

(b) Djibouti (TN: 2003)

(c) Côte d'Ivoire (FN: 2002)

(d) Tanzania (TN: 2003)

Note: Predicted probabilities of conflict onset from the LDA model with upsampling to 10%. False negatives (left column) and their matched true negatives (right column). Black lines are mean predicted probabilities; inner bands represent $25 - 75$ percentiles for predictions; outer bands represent 2.5 to 97.5 percentiles. Vertical red lines mark actual onsets (see Table 2.2). Green bars on top indicate false positives from the LDA model; blue bars on bottom indicate false negatives from the LDA model.

Figure 3.4: Predicted Probabilities of Conflict Onset IV

Note: Predicted probabilities of conflict onset from the LDA model with upsampling to 10%. False negatives (left column) and their matched true negatives (right column). Black lines are mean predicted probabilities; inner bands represent $25 - 75$ percentiles for predictions; outer bands represent 2.5 to 97.5 percentiles. Vertical red lines mark actual onsets (see Table 2.2). Green bars on top indicate false positives from the LDA model; blue bars on bottom indicate false negatives from the LDA model.

4. Qualitative Case Comparisons

This section provides detailed comparisons between our country pairs. For the purposes of brevity, we do not provide citations for well known events and facts. More detailed information on each of the country cases is readily available in online sources such as the CIA World Factbook, BBC country profiles, Freedom House Country Reports, and Polity IV Country Reports, all of which were used to guide our initial analysis. Unless otherwise noted, figures are taken from the World Development Indicators.

Each comparison first highlights trends in three key variables for a decade before the event or non-event (GDP per capita growth, Official Development Assistance per capita, and an inverted average of both Freedom House scores), then summarizes the key differences identified between the pair, and then provides a brief report on the comparison between the countries on several dimensions such as:

- **Establishment of Democracy and Political Plurality**

- **Economic Situation**

- **Land Use and Agriculture**

- **Literacy**

- **Type of Governance and Executive power**

- **Size of Administrative divisions**

- **Difference in Legislative Branches**

- **State of Media and Freedom**

- **Judicial Autonomy**

- **Population Below Poverty and Unemployment Rate**

- **Official Development Assistance and Relationship to the West**

- **Communication Infrastructure and Internet users**

- **Military Spending**

- **Political Environment and Dispute Resolution**

- **Government Priorities just before onset**

- **Additional case specific differences**

I. Côte d'Ivoire 2002 (FN) vs Tanzania 2003 (Peace)

Country: — Cote d'Ivoire, 2002 — Tanzania, 2003
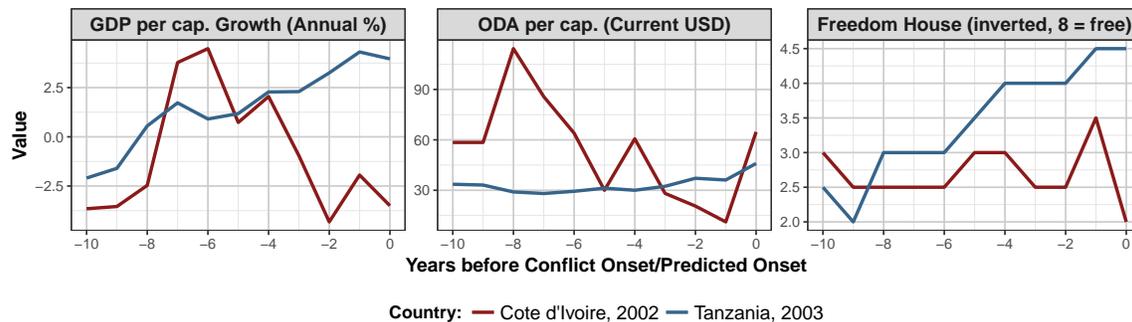
Summary

In 2002, the model predicts Côte d'Ivoire to be in peace. In reality, this year marked the beginning of the First Ivoirian Civil War which led to the country's division and over 1000 dead. Comparing Côte d'Ivoire to the closest non-conflict case –Tanzania in 2003– yields two key differences which appear to have led to conflict in one case and not the other. First is the sharp reversal of economic fortune in Côte d'Ivoire where GDP growth rates went from greater than 3% six years prior to the onset of conflict to below negative 2% in each of the three years immediately before. Second, power sharing in Tanzania had been relatively established following the signing of Muafaka I and II in 1998 and 2001 respectively. In the presence of widespread economic disturbance and deepening societal tensions, Côte d'Ivoire's history of restricting political opposition meant that many Muslims and Burkinabes in the North felt there was no non-violent recourse to achieve political representation.

- **Establishment of Democracy/Start of Multi-Party Democracy:** Côte d'Ivoire, after almost 30 years of one party rule, in the 1990s, saw limited political liberalization, though the dominant party retained political control. Tanzania amended its constitution in 1992 and held its the first democratic multi-party elections in 1995. Although these elections were deemed fair by international organizations, the ruling party continued to dominate.

- **Difference in Economic Conditions and GDP growth Rate:** Côte d'Ivoire has historically been very prosperous as compared to neighboring West African countries. The country has had some of the highest levels of cocoa and coffee production in the world, making the economy highly susceptible to volatility in international commodity prices. Due to the large devaluation of the CFA Franc in 1994 the economy picked up and the growth rate was about 5%. However, in 2000 and 2001 this trend reversed dramatically.[1] Moreover Ivorian conflict diamonds mined in the north were used to finance rebel operations and the United Nations imposed embargo had little effect.

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[1]AfDB/OECD/UNDP, 2004.

Despite overall low levels of GDP per capita, growth in Tanzania was consistently improving during the period between 1991-2002 in part due to infrastructure reforms, increased production of industrial goods and increased mining of mineral such as gold. Together with a host of economic and banking reforms Tanzania saw increased private sector growth and investment. In 2003, Tanzania's annual growth rate was 6.89%.

- **Land Use and Agriculture:** Both Tanzania and Côte d'Ivoire rely heavily on agriculture. Arable land in Côte d'Ivoire makes up 9.23% of the country's landscape while in Tanzania this figure rests at around 4.5%. Moreover, land with permanent crops is 13.85% in Côte d'Ivoire but only 1.08 % in Tanzania.[2]

- **Population Growth Rate:** During the early 2000s, Côte d'Ivoire had a high population growth rate of 2.45% augmented by an influx of migrants. Tanzania had a lower population growth rate and net migration is negative.[3]

- **Literacy:** Tanzania had a relatively high literacy rate of 69.43.2% (2002 estimate) as compared to Côte d'Ivoire's 48.74% (by 2000 estimates and decreasing steadily).

- **Type of Governance and Executive Power:** The strong leadership of the ruling party in Côte d'Ivoire and its domination over the judiciary and legislature meant there was very little opposition to any presidential initiatives. In June 1998, the National Assembly adopted numerous amendments to the constitution which further enhanced executive power.[4]

  Tanzania also had strong executive control over other branches of the government. Although the opposition was able to voice its opinion freely, there were many small parties which were relatively weak and disorganized. Therefore, these posed little threat to the ruling party.[5]

- **Legislature:** Power sharing arrangements are reflected in the composition of the legislature in Tanzania. Côte d'Ivoire has 225 members, elected for a five-year term in single-seat constituencies with no reservations for minority groups in 2002. Tanzania on the other hand holds reservations for women and representatives from Zanzibar. Zanzibar is semi-autonomous and has its own President and House of Representatives.[6]

- **Size of Administrative Divisions:** Côte d'Ivoire has much smaller and more administrative units in the country compared to Tanzania. Côte d'Ivoire total area is 0.3 million square kilometers and has 58 administrative divisions, Tanzania area is 0.9 million square kilometers and it has 26 administrative divisions.[7]

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[2]Central Intelligence Agency, 2003.
[3]Central Intelligence Agency, 2003.
[4]Polity IV Country Report 2010: Côte d'Ivoire.
[5]Polity IV Country Report 2010: Tanzania.
[6]Amnesty International, 2001.
[7]Central Intelligence Agency, 2002/2003.

- **State of Media and Freedom:** Tanzania was "Partly Free" in 2003 (with a combined score of 10.5) and Côte d'Ivoire was also "Partly free" 2002 (with a score of 13.5) which soon deteriorated to "Not Free" in 2003 as per Freedom House country reports (the range is 3- the best and 21- the worst).

- **Judicial Autonomy:** The judiciary in Côte d'Ivoire has only limited power and is not independent. Judges are usually political appointees without any tenure who were highly susceptible to corruption and external influence (in 2002).[8]

  In 2003, Tanzania's judiciary was showing signs of increased autonomy after decades. In in the couple years before 2002, although there remained political influence, the situation was improving.[9]

- **Poverty Headcount and Unemployment Rate:** Using the closest available figures, the poverty headcount rate at the $1.90 a day (2011 PPP) in Tanzania was an estimated 84.74% in 2000 –though decreasing thereafter– while it was 23.03% and increasing in Côte d'Ivoire, reaching 29.02% in 2008. The unemployment rate in Côte d'Ivoire was also much higher, at 9.14% in 2002 vs 3.03% in Tanzania in 2003.[10]

- **Official Development Assistance and relationship to the West:** Côte d'Ivoire and Tanzania both received large amounts of economic aid of $1 bn and $1.2bn respectively. Both the UK and US have relatively good relationships with Tanzania. UK is one of the largest sources of foreign investment and the US provides assistance to Tanzania to support health, education and development programs.[11]

  In Côte d'Ivoire, a large number of donors had frozen donations after concerns related to the October 2000 elections.[12] These electoral issues were a significant source of tension in foreign relations following 2000. There was regional and international assistance to resolve the 2002 dispute and implement a power sharing agreement in 2003. France was one of the first to recognize President Gbagbo after the elections and is a close ally.

