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**POLSCI.733**  
**Maximum likelihood estimation**  
**Term paper**  
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# 1 Introduction

Contemporary research holds that co-optation and political repression represent two mainstays of authoritarian regimes (Gerschewski, 2013, 21f.). Usually co-optation is defined as “the intentional extension of benefits to potential challengers to the regime in exchange for their loyalty” (Frantz and Kendall-Taylor, 2014, p. 333), and legislatures and parties are said to simplify those exchanges. Since the end of the Cold War those nominally democratic institutions have taken root in almost every authoritarian regime. In fact, by 2007

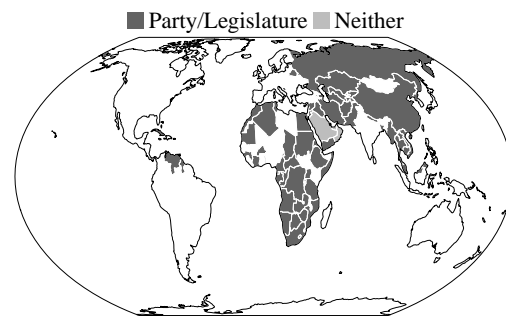


Figure 1: Parties and legislatures in authoritarian regimes, 2007

only Saudi Arabia, Oman, and the United Arab Emirates sustained neither political parties nor a publicly elected parliament. At the same time, however, authoritarian regimes did not forget about political repression. Restrictions on core political liberties and violations of physical integrity rights limit public criticism of the government, they undermine coordinated campaigns against it, and occasionally they even enforce commitments in authoritarian politics (Wintrobe, 1998, pp. 33,38). Yet, little is known about how co-optation and political repression interact.

This is the point of departure for Erica Frantz’ and Andrea Kendall-Taylor’s (2014) recent publication ‘A dictators toolkit: Understanding how co-optation affects repression in autocracies’. Based on extensive quantitative analyses they claim that co-optation has far-reaching consequences for how repression is used (Frantz and Kendall-Taylor, 2014, p. 332). More precisely, they find that increasing levels of co-optation lead dictators to reduce restrictions on empowerment rights, but at the same time they increase physical integrity violations. The authors explain this key finding by reference to the trade-offs involved in applying political repression. Restrictions on empowerment such as the freedoms of speech and assembly aim at the general public and characterize a diffuse approach to social control. Physical integrity violations such as torture and extra-judicial killings in contrast target specific individuals and are more attractive when the opposition is known. Nominally democratic institutions offer fora where regime opponents can make their demands heard and consequently they increase the available information on the political opposition. Under the bottom line, the institutions of co-optation generate

44 knowledge on threats to the regime and lead dictators to “shift their repressive approach  
45 in favor of physical integrity rights violations over empowerment rights restrictions”  
46 (Frantz and Kendall-Taylor, 2014, p. 337).

47 This paper replicates the work of Frantz and Kendall-Taylor. It provides evidence to  
48 the violation of key assumptions in the original publication and raises concerns with  
49 regard to predictive accuracy. Moreover, it casts doubt on a widespread estimation  
50 strategy that depends on lagged dependent variables to control for serial autocorrelation  
51 in pooled time-series cross-sectional designs. My extension . . . . The following section  
52 characterizes data and design of the original publication, and section three presents the  
53 replication results. Section four discusses the results of a modified estimation approach,  
54 and section five concludes.

## 55 2 Data & design

56 Covering the period from 1972 to 2007 Frantz and Kendall-Taylor analyze 138 dicta-  
57 torships based on the “Autocratic regimes” data. The authors follow the example set  
58 by **Vreeland.2008** run ordered logistic regressions (c.f. Fox, 2008; Fox and Weis-  
59 berg, 2011) to account for the ordinal characteristics of their dependent variables. Their  
60 research design inquires into the effect of co-optation on either type of political repres-  
61 sion, empowerment rights restrictions and physical integrity violations, based on pooled  
62 time-series cross-section data. Furthermore, as institutional changes might take years  
63 before they impact government policies, Frantz and Kendall-Taylor use current levels of  
64 co-optation including a set of control variables ( $t_0$ ) to predict future levels of political  
65 repression ( $t_0 + 1$  to  $t_0 + 5$ ). All models include a lagged dependent variable ( $t_0$ ) to  
66 account for serial autocorrelation and standard errors are clustered at the country level  
67 as a remedy to heteroscedasticity (Beck and Katz, 1995). Finally, Frantz and Kendall-  
68 Taylor used multiple imputation to fill gaps in the raw data and to avoid inefficiency as  
69 well as biased estimates or inference [KING ET AL CITATIONS].

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