

# Gov 50 Final Project

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### Introduction

When looking at the beginnings of a civil war, or the onset, one can assign specific types of rebellion warfare to each according to Kalyvas and Balcells's (2010) analysis of rebellion. First is a symmetric nonconventional onset, where the rebellion force would have limited resources and development. Because of the nature of the state, the rebellion would involve itself in informal fighting with primitive technology on both sides. Next is a symmetric conventional onset in which the controlling state and the rebellion both possess similar power and engage in a very formal means of fighting. Here, the sides are also comparable and would engage in conventional warfare with modern weapons. Lastly, is the longest-lasting and most common of the rebellion types—irregular warfare—where the oppressive state has substantial power over the lesser-developed insurgency. These three types of civil war onset represent three configurations of power between regimes and opponents. In an analysis conducted by Kalyvas and Balcells (2010), the most frequent of these categorized rebellions is irregular warfare (54%) followed by conventional warfare (34%) and symmetric nonconventional warfare with 12%. What Kalyvas and Balcells (2010) note is that irregular warfare, although occurring more than half of the time, occurred less than anticipated as it was previously thought to be almost the standard of civil war onset.

When looking at Kalyvas and Balcells's (2010) three types of civil war onset—irregular, conventional, and symmetric non-conventional—there is no data to indicate how the introduction of social media and increased communication (since 2004) impacted the relative frequency of insurgencies. Because of a very different social media environment since the post-Cold War era (1991-2004), I predict we should see an increase in insurgencies. To test this theory, this paper will first look at how to categorize each civil war onset based on Kalyvas's and Balcells's (2010) study. Then it will examine civil war onsets that have occurred since 2004 and classify the conflicts into the three types of civil war onsets to determine whether they will be more or less frequent, or stay stagnant. Then test, with data, whether civil wars as a whole will increase since 2004. The paper then aims to prove that the relative frequency of irregular civil war onsets greatly increases, symmetrical nonconventional stays the same, and symmetric conventional decreases. I credit the uptick in irregular civil war onset to the utilization of social media for communication in insurgent efforts. Then, the paper shows a significant decrease in civil war onsets as a whole since the Post-Cold War era being especially violent.

### Data

It is first important to recognize our data points, the 12 civil wars onsets since 2004. They are as follows: the First Central African Republic Civil War (2004-2007), the Chadian Civil War (2005-2010), the Iraqi Civil War (2006-2008), the First Libyan Civil War (2011), the Second Ivorian Civil War (2011), the South Sudanese Civil War (2013-2020), the Second Libyan Civil War (2014-2020), the Tigray War (2020-2022), the Myanmar Civil War (2021-Present), the Syrian Civil War (2011-Present), the Yemeni Civil War (2014-Present), and the Central African Republic Civil War (2012-Present). The onsets of these civil wars were classified using the descriptions of the types of civil war onset, based on the comprehensive news reports, journals, and documents that describe the onset. For example the descriptors for Irregular warfare: insurgency, paramilitary groups, factional fighting, assassinations, guerilla; for Symmetric Conventional: open confrontation, advanced weaponry, professional military forces, clear front line, regular forces; for Symmetric nonconventional: primitive warfare, both sides' use of IEDs, attacks on civilians, undeveloped, impoverished.

Then I expand Kalyvas and Balcells' (2010) categorizing of each civil war onset into new columns titled "Social Media Age (2004-2023)" in Figure 1. I also added a column to every period (1945-1990, 1991-2004, 2004-2023) to calculate the rate of onset, as the periods are not a uniform number of years. So the rate would show how often each onset would occur given consistent time periods. I also switched the "percentage" columns for each period with a column showing the "relative frequency" of each onset during each period compared to the other onsets, as that is the metric I am using to prove my hypotheses. After the columns were added I adjusted the last column ("Both Periods") to "All Periods" to see cumulative results. This allowed me to calculate the annual onset rates of the three onsets and compare them to each period. Expanding this chart allowed me to test my hypotheses that the rate of irregular civil war onset will increase as symmetric conventional and symmetric nonconventional will stay stagnant in rate. Then, to address my final hypothesis that civil war onsets as a whole have increased since 2004, I continued Kalyvas and Balcells' (2010) graph in Figure 2; specifically the "Wars Starting" line, as I am specifically looking at the onset. I continued the line graph until 2023, so the trend of civil war onset can be seen in conjunction with the previous periods. I looked at all three of the onsets classifications together because I hypothesized that the rate of irregular civil war onset would increase while symmetric conventional and symmetric nonconventional would stay the same—so cumulative onsets would increase.