- **Communication Infrastructure and Internet users:** The telephone and communication systems in both countries are fairly developed, though operating below capacity. There is a large difference in the number of Internet users while population sizes are similar; Tanzania had 250,000 users of Internet while Côte d'Ivoire had only 70,000 (2002 estimate).[13]

- **Military spending:** Tanzania has compulsory military service but spent relatively little on military (0.2% of GDP). Côte d'Ivoire, in contrast, spent much more on

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[8]Freedom House, 2002. *Freedom in the World: Ivory Coast.*
[9]Freedom House, 2003. *Freedom in the World: Tanzania.*
[10]World Development Indicators, 2017.
[11]Central Intelligence Agency, 2002/2003.
[12]WRITENET, 2002.
[13]Central Intelligence Agency, 2002.

its military in 2002 (1.3% of GDP).[14]

- **Political Environment and Dispute Resolution:**

  – **Tanzania:** Negotiations between the CCM (ruling party) and the CUF (opposition party) ultimately led to the signing of Muafaka I peace agreement. It was in action from February 1998 to June 1999. The agreement contained provisions on several aspects of the constitution, civic education, a permanent voters register, the freedom of political parties, the judiciary, attendance in the House of Representatives, the electoral laws, the state media organs, and promotion of good governance and democratization. Muafaka II followed the peace negotiations between the same parties and was held from March to October 2001 and was designed to address issues missed or not implemented in the first agreement and to proactively find a solution to the governance of Zanzibar. Muafaka II is generally seen to have been successfully implemented.[151617]

  – **Côte d'Ivoire:** The country allowed opposition parties but carefully monitored their activities. It had a "dual track" policy of economic co-optation and manipulation of laws which allowed it to restrict political opposition without generating much backlash. Continued economic prosperity was thus necessary for this to work and when the economy started dipping the ethnic tensions reemerged.[18]

- **Government Priorities just before onset:** In 2003, Tanzanian government was implementing the Muafaka II agreements. The Ivorian situation was very volatile because new amendments were again passed which prevented Ouattara's (a popular opposition presidential candidate) candidacy. This was received very poorly by his northern Muslim supporters who already felt marginalized. Côte d'Ivoire also has a history of using ethnic differences as a political tool. A successful mutiny in 2002 lead to a large portion of Northern Côte d'Ivoire falling in rebel control.
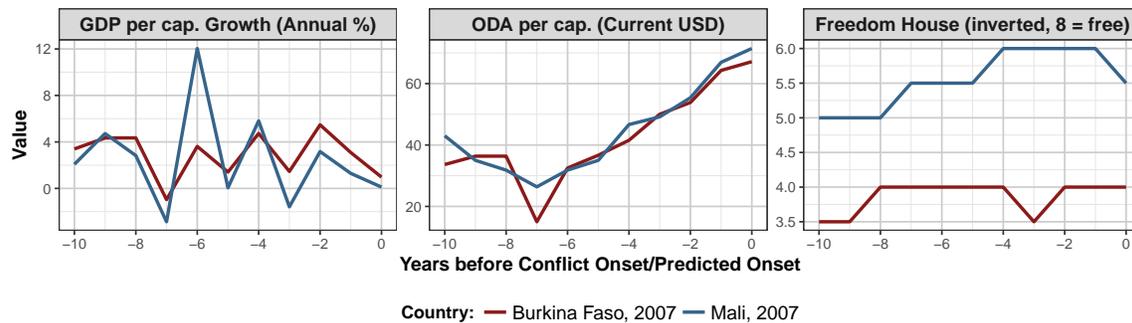
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[14]Central Intelligence Agency, 2002.

[15]Amnesty International, 2004.

[16]USSD Country Report on Human Rights Practices 2004 – Tanzania.

[17]Polity IV Country Report 2010: Tanzania.

[18]Polity IV Country Report 2010: Côte d'Ivoire.

II. Mali 2007 (FN) vs Burkina Faso 2007 (Peace)

Country: ▬ Burkina Faso, 2007 ▬ Mali, 2007

Summary

In 2007, Mali is predicted as being peaceful but actually saw conflict in the form of a Tuareg Rebellion. Insurgents had previously been granted some degree of autonomy and self-governance in the Kidal province of Mali following a peace agreement in 1995. However, a splinter group –unsatisfied with the level of poverty in the region and inspired by a larger uprising in neighboring Niger– broke from this agreement and was in sporadic conflict with the Malian Military. In aggregate, Mali and Burkina Faso are fairly similar in demographic and economic characteristics. Overall, the conflict in Mali was quite surprising and the result of internal defection among ex-combatants. Therefore, it is not obvious what sets it apart from its closest peaceful peer.

- **Establishment of Democracy/Start of Multi-Party Democracy:** Most attempts at liberalizing the political system in Burkina Faso were short lived. Multi-party democracy started in 1991 but most opposition parties boycotted subsequent elections. President Campoare, originally elected in 1991, was still in power by 2007.

  One party rule was established in Mali in 1974 and multi-party election system were established in 1992. The subsequent elections held were generally considered free and fair and the 2002 transfer of power to the newly elected president was peaceful.

- **Land Use and Agriculture:** Burkina Faso relies heavily on agriculture with almost 17.6% arable land. Mali only has about 3.6% arable land.[19]

- **Literacy Levels:** The literacy level in Mali are similar to that of Burkina Faso; Mali had an adult literacy rate of 26.17% in 2006 while Burkina Faso only has about 28.72% in 2007.[20]

- **Health issues and prevalence of HIV:** There is also a much higher prevalence of HIV/AIDS in Burkina Faso. Almost 4.2% of the total population was affected as compared to the 1.9% in Mali according to a 2003 estimate.[21]

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[19]Central Intelligence Agency, 2007.
[20]World Development Indicators, 2017.
[21]Central Intelligence Agency, 2007.

- **Size of administrative divisions:** Mali has a total area of around 1.24 mil sq kms and has 8 divisions while Burkina Faso has 0.27 mil sq kms and has 45 administrative divisions.[22] It is important to note that Burkina Faso had only 15 administrative units until 2004, when amendments to the electoral system lead to the creation of 45 units. This was widely seen as a move by the ruling party to gain a parliamentary majority in the subsequent election.

- **Economic Situation:** Both Burkina Faso and Mali have very low levels of GDP per capita. Cotton is the main cash crop in both countries and GDP growth in the years preceding conflict onset had largely been driven by increases in world cotton prices. In Mali, the devaluation of the CFA Franc had pushed the growth rate to about 5%. Burkina Faso devolved its macroeconomic policies and inflation targeting to the West African regional central bank and only maintains control over the microeconomic and fiscal policies. These include implementing reforms to encourage private investment.[23]

  Both Burkina Faso and Mali have been affected by the ongoing conflict in Côte d'Ivoire. There was a significant decrease in remittance income and new trade routes have to be charted for coffee and cocoa exports. Moreover, seasonal workers who were conventionally employed in Côte d'Ivoire, had returned to Mali and Burkina Faso, leading to increased pressures on the countries' infrastructure and labor markets.[24]

- **Type of Governance and Executive Power:**

  Mali: The multi-party electoral system in Mali, established in 1992, has seen fair and competitive voting. In May 2002 Mali saw its first electoral transfer of executive power and the transition was peaceful. Mali also has more restraints on executive power compared to Burkina Faso. The Constitution awards separate powers to the executive, legislative and judicial branches. The president is responsible for appointing the government and the Prime Minister they are accountable to the legislature as well. Executive power is comparatively more in check as compared to Burkina Faso.[25]

  Burkina Faso: There is less horizontal accountability in Burkina Faso. Amendments in the 1991 Constitution enhanced executive power, made even stronger by President Campaores dominance over the legislature and judiciary. The Prime Minister has little independent power and the appointment is made by the president. President Campoare's political party had a been in control the legislature throughout the 1990s.[26]

- **State of Media and Freedom:** There was a significant difference in civil and political liberties between the two countries. In 2007, Mali was rated as "Free"

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[22]Central Intelligence Agency, 2007.
[23]Central Intelligence Agency, 2007.
[24]United Nations Development Program, 2011.
[25]Polity IV Country Report 2010: Mali.
[26]Polity IV Country Report 2010: Burkina Faso.

with a score of 6. Burkina Faso was rated "Partly Free" with a score of 12.[27] The human rights record in Mali is generally good. The print and broadcast media in Mali is considered among the most free in Africa.[28]

- **Judicial Autonomy:** The judiciary in Mali is subject to extensive executive influence and there are credible reports of corruption. The trend however was improving in 2007. The judiciary has shown considerable autonomy in making anti-administration decisions which have been respected by the government.[29]

  The judiciary in Burkina Faso in 2007 was in the international spotlight for the murder case of Norbert Zongo, founder and publisher of an independent newspaper which exposed government extortion and impunity. The charges against the chief suspect were all dropped. There were a large number of anti-corruption initiatives but success was limited. There are credible reports of the judiciary's failure to prosecute corruption cases. Impunity is also widespread in Burkina Faso.[30]

- **Poverty Headcount and Unemployment Rate:** Both countries have high poverty levels. By a 2006 estimate, 50.59% of Malians were below the international poverty line compared to 55.29% in Burkina Faso in 2009. In 2007, the unemployment rate in Mali was 11.7% while in Burkina Faso it was a much lower 3.3%.[31]

- **Communications Infrastructure:** The communication infrastructure in Mali in 2007 was unreliable but slowly improving. In Burkina Faso, all domestic and international services were assessed to be fair and adequate. The number of Internet users in both countries is similar.[32]

- **Official Development Assistance and relationship to the West:** Both countries received substantial economic aid (a little less than half a million total funds received through ODA). Mali has a good relationship with the United States. The relationship with France is cordial and sometimes ambivalent. Nevertheless, France has sent in troops to support the government in its fight against the rebellion in the north.[33]

  For Burkina Faso, the relationship with US has been strained occasionally because of President Compaore's arms trading and other sanction breaking activities. USAID closed its office in Ouagadougou in 1995 but still gives about $18 million annually for development assistance.[34]

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[27]Freedom House, 2007. *Freedom in the World: Burkina Faso.*
[28]Freedom House, 2007. *Freedom in the World: Mali.*
[29]Polity IV Country Report 2010: Mali.
[30]USSD Country Report on Human Rights Practices 2006 – Burkina Faso.
[31]World Development Indicators, 2017.
[32]Central Intelligence Agency, 2007.
[33]BBC, 2013. *France and Mali: An 'ironic' relationship.*
[34]U.S. Department of State Country Report on Human Rights Practices 2006 – Burkina Faso.

- **Military Spending:** Comparing the two countries, Mali has slightly higher expenditure on military at 1.9% of its GDP while Burkina Faso spends 1.2% of its GDP on military. Both countries have compulsory military services.[35]

- **Political Environment and Methods of Dispute Resolution:**

  Burkina Faso

  – The assassination of the journalist Norbert Zongo in 1998 promoted the formation of a loose coalition of opposition parties, human rights organizations, and civic and media groups to draw international attention to the weak democratic system and low transparency.

  – Political reforms in the wake of the protests led to the creation of independent electoral commission, establishment of single ballot voting system, public financing for parties presenting candidates, and more. In 2002, the ruling party won 57 out of 110 seats (compared to the 101 in 1997).

  – Although the constitution was amended to shorten the presidential term from seven to five years and a limit of 2 terms, Campaore's party stated that these could not apply retroactively and nominated him for the third time (an election which he later won).

  – There were additional reforms in 2004 which appear to have favored the ruling party.

  – A subtle point that distinguishes Burkina Faso from Mali is that President Campaore is a powerful leader with strong support from the Burkinabes, unlike Malian President Toure. Moreover while there was opposition to President Campaore's rule the opposition parties were numerous and divided.[36]

  Mali

  – Ethnic identity is a strong cleavage in Malian society. In 1999, a Tuareg rebellion which started in 1991 was finally resolved. Many of their fighters were integrated in the armed forces, but their economic and political issues were left unattended.

  – In May 2006 there was fear of new rebellion (A weapons cache was looted in Nothern Mali). Algeria had brokered a peace deal between the government and the fighters. The focus was poverty reduction programs and economic rejuvenation of the area. Note - The Tuareg rebellion was a separatist movement going as far back as 1964. The Tuareg-heavy Kidal region was granted greater autonomy to end the conflict (attempts were made both in 1990 and 2006) but hostilities continued spurred on by poor economic conditions in the area.[37][38]

[35]Central Intelligence Agency, 2007.

[36]USSD, 2006. Country Reports on Human Rights Practices – Burkina Faso.

