

# Sample Selection Effects and the Likelihood of Coups

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## Abstract

A substantial body of research has examined coups, with much of it focusing on the factors that lead to coup attempts. However, consensus remains elusive regarding why coups are more prevalent in certain countries while less so in others. Previous scholarship exploring the determinants of coup attempts has often overlooked the crucial aspect of coup success. Given the severe consequences of a failed coup, coup plotters are unlikely to proceed unless they perceive a high chance of success. Thus, the expected outcome of a coup—whether successful or unsuccessful—is not merely incidental but serves as a pivotal determinant of coup attempts. The decision to stage a coup is a self-selected variable contingent upon the anticipated success rate of coups. This study employs a sample selection model (specifically, a two-stage probit model) to elucidate why coups are more common in some autocratic countries but rare in others. I contend that coup attempts are largely shaped by the likelihood of coup success, which, in turn, hinges on the power dynamics between coup perpetrators and incumbents. These power dynamics are influenced by the regime type and their distinct responses to internal and external shocks.

*Keywords:* Coup, Autocracy, Regime types, Sample selection

# 1 Introduction

Coups<sup>1</sup> occur with varying frequency across different countries, with some experiencing them more frequently than others. According to the Global Instances of Coups (GIC) dataset ([Powell and Thyne 2011](#)), Latin American countries such as Bolivia witnessed 23 coups between 1950 and 1984, while Argentina experienced 20 during a similar timeframe. However, Mexico’s authoritarian period from 1917 to 2000 saw no coups at all. In Africa, Sudan endured 17 coups between 1955 and 2021, whereas South Africa has not experienced a coup since 1950. Similar patterns are observed in the Middle East and South Asia. Despite numerous attempts in previous studies to explain these disparities, no consensus has been reached on a definitive model for analysing coups. As noted by Gassebner, Gutmann, and Voigt ([2016](#)), around one hundred potential determinants of coups have been proposed, yet the fundamental question remains unanswered.

In analysing the determinants of coups, it’s crucial not to overlook the most significant characteristic of coups themselves. Coups represent illegal attempts to overthrow current leaders, and the consequences of failed coups can be exceedingly high. Perpetrators of coups risk imprisonment, exile, or even death if their attempts are unsuccessful. In some instances, the repercussions extend to the families of the coup perpetrators. Despite these grave risks, there have been numerous coup attempts throughout history—according to the Global Instances of Coups (GIC) dataset, a total of 491 coups have been launched since 1950, with 245 coups succeeding. Furthermore, in 2021 alone, 7 coups occurred in 6 countries, marking the most frequent year for coup attempts since 2000. While 2022 and 2023 saw a decrease in the number of coups, they still witnessed 4 and 3 coups, respectively.

To comprehend the motives of coup perpetrators, it’s essential to analyze the potential pay-off of coup attempts. When orchestrating a coup, perpetrators anticipate gaining something, rather than risking losses, contingent upon the likelihood of their success. Therefore, when considering a coup, plotters prioritize assessing their probability of success. While they may have various motivations

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<sup>1</sup>Coups, according to Powell and Thyne, are “illegal and overt attempts by the military or other elites within the state apparatus to unseat the sitting executive” ([Powell and Thyne 2011, 252](#)).

for initiating a coup, they are unlikely to proceed without a reasonable expectation of success. When faced with low prospects of success, coup plotters may either abandon their plans or await more favorable circumstances. Determining the threshold for the likelihood of success is challenging, but historical data reveals that staged coups have generally enjoyed satisfactory success rates. As depicted in Table 1, the overall success rate of coups stands at 0.5, implying that half of the coups attempted since 1950 have resulted in success.

Table 1: Top 10 countries with the most coup attempts

Country	Coup attempted	Coup succeeded
Bolivia	23	11
Argentina	20	7
Sudan	17	6
Haiti	13	9
Venezuela	13	0
Iraq	12	4
Syria	12	8
Thailand	12	8
Ecuador	11	5
Burundi	11	5
Guatemala	10	5
Total	491	245

*Source: GIC dataset*

## References

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