When qualitatively classifying the 3 types of civil war onset, I found that 2 data points represented symmetric conventional, 2 represented symmetric nonconventional, and 8 represented irregular warfare. An example of symmetric non-conventional was the Second Ivorian Civil War. It was a military conflict between supporters of the acting President of Ivory Coast and supporters of the internationally recognized president-elect Alassane Ouattara. The conflict saw very limited military technology, with the culminating event being carried out via the personal cars of the soldiers on both sides. So there are clear examples of underdeveloped war tactics by both sides. An example of symmetric conventional is the Iraqi Civil War (2006-2008) which primarily involved two large military forces in the Iraqi government and various insurgent groups engaging in traditional warfare tactics, such as clashes, ambushes, and sieges with advanced equipment, a clear indication of symmetric conventional war. Lastly, an example of an irregular classification is Second Libyan Civil War (2014-2020). The Libyan National Army was a militia group backed by Nato and Western powers that fought against the technologically advanced Government of National Accord which was in power at the time. The conflict saw a militia group fighting a technologically advanced government. Guerilla warfare and assassination tactics were used. Again, all descriptors that describe irregular warfare. After the data points were classified, it was added to the expanded chart below (Figure 1).

Figure 1

```
library(kableExtra)
```

```
## Warning in !is.null(rmarkdown::metadata$output) && rmarkdown::metadata$output
## %in% : 'length(x) = 2 > 1' in coercion to 'logical(1)'
```

```
library(ggplot2)
civil_war_onset_table <- read.csv("Gov 50 Data Table - Sheet1.csv")
kable(civil_war_onset_table)
```

Civil.War.Onsets..by.Technology.of.Rebellion..1944.Present.	X	X.1	X.2
Technology of Rebellion	Cold War		
	Number (1944-1990)	Relative Frequency (1944-1990)	Rate
Symmetric Conventional	28	27.72%	0.6
Irregular	67	66.24%	1.4
Symmetric Non-Conventional	6	5.94%	0.1
Total	101	100%	2.2

Additionally, I address my second hypothesis that the relative frequency of civil war onset as a whole increased as a result of more frequent irregular warfare onsets and stagnant symmetric conventional and symmetric

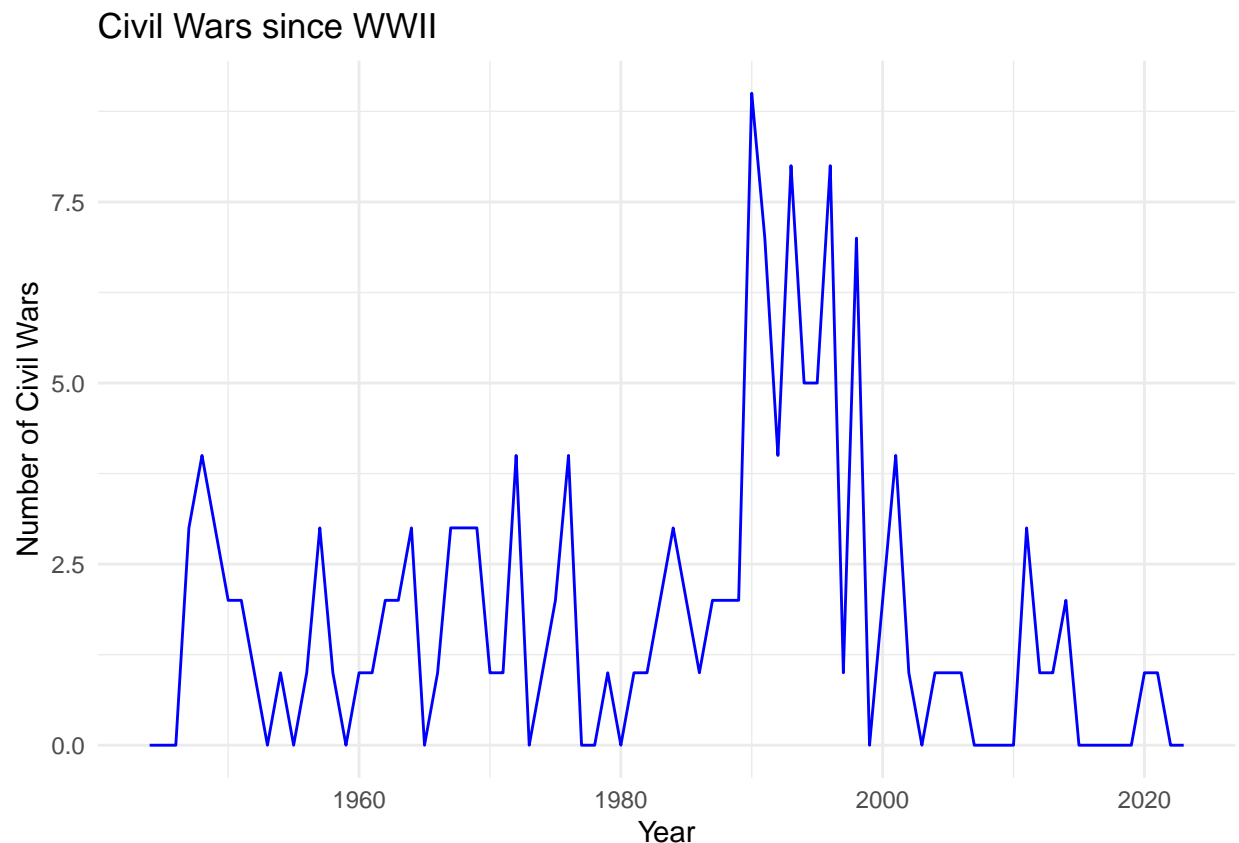
nonconventional onsets. In order to see if the relative frequency has increased, I added yearly data on civil war onset since 2004 to Kalyvas and Balcells' (2010) data as seen below in Figure 2. Furthermore, the research design is cross-sectional because I am examining data from a specific time period (since 2004) and comparing the relative frequency across the 3 types of civil war onsets (irregular, symmetric conventional, and symmetric non-conventional) within that timeframe.