[37]BBC, 2007. *Tuareg Conflict Spreads to Mali.*

[38]IRIN, 2007. *Indignation Dominates Reaction as Attacks in North Escalate.*

- **Government Priorities just before onset:** In Mali in 2007 President Toure had just won his second term in office and the ruling coalition had strengthened its hold over the parliament. Although the government had signed an Algerian brokered peace deal (June 2006) a splinter group inspired by the uprising in Niger continued to rebel. The focus although was poverty reduction programs and greater investments to develop the northern regions. Burkina Faso was generally peaceful in 2007. A significant development was the government amending the electoral systems again in favor of the ruling party. There was also focus on combating child trafficking and curbing the widespread practice of FGM/C (Female Genital Mutilation/Cutting).

III. Thailand 2003 (FN) vs Egypt 2005 (Peace)

Country: — Egypt, Arab Rep., 2005 — Thailand, 2003
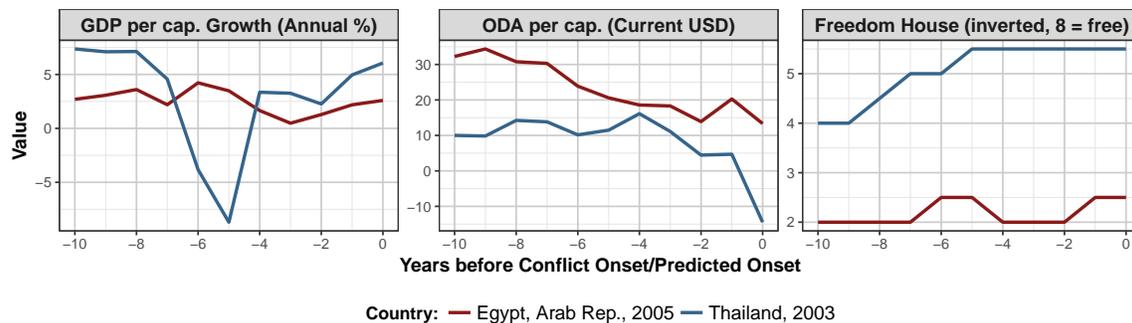
Summary

Thailand in 2003 was predicted as being peaceful but actually saw considerable civil unrest. 2003 marked the start of Thailand's aggressive war on drugs policy which led to severe human rights abuses and many deaths. This crackdown largely focused on the majority Muslim South, leading to increased feelings of political marginalization on behalf of the Muslim Malay. Egypt in 2005 faced similar challenges with minority populations feeling marginalized and politically under-represented. Rather than taking an aggressive approach, the ruling party pledged to promote political reforms as its central objective in 2003 which resulted in the multiparty reforms of 2005.

Similarities: Both the countries occupy important role in regional geography and as important commercial links. The population sizes of these countries are similar. The religious distribution is also quite similar; both countries have a large majority of one group and minorities groups in the the given year comprise 10% or less of the total population.

- **Establishment of Democracy/Start of Multi-Party Democracy:** The Egyptian constitution was framed in 1971 and in 2005 multiple parties were allowed to participate. In 1973, Thailand established democracy allowing multiple parties to participate. Thai democracy is marked with repeated interruptions of military rule.

- **Land Use and Agriculture:** The Thai economy is largely agrarian. Almost 33% of land in Thailand is arable with 7% of it cultivating permanent crops. Agriculture thus employs 54% of the population. Egypt on the other hand has only 2.93 arable land and 0.5% of land has permanent crops. The labor forces is largely employed in the service sector 51% and and only 32% in agriculture.[39]

- **Literacy Levels:** Thailand has a very high literacy rate of 92.67% (in 2000) as compared to Egypt's 66.37% (in 2006).[40]

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[39]Central Intelligence Agency, 2003/2005.
[40]World Development Indicators, 2017.

- **Size of administrative Divisions:** The size administrative divisions is smaller in Thailand as compared to Egypt.

- **Differences in Governance and Executive power:** Thailand is a constitutional monarchy while Egypt is a presidential republic. The executive powers of the head of State (the prime minister) in Thailand is less than the power exercised by the President in Egypt. The Prime minister in Thailand is accountable directly to the legislative branches. In Egypt there was very little horizontal accountability. The National Assembly has limited influence in important areas such as security and foreign affairs. Most legislation in Egypt is initiated by the executive branch. The national assembly, which has some control over economic and social policies, cannot modify the budget without executive approval.[41][42][43]

- **State of Media and Freedom:** Thailand in 2003 was rated "Free" by Freedom House, but the trend was towards less freedom due to an increase in the executive power of the prime minister, intimidation of journalists and censorship (international journals like *The Economist* were banned).[44] Egypt was rated as "Partly Free" but the trend was upwards (2003). There were constitutional political reforms and ease in restrictions of print and news media. On the other hand there were massive crackdowns on the activities of opposition groups, including Muslim Brotherhood members.[45]

- **Judicial autonomy:** The judiciary in Thailand is independent from the executive branch. However, during the impeachment procedure of the Prime minister in 2001 the Constitution Court faced considerable political pressure and there were many allegations of corruption. The judiciary in Thailand also lacks capacity and a sufficient number of qualified judges. (evidenced by a large volume of case backlogs according to a USSD report). The judiciary in Egypt had demonstrated substantial independence, though it lacked the power necessary to enforce its decisions (e.g. The court could declared a government guilty of electoral malpractice but does not have the capacity to remove officials). There was full judicial supervision of the electoral proceeding in 2005. The regular jury in Egypt is considered among the most impartial and fair in the Arab world. However, political cases are normally solved under Exceptional Courts which are controlled by the executive branch.[46]

  Thailand has not submitted an ICJ jurisdiction declaration whereas Egypt accepts compulsory ICJ jurisdiction with reservations. Both are non party states to the ICC.

- **Legislative Assemblies:** In 2005, Egypt had a bicameral legislature like Thailand. All the members of the legislative branch in Thailand are elected by pop-

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[41]USSD Country Report on Human Rights Practices 2002 – Thailand.
[42]Polity IV Country Report 2010: Thailand.
[43]Polity IV Country Report 2010: Egypt.
[44]Freedom House, 2003. *Freedom in the World: Thailand.*
[45]Freedom House, 2005. *Freedom in the World: Egypt.*
[46]USSD Country Report on Human Rights Practices 2002 – Thailand.

ular vote. In Egypt there is a proportion which is chosen by the president. The president also had the authority to dissolve the National Assembly with the help of a referendum.

- **Economic Differences:** Both countries experienced growth rates of around 5%, but Thailand was steadily decreasing from its very high 9%. Egypt at the same time was making economic reforms and had improved to 5%. Egypt in the few years before 2005-2006 undertook a substantial restructuring of its economy. Economic reforms included reduced personal and corporate tax rates, privatization of enterprises like banks, and sponsoring energy subsidies.[47]

  Thailand on the other hand enjoyed a very high growth rate in the decade before 1995 (One of the highest growth rate in the world at about 9%). This caused increased speculative pressure on its currency and there was a major financial crisis in 1997- 1998. The recovery after this period was slow, but bolstered by strong exports, investment spending and increased consumption An ailing financial sector combined with slow pace of corporate debt restructuring and low global demand pushed by growth rate to almost 1.4% in 2001 and continued to grow slowly thereafter.

- **Poverty Headcount and Unemployment Rate:** Thailand in 2001 had a lower percentage of population below the poverty line (1.14%)[48] than Egypt (20%).[49] The unemployment rate in Thailand in 2003 (1.54%) was also lower than Egypt (11.2%) in 2005.[50]

- **Economic aid received and relationship with the Western World:** Egypt in 2005 received about $1.2 billion in Official Development Assistance (ODA 2002 figures). Thailand on the other hand received only $131.5 million. Relations between Egypt and the U.D have improved after the peace treaty with Israel and Egypt received about $19 bn in military aid and $ 30 bn in economic aid (between 1979-2003). Military cooperation is a strong aspect of the strategic partnership.[51] The European Union is one of Egypt's biggest trading partner, whose export volume amounted to $11.6 bn in 2004. Thailand US relationships are also good and in 2003 US declared Thailand a "major non-NATO ally" which grants the country many financial and military benefits.

- **Communication Infrastructure and Internet Users:** Communication Infrastructure in Egypt is reasonably modern with good cellular services. The number of Internet users is 5 million vs 1.2 million in Thailand even though the population sizes of the countries are comparable. The telecommunication infrastructure in Thailand was adequate and in need of upgrades.[52]

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[47]United Kingdom: Home Office, 2008.
[48]World Development Indicators, 2017.
[49]Central Intelligence Agency, 2005.
[50]World Development Indicators, 2017.
[51]Sharp, 2010.
[52]Central Intelligence Agency, 2003/2005.

- **Military expenditure and number of Units:** Egypt military expenditure is higher than Thailand. Thailand expenditure as percentage of GDP in Thailand is 1.4% (2000) vs Egypt's expenditure of 3.4% (2004).[53]

- **Differences in the nature of public grievances:** In Thailand, the ethnic Musim Malay people felt marginalized and unrepresented (2004). There was a major crackdown on drug rings in 2003 in which many innocent lost their lives and was a major cause of dissent for the public. Egypt on the other hand was slowly becoming more radicalized (increasing support for Muslim Brotherhood, which the government did not tolerate) and there was additional resistance towards long periods of rule of one leader.[54]

- **Poltitical environment and Methods of Dispute Resolution:**

  Thailand: The onset of the civil unrest in Thailand starts with its "War on Drugs" in 2003. Almost 2000-2800 people were killed and official investigations show that over half of these killings had no relationship with drugs (rather, extensive police brutality and extra-judicial killings which were known and encouraged by the government). Several thousand people were also forced into drug addiction treatment programs without any evidence of addiction. Just before this there was also a resurgence of violence in the southern states dominated by Malay Muslims in 2001. The government did not acknowledge the separatist movements and the conflict continued to escalate in 2004. Martial law was imposed in 2004 in some southern states.[55]

  Some reasons citied for the political unrest of the southern Malay people include:

  – **Political Factors:** The Malay Muslim claim they are marginalized and underrepresented in politics. The authorities deny these claims. There were several prominent Muslim members of the parliament in 2001-2005, and the mayors of the southern states were Muslim and enjoyed religious freedom. However, this situation changed drastically post 2005 elections.

  – **Economic Factors:** Although the Malay Muslim States continued to prosper during the good years they generally have much lower educational levels compared to Buddhist counterparts. Moreover, Government school in these areas are being destroyed by insurgent actors. The lesser educated Muslims thus have lower employment prospects. The divide is deepened by the fact that Muslims don't really accept Thai as their language or the Thai education system

  Egypt: Political Representation –whether real or just perceived– was perceived as very important. Egypt made progress towards political plurality in May 2005 with the approval of a new Constitution. For the first time Multi candidate competition for presidency would be decided by popular vote. But this was not

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[53]Central Intelligence Agency, 2003/2005.
[54]Chalk, 2008.
[55]Human Rights Watch, 2008.

implemented in spirit and the ruling party did not truly expose themselves to democratic participation. A main opponent, the Muslim Brotherhood, remained banned.[56]

- **Government Priority just before Onset:**

In Egypt the ruling party pledged to promote political reforms as its central objective (2003) which resulted in the multi-party reforms of 2005. Thailand in 2003 was starting the war on drugs which led to severe human rights abuses which were largely ignored by authorities.

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[56]Polity IV Country Report 2010: Egypt.

IV. Central African Republic 2009 (FN) vs Djibouti 2003 (Peace)

Country: — Central African Republic, 2009 — Djibouti, 2003
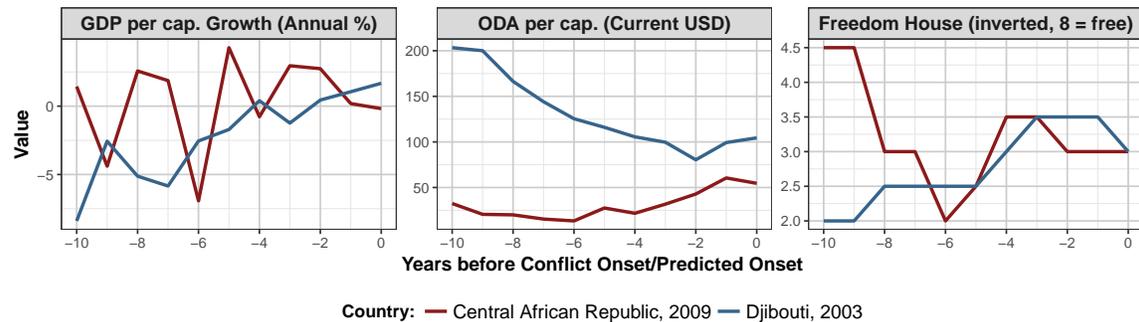
3 Summary

CAR in 2009 and Djibouti in 2003 faced similar political challenges to peace. Both countries had recently come out of conflict characterized by ethnic or tribal cleavages and had recently implemented peace agreements. In Djibouti, peace was reached through power sharing agreements in which Issa and Afar clans hold roughly equal cabinet posts and the legislature also includes representatives of other groups. In contrast, the agreements in CAR were logistically difficult to implement in an extremely low-capacity environment made all the more difficult by conflicts in neighboring Chad and from the Lord's Resistance Army (LRA). The key distinguishing feature was that Djibouti had been able to arrive at a stable power-sharing system.

- **Establishment of Democracy/Start of Multi-Party Democracy:** After the strict one party rule under President Aptidon (who in total held office for 22 years) multi-party politics were re-established in 1992 in Djibouti. CAR on the other hand had seen erratic authoritarian rule (multiple leaders, repressive rule, one self declared emperor) since independence. A one party state was established in 1986 and the political system was liberalized in 1992. Efforts to institutionalize democracy were severely undermined by ethnic cleavages.

- **Land use and Agriculture:** Subsistence agriculture and forestry (over 55%) are essential to the economy of CAR. CAR has 3.1% arable land 0.15% of which is used for permanent crops. Djibouti on the other hand has little arable land. Services (85%) and industry are the backbone of the economy.[57]

- **Presence of precious mineral resources:** CAR has a large number of precious natural resources such as diamonds, uranium, gold and oil. There is often conflict over the control and distribution of such resources. Diamonds constitute more than half of the export earnings but most of this revenues bypasses official channels.[58] Djibouti has very few precious natural resources. There is some gold, some clay, granite, limestone, marble, petroleum and salt.

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[57]Central Intelligence Agency, 2009.
[58]International Crisis Group, 2014.

- **Size of Urban population and Demography:** Most of CAR's population is rural and only 39% of it is urban (2008). Djibouti by contrast is largely urban with over 80% (with an upward trend in 2003) of the population living in urban centers. Religion is more homogeneous in Djibouti with 94% Muslims and 6% Christians. There are two main ethnic groups: The Afars (35%) and the Issa (60%). CAR is a little more heterogeneous with about 50% Christians, 15 % Muslims and the remainder practice indigenous religions. There are over 7 major ethnic groups.

- **Size of administrative divisions:** Djibouti has much smaller administrative division as compared to CAR (adjusting for the size of the country)

- **Type of Governance and Executive Power:**

  CAR: The National assembly and the constitutional courts were dissolved after the March 2003 coup and a new Constitution was written. The President is both the head of state and the head of government. He shares limited executive power with the Prime Minister. In the few years before 2009, the National assembly instead of constraining President Bozize let him rule with a free hand. In 2006 the president was allowed by the national assembly to rule by decree. He reorganized the civil services. Even municipal leaders were appointed by the president. The judicial branch too saw many appointments strongly influenced by the preferences of the president.[59]

  Djibouti: There is limited horizontal accountability in Djibouti as well. The president, in consultation with the cabinet, dominates the political agenda while the legislative and judicial branches serve subordinate roles. It is also noteworthy that elections are consistently characterized by fraud and vote rigging. In the elections of 1997 and 2003 the ruling party won all of the seats in the national assembly. [60]

- **Legislative Assemblies:** In Djibouti the unicameral legislature consists of of 65 members and is designed to represent the ethnic distribution of the country. The Issa clan has a representation of 21 legislative members while the Afar have 30 members. The remainder of the seats are shared by all the minority tribes in the country. There are no such reservations in CAR. All the 105 members are elected by popular vote.

- **Economic Situation:** The economic differences between the countries are considerable. Djibouti is a small financial hub in the region, with strong foreign investment flows. It occupies a strategic location and is a free trade zone in Africa. Djiboutian ports serve as transit point for both regional and a international transshipment (China and many Gulf countries) and as a refueling center for ships. Inflation is not a concern for the Djiboutian Franc is pegged to the US dollar. CAR's economy, relatively, is much poorer. Most of the GDP is generated by agriculture sector. Timber and diamonds are important exports. The combination of landlocked position, misdirected economic policies, poor transportation

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[59]USSD Country Report on Human Rights Practices 2006 – Central African Republic.
[60]Polity IV Country Report 2010: Djibouti.

system, and unskilled labor forces are major constraints to growth. Moreover the income distribution is highly unequal (2009) The growth rate in Djibouti in 2003 was 3.5% and increasing, while the growth rate in CAR in 2009 was 2.2%.[61]

- **Poverty Headcount and Unemployment Rate:** The unemployment rate in Djibouti was estimated at about 6.85% in 2003. The population living below poverty was about 20.63% (2002 estimate).[62] In CAR, the unemployment rate was significantly lower at about 8% with 23% headcount poverty rates in urban areas.[63] Overall, the population below poverty was very high at 66.3% by a 2008 estimate.[64]

- **Economic aid received and relationship with the West:** Djibouti received about 36 million in economic aid (2001) and enjoys excellent relationships with the United States and France. There are military and economic agreements and France provides security and economic assistance in return. The largest French military base in Africa is located in Djibouti's territorial waters. United States is a principal provider of humanitarian assistance and financial aid to Djibouti. Djibouti has allowed the US military to use its port and airport facilities (2003). Between 1998-2003, US was building its relationship with Djibouti and after 9/11 it cooperated with the US on counter-terrorism matters, establishing Camp Lemonnier there in 2003, which is in operations to this day.[65]

  France is the most important bilateral donor to CAR. In March 2009 French troops came to the assistance of President Bozize when rebels were taking over the capital, despite concerns that the elections were not completely free and fair.[66] France closed all of its military bases in CAR in 1997 which caused a power vacuum and the has been implicated in numerous violent military uprisings and a deepening of ethnic tensions.

- **Communication infrastructure and Internet users:** Communication infrastructure is quite limited in CAR with only one in hundred connected by a cellphone. They also have some of the lowest users of Internet in the world (at 19,000 people in 2009). Djibouti has adequate communication infrastructure with many more Internet users as well (3300 in 2002).[67]

- **Military Expenditure and Units:** Military expenditure by in Djibouti is more than CAR. Military expenditure as percent of GDP in Djibouti is 4.4% (2002 estimate) while in CAR it is 1.1% (2006 estimate).

- **State of Media and Freedom:** Both Djibouti (2003) and CAR (2009) were rated "Partly Free" by Freedom House with a score of 13.5 and 15 respectively (where 3

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[61]Central Intelligence Agency, 2003/2009.
[62]World Development Indicators, 2017.
[63]Central Intelligence Agency, 2003/2009.
[64]World Development Indicators, 2017.
[65]Embassy of the Republic of Djibouti,Djibouti-U.S. Relations, 2017
[66]BBC, 2006.
[67]Central Intelligence Agency, 2009/2003.

is best and 21 is the worst). In CAR, although the government allows free speech most journalists practice self censorship many press laws were also decriminalized in 2005. There are no restrictions on the Internet but it is estimated than less than 1% of the country can access this resource.

In Djibouti the constitution grants freedom of speech but most journalists practice self censorship. Independent newspapers are nevertheless allowed to circulate freely, though electronic media is largely controlled by the government.

- **Judicial Autonomy, freedom and power:**

  CAR: The president was able to strongly influence the judiciary. Moreover corruption, political interference and lack of training undermine the judiciary's capacity to perform its duties. As the judges are appointed by the president. The agenda is highly aligned with the president's. The country's criminal court meets only once or twice a year for one or two months per session and had large backlogs. The other high courts and subordinate courts had suffered from lack of funding and trained personnel.[68]

  Djibouti: The judiciary serves a subordinate role under the president and thus is not entirely independent. The situation is improving slowly and steps are being taken in the direction to increase transparency and accountability.[69]

- **Political Environment and Methods of dispute resolution:** The nature of conflict in both the countries is similar. A politically unrepresented and marginalized group wanted to increase its influence in public affairs.

  CAR: Deep ethnic and tribal cleavages continue to define political interactions. CAR has also tried to sign many peace agreements with the many competing rebel factions but they have had negligible effects. The most recent peace agreements are:

  - **Birao Agreement (2007):** To end the Bush war which started in response to President Bozize's military coup to topple Patasse in 2003.

  - **Libreville Comprehensive Peace Agreements (2008):** This agreement laid out amnesty programs and disarmament demobilization reintegration proposed by he government. These failed due to inadequate implementation.

  - In summary, it can be argued that these peace programs failed because of severe lack of institutional capacity (ICG). It is also possible that the favorable terms of the amnesty programs incentivized the creation of armed groups in the short term. Furthermore, CAR was surrounded by several conflict ridden countries, making peace-building all the more difficult.[70]

  Djibouti: Djibouti was able to solve the issue of bridging the gap between the Issa and Afar clans by successfully implementing multiple power sharing agreements:

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[68]International Criminal Court, 2007.
[69]USSD, 2005. *U.S. Department of State Country Report on Human Rights Practices – Djibouti.*
[70]See Warner (2013) and International Crisis Group (2007a).

– **1994:** Power sharing agreement signed between government and the rebels (FRUD). Most of the demands were met and the leaders of FRUD were incorporated in the government. The rebels were encouraged to disarm and reform themselves as a political party. Few extreme rebels factions continue to fight.

– **2000:** The radical wings of the rebellion and the government also signed a peace agreement. The marked the end of the civil war. Thus, an inclusive approach helped facilitate dialogue and communication between opposition groups and the power sharing agreement was agreeable to everyone.

– The Issa and the Afars now have roughly the same number of seats in top level cabinet posts even though the population is 60% and 35% respectively. Moreover the legislature included member from all clans of Djibouti society i.e the Issa hold 45% seats, the Afars hold 15% and the rest are held by minority. The president is an Issa clan member but his prime minister is an Afar. This serves as a good model for African Peacebuilding processes implemented through power sharing.[71]

• **Governmental Priority just before onset:**

CAR: 2008 was an eventful year for CAR politics.