Figure 2

```
library(ggplot2)

civil_war_onset<- read.csv("Gov 50 Data Set - Sheet1.csv")

ggplot(data = civil_war_onset, aes(x = Year, y = `Number.of.Civil.Wars`)) +
  geom_line(color = "blue") +
  labs(title = "Civil Wars since WWII", x = "Year", y = "Number of Civil Wars") +
  theme_minimal()
```



## Results

When looking at the results of this expanded chart in Figure 1, it proves my first part of my first hypothesis correct: that the relative frequency of irregular civil war increased since the Post-Cold war period. From 1991-2004, the relative frequency of irregular civil war increased from 26.09% to 66.67%, almost tripling the frequency of the onset. 66.67% is also significantly greater than the 54.72% average relative frequency seen across all periods. Then when looking at the second part of my first hypothesis—that the relative frequency of symmetric conventional and symmetric nonconventional stayed stagnant between the 1991-2004 period and the 2004-2023 period—we see that symmetric nonconventional does stay stagnant between the two periods, 26.09% and 25% respectively; but symmetric conventional decreases in relative frequency from 47.83% to 16.67%.

In Figure 2, regarding my second thesis, if we were to be able to see a relative increase in civil war onset from the Post-Cold War period, we should see an increase in the number of civil wars starting. In other words, we should see a visual positive increase in the number of civil wars starting after 2004, which we do not. So my second hypothesis does not hold true. I would argue that the Post-Cold War era is the outlier as seen by Figure 1 and Figure 2 in the total rate of onsets per year. The Post-Cold War saw an average of 3.54 civil war onsets per year, compared to 2.20 from 1944-1990 and 0.63 from 2004-2023. There were many segments of the 1944-1990 period that look very similar to the 2004-2023 period, but not the 1991-2004 period. So, the Post-Cold War era was just especially violent.

Regarding my first thesis, I theorize that the increase in relative insurgency onset is a result of the introduction of social media communication for several reasons. Firstly, social media allows for the rapid dissemination of information, making it easier for insurgent groups to gain support and spread their ideas at the onset. Secondly, social media can provide a sense of security and anonymity to insurgent groups, allowing them to coordinate attacks against the greater technologically advanced government, and making it harder for the central government to track their efforts. With the introduction of social media and subsequent increase in support, it can also add a degree of legitimacy to the onset of irregular warfare efforts. But, primarily it benefits the start of irregular warfare because of the greater net benefit of the advanced communication to the insurgent group compared to the central power. Furthermore, symmetric nonconventional onset relative frequency stays stagnant because social media does not have any effect on undeveloped nations given limited technology. Regarding the decrease in the relative frequency of symmetric conventional warfare, I theorize it is a result of the nature of world affairs. Unlike the Post-Cold War era there has not been a large state breakup similar to Yugoslavia, so it just was simply bound to be less frequent. When looking at the main coefficient of interest, it is the fact that social media is associated with a significant increase in irregular warfare in comparison to the other types of onset.

## Conclusion

This project demonstrated that irregular civil war onsets' relative frequency had significantly increased—as a result of the use of social media in insurgent efforts—symmetrical nonconventional onsets remained the same, and symmetric conventional onsets had decreased. Additionally, it illustrated a substantial decrease in civil war onsets as a whole as a result of a particularly violent Post-Cold War era. When discussing the limitations of my approach, the glaring constraint is subjectivity. The way I categorize a civil war onset could be different than someone performing the same analysis, as I am one person with limited experience performing qualitative analysis. So, what I dictate about a civil war could be, again, up to interpretation; so my hypothesis about an increase in irregular warfare does prove correct, but could be for subjective reasons. Another limitation is the fact that Kalyvas and Balcells (2010) categorize the civil war onsets according to their own guidelines; though I use their definition for my paper, someone else may have different distinctions for each civil war onset. Furthermore, simply classifying each type of civil war onset does not give us any insight into the mechanisms behind the war. Since I only focused on the macro-level of the onset, not directly the technology in itself, if I had more time/money I could look at the micro-level and address how technology specifically affected each civil war onset. In terms of causality, it is complicated to identify the root causes of civil war onsets because, in a symmetric war, it could be military capabilities, but for irregular warfare, it could be political stability; if I had more time/money I could also narrow down the root cause of every onset to determine if it was truly technology. All in all, there is a demonstrated correlation between civil war onset in combination with social media communication specifically in irregular warfare.

Here is the link to the Kalyvas and Balcells journal with the data. <https://www-jstor-org.ezp-prod1.hul.harvard.edu/stable/40863761?typeAccessWorkflow=login>