– A large number of civil servants and soldiers had not been paid in months and were striking.

– The Prime Minister and the cabinet resigned just before a motion of no confidence was started against him in the parliament.

– New Prime Minister Touadera, an academic with no political experience, is appointed.

– Kony's "Lords Resistance Army" attacked CAR from its normal area of operations in Uganda.

– Two of the three main rebel groups signed a peace agreement with the government. The government agreed to provide assistance for disarmament and demobilization of the rebels. These factions decided to come together to form a coalition government in the 2010 elections.

– The government adopted an amnesty law to bridge the gap between rebels demands and the peacebuilding process.

Djibouti: The year was generally peaceful in part due to the expiration of a 1992 law which allowed only three opposition parties to participate in political affairs. For the first time free, multi-party elections were held (2003) and a coalition government was formed. However, it is noteworthy that no seats in the legislative government were won by the opposition.

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[71]United States Department of State, 2005. *U.S. Department of State Country Report on Human Rights Practices –Djibouti.*

V. Burundi 2008 (FP) vs Central African Republic 2009 (Onset)

Country: — Burundi, 2008 — Central African Republic, 2009
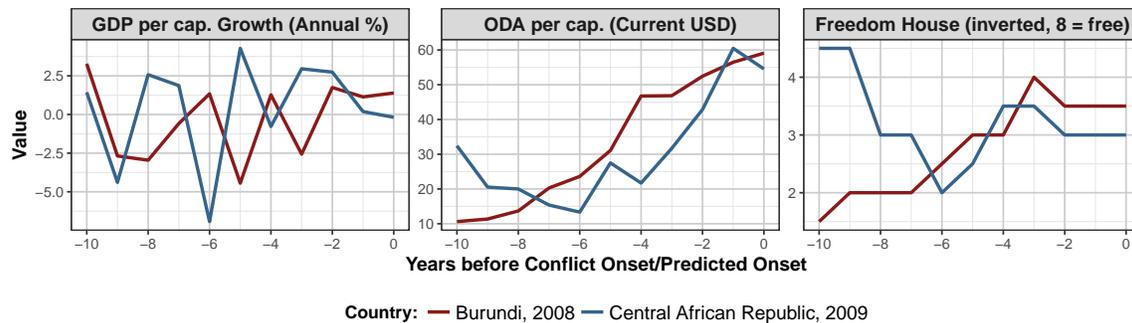
Summary

Burundi in 2008 was expected to fall into conflict but was not recorded as being in conflict by our data. In reality, the Forces Nationales de Libération (FNL), a Hutu political party and rebel group, broke the 2000 Arusha Peace and Reconciliation agreement for Burundi leading to small-scale conflict. So in fact, there was a small conflict in Burundi. However, the government of Burundi and the rebel group were able to come to an agreement in which 33 government positions were given to FNL leaders, stopping the conflict before it reached a sufficient level to enter into our dataset. In contrast, the CAR –which also had previously signed peace agreements in 2007 and 2008– was unable develop a lasting peace accord in part due to logistical challenges and in part due to competing demands by the many disparate groups in conflict.

- **Establishment of Democracy/Start of Multi-Party Democracy:** Burundi experimented with multi-ethnic constitutional monarchy post colonialism, and in 1966, after a military coup, Burundi was declared a republic with a single party. In early 1990s Burundi's first multi-party presidential elections were held. In contrast, CAR had seen erratic authoritarian rule (multiple leaders, repressive rule, one self declared emperor) since independence. A one party state was established in 1986 and the political system was liberalized in 1992. Efforts to institutionalize democracy were severely undermined by ethnic cleavages.

- **Differences in Economies:** Both countries are considerably poor with a majority population depending on subsistence agriculture. The primary exports in Burundi are tea and coffee which make the economy very vulnerable to international demand and prices for these commodities. Following a decade long civil war, the relative political stability following 2006 and 2007 led to an improvement in economic conditions and aid flows. Still, Burundi had a very low administrative capacity which made planned economic reforms difficult to implement. The government is heavily dependent on donors to finance employee salaries.[72]

  In CAR, most of the GDP is generated in the agriculture sector. Timber and diamonds are also important exports. However, economic mismanagement and

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[72]Central Intelligence Agency, 2008.

poor transportation infrastructure, including limited access to maritime trade, are major constraints to growth. Additionally, the income distribution was highly unequal in 2009. The growth rate in CAR in 2008 was 2.2%.[73]

- **Land Use and Agriculture** Burundi has much more arable land than CAR. Almost 35.57% of the land is arable and 13.6% has permanent crops. CAR on the other hand has only 3.1% arable land and 0.15% of which is used for permanent crops.[74]

- **Literacy:** Although literacy was fairly low in both countries at the start of the millennium (both between 50 and 60%), per World Bank estimates, Burundi had made significant improvements, with the adult literacy rate increasing to an estimated 86.9% (2008). CAR, in contrast, had decreased to 36.8% by 2010.

- **Type of governance and presidential power** In Burundi, President Buyoya (with the backing of the minority Tutsi controlled military) had dominated the political agenda since 1996. Nevertheless his power is not unlimited. He limited his own power when he chose to work with member of the Hutu opposition party. While the Tutsi controlled the security and legislative division and held positions in the ministry, the opposition controlled the Transitional National Assembly and half of the cabinet portfolios. Although the transitional National Assembly had only marginal powers, it largely served as a constitutional mechanism to resolve the deep rooted political factionalism. The President also played a key role in ending the civil unrest and establishing a frame work to address the fundamental ethnic inequalities in politics. When the traditional national assembly was formed he served as president for the first 18 months and then handed executive authority over to the Hutu vice president. The parliament established after was also much stronger.[75]

  The president in CAR has much more executive control in comparison. The constitutional courts were dissolved after the March 2003 coup and a new Constitution was written. The President is both the head of state and the head of government. He shares limited executive power with the Prime Minister. In the few years before 2009, the National assembly instead of constraining president Bozize let him rule with a free hand. In 2006 the president was allowed by the national assembly to rule by decree. He reorganized the civil services and even the municipal leaders were appointed by the president. The judicial branch also saw many appointments strongly influenced by the preferences of the president.[76]

- **Difference in legislatures:** Burundi has a bicameral legislature which is designed to ensure political participation of all the ethnicities. The National assembly has 121 seats. 100 of these are filled by directly by election. There are reservations in the national assembly to ensure the seats are 60% for Hutu and 40% for Tutsi

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[73]Central Intelligence Agency, 2009.
[74]Central Intelligence Agency, 2009.
[75]Polity IV Country Report 2010: Burundi.
[76]Polity IV Country Report 2010: Central African Republic.

with at least 30% women overall. Addition seats are appointed by a National Electoral Commission to ensure ethnic representation (including Twa members). There is no comparable arrangement in CAR and all the 105 seats are elected by popular vote.

- **State of Media and freedom:** Both Burundi (2008) and CAR (2009) were rated "Partly Free" by Freedom House with a score of 13.5 (where 3 is best and 21 is the worst). In CAR although the government allows free speech most journalists practice self censorship, although many press laws were decriminalized in 2005. There are no restrictions on the Internet but it is estimated than less than 1% of the country can access this resource.

  In Burundi the trend was upwards because the government made progress in resolving ethnic conflicts by strengthening democratic institutions. Peace agreements were reached between rebels and the government. The head of the Truth and Reconciliation Commission was declared in 2008. Additional agreements signed between rival parties also moved the country towards political stabilization.[77]

- **Judicial Autonomy:** In Burundi, the judiciary has conventionally been dominated by the Tutsi. The judicial system around 2008 was encumbered by a severe lack of resources, poor training, and corruption. There was a huge backlog of cases (far more than the judiciary in 2008 could handle, more so because many of these cases were politically sensitive).[78] Past human rights violations were also not addressed through limited progress was attempted with the establishment of the Truth and Reconciliation Commission. Overall the trend was moving upwards.

  Similarly in CAR, the president was able to strongly influence the judiciary. Moreover corruption, political interference and lack of training undermine the judiciary's capacity to perform its duties. As the judges are appointed by the president the agenda is highly aligned with the president's. The country's criminal court meets only once or twice a year for one or two months per session and had large backlogs (in the few year preceding 2009). The other high courts and subordinate courts had also suffered from a lack of funding and trained personnel.[79]

- **Poverty Headcount and Unemployment Rate:** Burundi unemployment rates were very high in 2008 at 35.5% but the trend was downwards. The population living below poverty (by an 2006 measure) was a high 77.65%. In CAR the unemployment rate was better at 8% in 2008. The population living below poverty was also very high at 66.3% (2008).[80]

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[77] Freedom House, 2008. *Freedom in the World: Burundi.*
[78] Freedom House, 2008.
[79] Freedom House, 2009. *Freedom in the World: Central African Republic.*
[80] World Development Indicators, 2017.

- **Economic aid received and relationship to the West:** Burundi has strained relationships with the West. These relationships have worsened in the past few years, but were beginning to deteriorate much before 2008.

  Hostility towards EU, AU and other international organizations: Ruling party officials would often accuse international organizations, donors and foreign journalists of siding with the opposition. Concerns about severe human rights abuses were rebuffed.

  The situation in CAR was slightly better. France is the most important bilateral donor to CAR. In March 2009, French troops came to the assistance of President Bozize when rebels were taking over the capital, despite concerns that the elections were not completely free and fair.[81]

- **Communication Infrastructure and Internet users:** The Burundian communication system is assessed to be primitive and inadequate. The telephone lines density is some of the lowest in the world. The number of Internet users was 60,000 (by a 2006 estimate). In comparison, CAR telecommunication is only slightly better (specially around the capital of Bangui). The number of Internet users though is some of the lowest in the world at about 19,000 users in 2006.[82]

- **Military spending:** Burundi has a history of compulsory military service (16 years) and recruiting child soldiers into the armed forces.[83] Military expenditure is quite high at 5.9% of GDP as per 2006 estimate. Military service in CAR on the other hand is voluntary (18 years) and the spending is much lower in comparison at only 1.1% of GDP (by 2006 estimate).[84]

- **Political environment and dispute resolution:** The nature of conflict in both the countries is similar. A politically unrepresented and marginalized group wanting to increase influence in political affairs.

  CAR: Deep ethnic and tribal cleavages continue to define political interactions. CAR has tried to sign many peace agreements with its rebels factions but they have had negligible effects. The most recent peace agreements prior to 2009 are:

  - **Birao Agreement (2007):** To end the Bush war which started in response to President Bozize's military coup to topple Patasse in 2003.
  - **Libreville Comprehensive Peace Agreements (2008):** This agreement laid out amnesty programs and disarmament demobilization reintegration proposed by he government. These failed due to inadequate implementation.
  - In summary, it can be argued that these peace programs failed because of severe lack of institutional capacity.[85] Furthermore, CAR was surrounded by several conflict ridden countries, making peace-building all the more difficult.

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[81]Polity IV Country Report 2010: Central African Republic
[82]Central Intelligence Agency, 2009.
[83]United States State Department, 2009.
[84]Central Intelligence Agency, 2009.
[85]International Crisis Group (ICG), 2008.

Burundi:

- **1998:** the transitional constitution established a partnership between the Tutsi government and the Hutu led National Assembly. Although its power was limited it was the beginning of initiating dialog between opposing sides.

- **2002:** Ceasefire agreement between the central government and three of the four major rebels troops. Rebel members were integrated into the army and the police (2003). A cabinet reshuffle was also planned as per the power sharing agreement. In 2004, however, the opposition suspended cooperation claiming delays in implementing the power sharing accord.

- Post transition constitution was ratified by popular referendum in 2005 with almost 92% approval. The opposition also won 59 of the 118 National assembly seats in the elections after the finalized Constitution and the transfer of power was peaceful.[86]

- **Government priorities just before onset:** Burundi saw fresh fighting between the rebels and government forces. This was soon followed by cease fire agreement. The rebellion leader returned home from exile in Tanzania. Shortly after, the rebel group formally lays down its arms and officially becomes a political party (supervised by African Union).

CAR: 2008 was an eventful year for CAR politics:[87]

- A large number of civil servants and soldiers had not been paid in months and were striking.

- The Prime Minister and the cabinet resigned just before a motion of no confidence was started against him in the parliament.

- New Prime Minister Touadera, an academic with no political experience, is appointed.

- Kony's "Lord's Resistance Army" attacked CAR from its normal area of operations in Uganda.

- Two of the three main rebel groups signed a peace agreement with the government. The government agreed to provide assistance for disarmament and demobilization of the rebels. These factions decided to come together to form a coalition government in the 2010 elections.

- The government adopted an amnesty law to bridge the gap between rebels demands and the peacebuilding process.

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[86]Polity IV Country Report 2010: Burundi.
[87]Adapted from BBC, 2017. *Central African Republic Profile – Timeline*.

VI. Egypt 2005 (FP) vs Pakistan 2011 (Onset)

Country: — Egypt, Arab Rep., 2005 — Pakistan, 2011

Summary

Egypt in 2005 was predicted to be in conflict due to rising religious extremism and protests in favor of political liberalization, but remained conflict free. In contrast its closest match, Pakistan in 2011, which, facing similar issues of rising extremism and terrorism in the FATA regions, fell into conflict. In aggregate, what sets the two cases apart is the rapid deterioration of economic conditions in Pakistan, coupled with the country's policy of accommodation towards insurgents during the period before conflict onset. and the dispute resolution methodology. Pakistan's economy, which was steadily falling, almost flat-lined approaching 2011. This situation was exacerbated by widespread floods in 2010. Egypt meanwhile was enjoying a steady growth rate, bolstered by economic reform. Egypt also responded to the civil unrest by liberalizing the political system followed by a harsh crackdown. Pakistan saw a steady increase of Islamist violence in the FATA regions related to the war in Afghanistan from 2006-2011 and attempted a policy of accommodation with various Islamist organizations in parts of FATA and KPK (including the failed peace process in Swat and Malakand from 2007-2010).

- **Establishment of Democracy/Start of Multi-Party Democracy:** The Egyptian constitution was framed in 1971 and in 2005, multiple parties were allowed to participate. Pakistan was declared a republic in 1956, although the military have ruled even when not directly in power. The last 50 years have been characterized by many assassinations and military coups.

- **Economic Situation:** Between 2004 and 2007 Pakistan's economy had been performing relatively well, bolstered by improvements in the service and industrial sectors. However, immediately before onset, economic conditions deteriorated dramatically: growth slowed, inflation and unemployment increased, and the rupee depreciated in value. In 2010, widespread flooding damaged agricultural output and contributed to rising inflation.[88]

  Egypt in 2005 had a fairly robust economy and the growth rate had improved to 5%. Egypt in the few years before 2005-2006 was restructuring its economy

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[88]Central Intelligence Agency, 2011.

and undertook economic reforms which included reductions in personal and corporate tax rates, privatization of enterprises like banks, and sponsoring energy subsidies.[89]

- **Land Use and Agriculture:** The Pakistani economy is not entirely dependent on agriculture (Agriculture contributes 21.2% of the GDP but employs 43% of the population by a 2005 estimate). It has 24.4% arable land of which 0.84% is utilized for growing permanent crops. Egypt on the other hand has only 2.93% arable land and 0.5% is used for permanent crops. The labor forces is thus largely employed in the service sector (51%) and only 32% in agriculture.[90]

- **Literacy:** The literacy rates in the two countries are similar with Egypt being a little higher The literacy rates in Pakistan and Egypt are 54% (2011) and 71% respectively (2005 estimate).[91]

- **Governance and presidential power:** In Pakistan, many years of military rule and interference have weakened the democratic institutions in the country. In the years before 2011, the president held extensive authority (they could dismiss the prime minister, dissolve the parliament and attempt to restrain the judiciary). Under the 18th amendment in April 2010 the extent of executive power was altered extensively. The role of the chief executive was transferred from the president to the prime minister. The power to unilaterally dissolve the General Assembly and declare an emergency was also taken away from the president. The president was not allowed to appoint the head of military or members of judiciary. There was a transfer of power to the provincial assemblies and the two term limit on the office of Prime Minister was removed. These new laws also placed a considerable check on the powers of the military.[92]

  In Egypt the situation was different in that there was very little horizontal accountability. The National Assembly has limited influence in important areas such as security and foreign affairs. Most legislation in Egypt is initiated by the executive branch. The national assembly only has small control over economic and social policies and cannot modify the budget without executive approval.[93]

- **Difference in legislatures:** Both countries have bicameral legislatures. In Pakistan the National Assembly has 342 seats of which 272 are directly elected in single-seat constituencies by simple majority vote. 70 seats are reserved - 60 for women and 10 for non-Muslims and filled by proportional representation vote. In Egypt there is a proportion which is chosen by the president. There were no such reservations for women or minorities in 2005 (The constitution had been amended recently in Egypt and the legislature at present is unicameral). The president also had the authority to dissolve the National Assembly with the help of a referendum in Egypt.

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[89]Central Intelligence Agency, 2005.
[90]Central Intelligence Agency, 2005 & 2011.
[91]World Development Indicators, 2017.
[92]Polity IV Country Report 2010: Pakistan.
[93]Polity IV Country Report 2010: Egypt.

- **State of Media and freedom:** Pakistan in 2011 was classified as "Partly Free" while Egypt was rated as "Not Free." In Pakistan there were steps taken to curb executive power. Meanwhile the civilian government tried to exert more control over policy formulation in the face of interference by the military. There were also extensive army campaigns against the Islamic militants and there were credible reports of human rights abuses and large civilian displacement.[94] In Egypt the government had taken some positive steps like easing the restrictions on independent media and controversial political discussion were tolerated. But, alongside this, there was a violent crackdown on the activities of the Muslim Brotherhood. There were also restrictions put in place on the operation of several human rights organizations.[95]

- **Judicial Autonomy:** In the years before 2011 Pakistan had shown surprising judicial autonomy. In 2007 when Musharraf announced his intention of continuing to retain office, the Supreme Court was the only government institution willing to show a degree of Independence. Musharraf subsequently suspended the Chief Justice. (This was met with extensive backlash and the chief justice had to be reinstated). At all levels the judges were dismissed and replaced with those that aligned with the government extensively in the period prior to 2010. The tensions between the judiciary and the military have continued to persist. In the 19th amendment, the role of senior judiciary was strengthened. The lower courts on the other hand, are plagued by corruption, intimidation and there was a backlog of 1.5 million cases in 2009. A new judicial policy was enacted in June 2009 to tackle these and has had some positive effects.[96]

  The judiciary in Egypt has shown a lot of independence similarly, although it lacked the power necessary to enforce its decisions. (E.g. The court could declared a government guilty of electoral malpractice but does not have the capacity to remove officials). There was full judicial supervision of the electoral proceeding in 2005. The regular jury in Egypt is considered the most impartial and fair in the Arab world. But political cases are normally resolved in Exceptional Courts which are controlled by the executive branch.[97]

- **Poverty Headcount and Unemployment Rate:** In 2010-2011 the unemployment rate in Pakistan was 5.55% as compared to Egypt's 8.98%.[98] The population below poverty was 24% in Pakistan (by a 2006 estimate) as opposed to Egypt's 20%.[99]

- **Economic aid received and relationship to the West:**

  Pakistan: US-Pakistan relations saw a steep decline in 2011. Nevertheless, the US was a major donor of relief funding during the flooding crisis. A few major

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[94]Freedom House, 2011. *Freedom in the World: Pakistan.*
[95]Freedom House, 2005. *Freedom in the World: Egypt.*
[96]Freedom House, 2011. *Freedom in the World: Pakistan.*
[97]Freedom House, 2005. *Freedom in the World: Egypt.*
[98]World Development Indicators, 2017.
[99]CIA World Factbook, 2006.

incidences that were responsible for the decline are:[100]

- Raymond Davis - US citizen and a CIA contractor with diplomatic immunity shot two Pakistani citizen dead. He was returned to the United States without being tried.

- The number of drone attacks by US military on Al Qaeda and Taliban centers inside Pakistani territory was increasing. This resulted in a large number of civilian deaths also. General Kayani at the end of 2011 ordered any drones to be shot and US was asked to vacate Shamsi Air Base in Pakistan.

- Osama bin Laden being found in the Pakistani city of Abbotabad. There was furious debate about air strikes being carried out without Pakistani permission. US aid to Pakistan was cut.

- NATO attacks - 24 Pakistani soldiers were killed NATO bombing raid. This led to Pakistan blocking supply routes to NATO.

Egypt in 2005 received about $1.05 billion in Official Development Assistance.[101] Egypt had a good relationship with the US following the peace treaty with Israel and has received about $19 bn in military aid and $30 bn in economic aid between 1979-2003. Military cooperation is a strong aspect of the strategic partnership. The EU is one of Egypt's biggest trading partners amounting to $11.6 bn in exports in 2004.[102]

- **Communication Infrastructure and Internet Users:** The telecommunication industry in Pakistan was improving dramatically in 2010-2011. There was increased foreign and domestic investment in infrastructure. Approximately 7.5% of the population in Pakistan had access to the internet in 2009, compared to 11% in Egypt in 2004. The communication infrastructure in Egypt was also fairly modern with good cellular services.[103]

- **Military Spending:** Military expenditure as a percentage of GDP is similar in both the countries with Pakistan spending 3% (2007 estimate) of its GDP on military and Egypt about 3.4%.[104]

- **Political Environment and Dispute Resolution:**

  In this case, Pakistan in 2006 had not yet seen the big run up in violence in the FATA, nor had Egypt in 2000 yet seen the increase in conflict in the Sinai. The big difference between the two is that in the intervening years Pakistan saw a steady increase of Islamist violence in the FATA related to the war in Afghanistan and various strategies by the government relating to tolerating extremism as a foreign policy tool. Egypt did not employ these strategies.

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[100]BBC. 2017. *Pakistan Profile – Timeline.*
[101]World Development Indicators, 2017.
[102]Sharp, 2010.
[103]Central Intelligence Agency, 2005 & 2011.
[104]Central Intelligence Agency, 2005 & 2011.

Egypt: Political representation, whether real or perceived, was an important factor. Egypt made progress towards political plurality in May 2005 with the approval of a new Constitution. For the first time multi-candidate competition for presidency would be decided by popular vote. However, this was not implemented in spirit and the ruling party did not truly expose themselves to democratic pressures. A main opponent, the Muslim Brotherhood, remained banned.[105]

- **Government Priority just before Onset:**

 **Pakistan:**- The government focus in 2010-2011 was:[106]

  - April 2010 - Extensive constitutional reforms. Transfer of executive power from President to Prime Minister. Legislature, Judiciary and provincial governments strengthened. Places checks on the military (more details above).

  - August 2010 -Worst flood in recent history hits Pakistan. About 1750 killed, 10 million left homeless and 20 million affected (IISS ACD report). An area almost the size of Italy was submerged and there were catastrophic damages to infrastructure and a risk of endemic disease.

  - Reforms in Pakistan's blasphemy laws

  - April 2011- Osama bin Laden is killed by American forces

  - November 2011 - Pakistan shuts down NATO supply routes after NATO attack on military outposts kills 25 Pakistani soldiers.

  - December 2011 - Memogate Scandal -The Pakistani government allegedly sought the help of the Obama Administration after Osama bin Laden's death to avoid the military takeover of the civilian government and assistance in civilian takeover of military and government apparatus.

  Egypt: In Egypt, the ruling party pledged to promote political reforms as its central objective in 2003 which resulted in multi-party reforms in 2005.

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[105]Polity IV Country Report 2010: Egypt.
[106]Adapted from BBC. 2017. *Pakistan Profile – Timeline*.

VII. Nepal 2007 (FP) vs Mali 2007 (Onset)

Country: — Mali, 2007 — Nepal, 2007
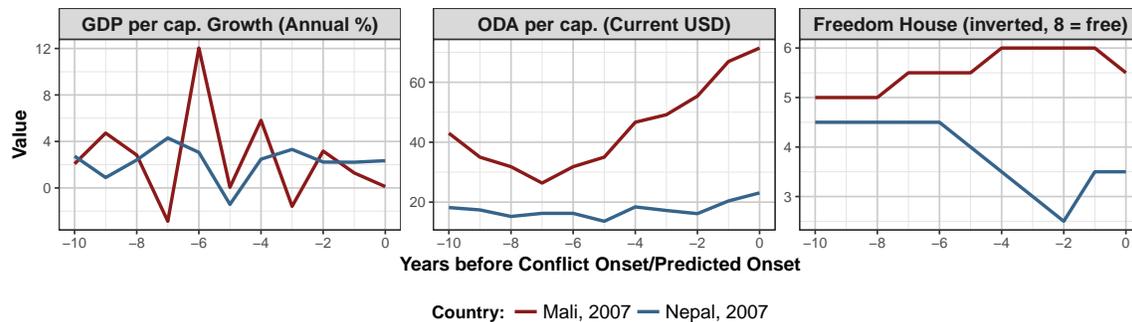
Summary

Nepal in 2007 was predicted to see conflict in the face of political realignment but was surprisingly calm. The Maoist rebellion demand of abolishing monarchy and establishing Nepal as a republic gathered popular momentum and the King was forced to step down in 2006. The period of power transfer was peaceful as the Maoist rebels were dominant partners in the new political firmament and a vast majority of Nepalese were in favor of the political change. In the Tuareg rebellion in Mali, unlike Nepal, the rebel grievances were largely unaddressed. Malian rebels unsatisfied with the extremely high levels of poverty demanded poverty reduction programs in lieu of greater political participation, which was their original demand.

- **Establishment of Democracy/Start of Multi-Party Democracy:** One party rule was established in Mali in 1974 and the multi-party system in 1992. The subsequent elections that were held are generally considered free and fair and the transfer of power in 2002 (when the new president was elected) was a peaceful one.[107] In 1990, Nepal replaced its autocratic *panchayat* system with multi-party governance. This was followed by a period of constitutional monarchy and a succession of weak governments.[108]

- **Economic Situation:** Cotton is the main cash crop in Mali and GDP growth in the years leading up to conflict had largely been driven by increases in world cotton prices. Mali is also heavily dependent on foreign aid. In the period leading up to the conflict, the devaluation of the CFA Franc has pushed the growth rate to about 5%. Mali's economy was also being affected by the ongoing conflict in Côte d'Ivoire; there was a significant decrease in remittance income and new trade routes were charted for coffee and cocoa exports. Moreover the seasonal workers who were conventionally employed in Côte d'Ivoire returned and the countries internal infrastructure and labor markets were not able to meet the influx of workers.[109]

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[107]Polity IV Country Report 2010: Mail.
[108]Polity IV Country Report 2010: Nepal.
[109]Central Intelligence Agency, 2007.

Nearly one third of the population of Nepal is below the poverty line. Agriculture is the main source of income employing about 75% of the population and generating 38% of the GDP (by 2006 estimates). Around 2007, due to ongoing security concerns, there was a sharp drop in tourism which lead to a decrease in foreign exchange. Nepal also has extensive scope for harnessing hydro-power but this has not been fully realized. The GDP growth rate in 2006 was 2.4%.[110]

- **Land Use and Agriculture:** Only 3.4% of total land in Mali is arable compared 16% in Nepal. Both countries are largely agricultural.[111]

- **Literacy:** Literacy levels are higher in Nepal than in Mali. The adult literacy rate is estimated at59.63% for Nepal in 2011 and at 31.1% for Mali in 2010.[112]

- **Type of governance and presidential power:**

  Mali: The multi-party electoral system in Mali, established in 1992, had seen fair and competitive voting. In May of 2002, Mali saw its first electoral transfer of executive power and the transition was peaceful. Mali also had more restraints on executive power as compared to Nepal. The Constitution accords separate powers to the executive, legislative and judicial branches. The president is responsible for appointing the government and the Prime Minister. Presidential power is reasonably constrained.[113]

  Nepal: The situation in Nepal grew complex in the wake of the King's death in 2001 (who was very popular and allowed the fledgling democracy to take the leading role in governance). His brother and successor dissolved the legislature soon after coming to power and assumed absolute control over the country. Opposition to the monarchy gathered momentum in 2005 and soon all political parties representing various economic classes and all ideological extremes –including the Maoist parties– called for a return to democratic rule. Pressure from international communities and continued protests from the Maoist rebellion led the king to step down in 2006. The legislature was reinstated soon and the King's powers were stripped (May 2006). The prime ministers powers are also limited by the legislature.[114]

- **Size of Administrative divisions:** Nepal is a much smaller country with 14 administrative divisions while Mali has only 8 administrative units.[115]

- **Difference in legislatures:** the legislature in Mali wields more power than the one in Nepal. The constitution holds the executive accountable to the legislature in Mali. In the few year preceding 2007 in Nepal, the legislative assembly was dissolved and reconvened at the will of the king. There was a significant empowerment of legislative politics post 2006, after the king stepped down.

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[110]Central Intelligence Agency, 2007.
[111]Central Intelligence Agency, 2007.
[112]World Development Indicators, 2017.
[113]Polity IV Country Report 2010: Mali.
[114]Polity IV Country Report 2010: Nepal.
[115]Central Intelligence Agency, 2007.

- **State of Media and freedom:** In 2007 Mali was rated as "Free" with a good score of 6. Nepal was rated as "Partly Free" with a score of 13.5.[116] The marked a positive trend in Nepal, as the country was classified 'not free' in the previous year. The king was responding to domestic and international pressures and monarchy was giving way to democracy. A ceasefire agreement had been reached with the rebels, but there were credible reports of wide range of human rights violations in Maoist controlled areas. A new constitution was being written mid-2007.[117]

- **Judicial Autonomy:** The judiciary in Mali is subject to extensive executive influence and there are credible reports of corruption. The trend, however, was improving in 2007. The judiciary has shown considerable autonomy in making anti- administration decisions which have been respected by the government.

  The judiciary in Nepal reflected influence of the monarch prior to 2007. Most justices are appointed by the monarch with recommendation from the constitutional council. Nevertheless, Nepal's judiciary is legally separate from the executive and legislative branch In more recent years, it has increasingly shown more independence from political influence. The judiciary has the right of judicial review under the new constitution.

- **Poverty Headcount and Unemployment Rate:** By a 2006 estimate, 50.59% of Malians were estimated to be below the international poverty line compared to 46.12% in Nepal. However, this figure is based on a 2003 estimate, the next available observation of Nepal occurred in 2010 and estimated only 14.99%. It is likely that poverty in Nepal was much lower than the 46% estimate by 2007. The unemployment rate in Mali reached a ten year peak of 11.7% in 2007. In contrast, unemployment was relatively stable in Mali at around 3.17%.[118]

- **Economic aid received and relationship to the West:** Both countries received substantial economic aid (a little less than half a million). Mali has good relationship with the US. The relationship with France is cordial. France has sent in troops to support the government in its fight against the rebellion in the north.[119] Nepal is a much smaller landlocked country between India and China. While the relationship with India has shifted over time, the relationship with China has improved in the recent years (China is the third largest aid donor). The relationship with UK has been historically close. There was a small phase in 2005 when the relationship deteriorated after the King seized power but this situation has improved since. The UK remains Nepal's largest bilateral donor. The relationship with United States similarly is cordial.

- **Communication Infrastructure and Internet users:** The communication infrastructure in Mali in 2007 was unreliable but slowly improving The situation in

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[116]Freedom House, 2007. *Freedom in the World: Mali.*

[117]Freedom House, 2007. *Freedom in the World: Nepal.*

[118]World Development Indicators, 2017.

[119]BBC, 2013. *France and Mali, an 'Ironic' Relationship.*

Nepal was similar; telephone services in Nepal were assessed as poor, but cellular communication is fair.[120]

- **Military spending:** Military sending in both countries is similar. While Mali spends 1.9% of its GDP on military Nepal spends 1.6% (2006 estimate). Nepal does not have compulsory military service like Mali.[121]

- **Political environment and dispute resolution:**

  Nepal: The situation in Nepal grew complex in the wake of the King's death in 2001. In May 2002 the King dissolved the legislature. The conflict between the king and the legislature continued to grow as the Maoist insurgencies escalated. Subsequently the king dismissed the Prime Minister Deuba also and appointed a loyalist to replace him. Deuba had to be reappointed in 2004 because the prime ministers (two were appointed) appointed to replace him could not handle the Maoist rebellion or the growing civil unrest. Deuba formed a coalition of 4 parties but soon the political situation deteriorated and he was fired by the King. It was declared that elections would not be held in the country until the Maoist rebellion was over. In 2006 because of increasing external pressure, rising street protests and continued armed rebellion by the Maoists, the king reinstated the legislature (which was suspended in 2002 when he assumed direct control). Subsequently the legislature voted to remove executive powers from the King (May 2006). The communist party joined the interim agreement as a result of the "Comprehensive Peace Agreement" signed between the government and the Maoists (November 2006). Their primary demand was that monarchy be abolished and Nepal be declared a republic. In 2008 when the newly elected assembly met for the first time they voted unanimously to end monarchy. As the primary rebellion demand was met, Nepal in 2007 was peaceful.[122]

  Mali:

  - Ethnic identity is a strong cleavage in Malian society. In 1999, the Tuareg rebellion which started in 1991 was finally resolved. Many of their fighters were integrated in the armed forces, but their economic and political concerns were largely unattended.

  - In May 2006 there was fear of new rebellion (Taureg rebels looted a weapons store in Northern Mali). Algeria brokered a peace deal between the government and the fighters. In addition to greater regional autonomy the government promised to implement a set of poverty reduction programs in the area.[123][124]

- **Government priorities just before onset:** In Nepal just before 2007, the priority was signing the "Comprehensive Peace agreement" with the Maoist rebels which

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[120]Central Intelligence Agency, 2007.

[121]Central Intelligence Agency, 2007.

[122]ICG, 2007b. *Nepal: Peace Postponed.*

[123]BBC, 2007. *Tuareg Conflict Spreads to Mali.*

[124]IRIN, 2007. *Indignation Dominates Reaction as Attacks in North Escalate.*

ended the decade long insurgency. This was a very important move as it paved way for a democratically elected government and the integration of rebel parties into mainstream politics. This was also an instrumental step wards the abolition of absolute monarchy.[125]

In Mali in 2007, President Toure had just won his second term in office and the ruling coalition had strengthened its hold over the parliament. Although the government had signed an Algiers brokered peace deal (June 2006), the conflict had not ended.[126]

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[125]ICG, 2007b. *Nepal: Peace Postponed*.

[126]Polity IV Country Report 2010: Mali.

VIII. Syria 1996 (FP) vs DRC (Zaire) 1996 (Onset)

Country: —— Congo, Dem. Rep., 1996 —— Syria, 1996
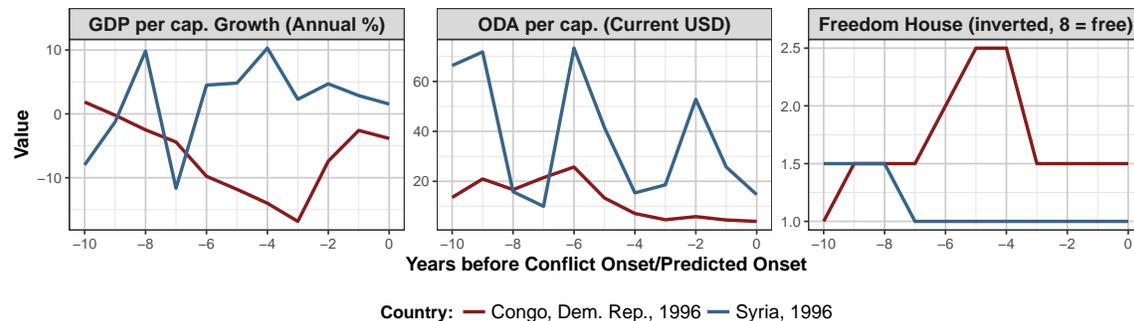
Summary

Zaire and Syria were comparable in 1991, President Mobutu was liberalizing political institutions and Syria although seeing a decline in Cold War support had just decided to align with the United States and other countries against Iraq. Three things really set these countries apart in the five years in advance of conflict onset. First, Syria saw a renewal of aid following its decision to side with the United States and Saudi Arabia in the first Gulf War. Second, the countries employed very different strategies in relation to the distribution of natural resource rents and other government income. Syria used its oil income in part to provide subsidies to the majority of the population, particularly for basic foodstuffs.[a] In Zaire, rents went mainly to elites, exacerbating ethnic tensions and incentivizing armed capture.[b] Third, and most importantly, unsustainable policy choices by the Mobutu government as it attempted to manage a transition to limited democracy led to hyperinflation and a broad economic breakdown in Zaire, a process with no analogue in Syria in the early-1990s.[c] Zaire's mineral production plunged in the early-1990s and what profits there were were directed to the elites instead of the state. Similarly, aid funds were largely captured by corruption. When Kabila started a rebellion in retaliation for Mobutu supporting the Hutu rebels against the Tutsi government in Rwanda, the state had very low capacity, and little support from neighboring countries. Syria, in contrast, had a robust economy during that period due to the massive aid influx from Arab and European donors due to Syria's decision of joining the coalition forces in the Gulf War.

[a]These subsidies were being rolled back in the 1990s, but remained significant (Fiorillo and Vercueil 2003).

[b]Oil production increased almost 20% in Syria from 1991 to 1996, while mining collapsed in Zaire.

[c]For a good brief summary see Beaugrand (1997).

- **Establishment of Democracy/Start of Multi-Party Democracy:** The Democratic Republic of Congo (then called Zaire) after independence was a one party state until 1991 when there were agreements to form a coalition government. Syria had been under left-wing military regime since 1963. President Assad was still in power in 1996.

- **Economic Situation:** In Syria the economy was heavily dominated by the state in the few years before 1996. The economy was unusually high due to favorable terms of trade as a results of the Gulf War and raised oil prices. This was further bolstered by economic deregulation and good weather. The average GDP growth rate was approximately 10% (1992 estimate). The Gulf war unexpectedly proved beneficial as Syria received an aid windfall of nearly $5 billion dollars from Arab, European, and Japanese donors. This opportunity, however, was not utilized well. Rising income gaps and increasing inflation (the inflation rate was 16.33%) were accompanied by a decrease in GDP growth rate to 4% in 1994. The public sector was performing poorly, and industrial productivity was low.[127]

  In Zaire the economy was also continuing to deteriorate, though there were attempts to slow down the rate of decline. Some chief issues with the economy were hyperinflation (3000-4500% in 1990-1993 and 9800% in 1994), chronic and large government deficits, and plunging mineral production in the few years before 1996.Most formal transactions were conducted in hard currency as indigenous bank notes had lost almost all value. The situation was even worse in rural areas where a barter economy was flourishing. Subsistence farming and petty trade were barely supporting the population. The government was not been able to meet its financial obligations to the International Monetary Fund (IMF) or implement financial suggestions advocated by the IMF. Despite an abundance of natural resources, poor political stability was a major hurdle in economic growth.[128]

- **Land Use and Agriculture:** Land cover in both countries is significantly different. The percentage of arable land in Zaire was only 3% (a large majority is forest and woodlands) whereas Syria had 25% arable land in 1996.[129]

- **Literacy:** The literacy rates in both countries are comparable. Zaire had a literacy rate of 72% and Syria was at 64%.[130]

- **Type of governance and presidential power:** Syria has almost continuously been under martial law since independence. There are few checks to presidential power and the power structure is highly centralized. The legislative branch could do little to limit the power of President Hafez al-Assad (Ba'th party). The National Assembly was merely namesake, approving all policy initiatives by the president and his loyalists. Around 1996 there was a constitutional mandate that Ba'th party be allocated a majority of seats in the National Assembly. The cabinet was also appointed by the president.

  Zaire's government had been a republic with strong presidential authority since 1965. The administrative structure was fused with the only legal party. Although there was an attempt at liberalization in 1991 and a transitional government was appointed, it was ineffective in bringing about any change because President

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[127]Central Intelligence Agency, 1996.
[128]Beaugrand, 1997.
[129]World Development Indicators, 2017.
[130]Central Intelligence Agency, 1996.

Mobotu continued to control key military and security forces, media, treasury, and administrative divisions. Mobutu also reconvened the former legislature in an attempt to gain a more favorable draft Constitution. Thus, by 1994 there were two parallel governments fighting for political supremacy.

- **Size of Administrative divisions:** Syria has 14 administrative divisions and Zaire in 1996 has 10 administrative regions. Syria had much smaller administrative units as compared to Zaire.[131]

- **Difference in legislatures:** In Zaire, the legislative assembly was a single body consisting of the High Council of the Republic and the Parliament of the Transition with membership equally divided between presidential supporters and opponents. There was no such arrangement in Syria.

- **State of Media and freedom:** Freedom was very low in Syria in 1995. The citizens had been living in a state of emergency under martial law since 1963. There was no way to form legal political opposition. Journalism was severely restricted and opposition newspapers could not even be sold freely (it had to be distributed through underground channels).[132]

- **Judicial Autonomy:** The Syrian judicial system was also deeply flawed. There was criminalization for political activity, detainees were held for years without charge, and the courts were not independent and often aligned with governmental agenda. Torture and coercion were also commonplace.[133]

  The judicial system in Zaire was not any better. The judiciary was not independent and frequently faced allegations of corruption. It could do very little to limit the executive power of the president. Neither Syria or Zaire accepted compulsory ICJ jurisdiction.

- **Poverty Headcount and Unemployment Rate:** The unemployment rate in Syria was low at 7.4% (by 1993 estimate).[134] The unemployment rate for Zaire was 80%.[135] There is little data on poverty in these countries in 1996.

- **Official Development Assistance and Relationship with the West:** Zaire's relationship to the west was in decline for several years before 1996 because of widespread human rights violations. There was increasing pressure by Belgium, France and United states to improve Zaire's human rights records and institute multi-party democracy. Following 1992, all aid from the United States Government to Zaire (except humanitarian assistance to private organizations) was halted.

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[131]Central Intelligence Agency, 1996.
[132]United States Department of State, 1997.
[133]United States Department of State, 1997.
[134]World Development Indicators, 2017.
[135]Human Rights Watch, 1995. *Human Rights Watch World Report 1995 – Zaire.*

Syria on the other hand received a large amount of aid in 1990-1992 amounting to about $5 billion in grants from Arab countries and Western donors as a result of its Gulf war stance.[136]

- **Communication Infrastructure:** The communication infrastructure in Zaire was barely adequate to poor even urban areas. Syria on the other hand had a fairly robust telecommunication system. There were a large number of land line connections and the system was undergoing significant improvements for digital upgrades and fiber optic technology.[137]

- **Military spending:** Defense expenditure in Syria was very high and the country was spending 6% of its GDP on the military (by 1992 estimate). Zaire on the other hand was only spending 1.5% of its GDP on military (by 1990 estimate).[138]

- **Political environment and dispute resolution:**

  Zaire: Laurent Kabila came to power after state authority collapsed in 1996 due to civil war. This civil war began in 1994 as a consequence of the Rwandan genocide which drove over one million Rwandan Hutu refugees and militia into Zaire. The influx of refugees had the effect of exacerbating pre-existing tensions between Tutsis and Hutus in the region. The situation worsened when President Motubu decided to support the Hutu rebels against the Tutsi government in Rwanda. In response to this, the Rwandan government provided the ethnic Tutsi in Southern Congo military support to stage an uprising in May 1996 against the Mobutu government. Within seven months Kabila and his forces had assumed control over Kinshasha. Kabila consolidated his political authority in the capital while numerous foreign actors (primarily Angola, Namibia, Rwanda, Uganda and Zimbabwe) began pursuing their own agenda by transcending the borders.[139] Some were pursuing political agendas the others were trying to take gain control over valuable mineral resources.

  Syria: The political environment was calm on the surface. A Human Rights Watch report (1996) states that Syrian society was highly controlled and the legal system lacked any framework by which a group could attain the status of a political party.[140] Opposition was harshly criminalized. Both were contributing factors in why there was minimal opposition.

- **Government priorities just before onset:** 1996 was a very volatile year for Zaire. First, President Mobutu was deposed and Laurent Kabila came into power. This was followed by months of instability and weak political consolidation. The country was renamed and the constitution was rewritten. Limited political reform had little to no effect. In contrast, Syria had some ongoing tensions with Israel but otherwise was peaceful.

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[136]Central Intelligence Agency, 1996.

[137]Central Intelligence Agency, 1996.

[138]Central Intelligence Agency, 1996.

[139]Polity IV Country Report 2010: Democratic Republic of Congo (Zaire).

[140]Human Rights Watch. 1996. *Human Rights Watch World Report 1996 – Syria*

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