Globalization and Political Protests: The Role of Motion Picture Import

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Abstract: Most political science research on the impact of economic globalization focuses on the flow of goods, capital, and people, ignoring the spread of culture. In this study, we examine whether the importation of protest movies leads to increased anti-government protests in the importing country. We argue that imported protest movies promote protest participation in autocracies but not democracies. Using a novel dataset on imported protest movies, we conducted an empirical analysis of 24 non-democracies and 65 democracies from 1999 to 2018. We find that public consumption of imported protest movies promotes mass anti-government demonstrations in non-democracies. Nevertheless, imported movies that do not have a large audience or have no political protest content fail to impact protest behaviors. Moreover, foreign movies have no impact on protests in democracies. Our research contributes to the bodies of literature on the globalization of culture and ideas, international service trade, and sources of mass political protests.

Keywords: Globalization of culture and ideas, Motion Picture Import, Political Protest, Regime Type

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1 Introduction

Globalization is widely defined as the spread of activities, people, culture, and ideas in every sphere of human existence across borders and around the globe (e.g. Frieden, 2016; Feenstra and Taylor, 2014; Baylis, 2020). The impact of economic globalization, in particular, has attracted wide scholarly and public attention, even amid the latest pushback. In political science, most research on the impact of economic globalization has focused on the flow of goods, capital, and people, largely ignoring the spread of culture. One salient aspect of the spread of culture is the global movie industry. Ordinary people often encounter globalization by consuming foreign cultural products like movies (Kluver and Fu, 2004). Foreign movies directly transmit culture, values, and ideas, and consumers often let down their ideology guard. This soft persuasion power could impact consumers more effectively than goods do.

The export and import of motion pictures constitute an important part of the global economy. A recent industry report suggests that the value of the global movies and entertainment market size reached $90.92 billion in 2021, with an expected compound annual growth rate of 7.2% from 2022 to 2030[1]. Evidence of the global significance of the American and European film industries abounds. Despite their economic significance, how imported movies influence domestic politics has rarely received scholarly attention in political science. In this study, we seek to remedy this oversight by studying how imported political protest movies influence anti-government protests in the importing country. We offer several theoretical explanations to address this research question and test our argument using our newly

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[1]https://www.grandviewresearch.com/industry-analysis/movies-entertainment-market

collected data on imported political protest movies.

We argue that imported protest movies could increase the audience's protest participation by showcasing democratic rights and values, demonstrating how to fight for those rights and values, and strengthening the social network-protest nexus. However, the impact of imported protest movies differs significantly between democracies and autocracies. In autocracies, where the right to assembly and freedom of speech is limited, and media is often censored, watching political protests in foreign movies brings something new to the audience and could mobilize them to action. In contrast, because democracies grant citizens the right to assembly and freedom of speech, producing and watching protest movies is common. Thus, imported protest movies are unlikely to contain additional new information that mobilizes the audience politically.

To test our argument, we analyze whether public consumption of imported political protest movies triggers more anti-government demonstrations in the following year in autocracies but not democracies. Our samples include 24 non-democracies and 65 democracies from 1999 to 2018. We find that public consumption of imported protest movies, as measured by their box office value, has a positive and statistically significant effect in non-democracies but not democracies. We also test different logical implications of our argument and carry out several placebo tests. We find that neither movies without box office value nor family romance movies encourage protest behaviors. In addition, in the placebo tests, foreign protest movies do not influence protest activities before those movies are imported. These results provide strong support for our theoretical argument.

Our study contributes to the literature on the globalization of ideas. Previous

literature about the impact of economic globalization focuses on the role of traded goods, foreign direct investment, and financial capital over a wide range of outcomes, such as democratic governance (Gleditsch and Ward, 2006; Simmons, Dobbin and Garrett, 2008), human and labor rights (Greenhill, Mosley and Prakash, 2009; Hafner-Burton, 2005; Greenhill, 2010; Mosley and Uno, 2007), and legal system (Kelemen and Sibbitt, 2004; Kagan, 2007). Hardly any work identifies the impact of cultural diffusion on citizens directly. Our work fills this gap by investigating how imported movies influence citizens' political behaviors.

Our study also speaks to the literature on service product globalization. For a long time, scholars investigate the distributional outcome of globalization purely from the point of goods or capital exchange. Service products occupies at least 21% of world trade and employed more than half of the labor force worldwide (Briggs and Sheehan, 2019). However, the distributional outcome of service trade is still unknown. Scholars have identified that service trade has higher costs (Miroudot, Sauvage and Shepherd, 2013; Borchert, Gootiiz and Mattoo, 2013) and different firm participation patterns (Breinlich and Criscuolo, 2011). Our paper contributes to the literature by identifying one service trade distributional outcome: cultural diffusion. Unlike globalization of manufacturing goods, globalization of services could directly shape other countries' political environments by affecting their citizens.

By linking the globalization of culture and ideas to a domestic political outcome, our research contributes significantly to the study of mass political protests. The determinants of mass political protests have long captured the attention of political scientists, sociologists, economists, and social activists. Scholars often approach the question by analyzing causal factors related to opportunities and grievances both

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at the national and individual levels. For example, many scholars (Lipset, 1959; Boix, 2011; Epstein et al., 2006; Korotayev, Sawyer and Romanov, 2021) argue that economic development increases mass demonstrations because citizens would become less tolerant of repressive regimes. Others (Klandermans, 1984; Arikan and Bloom, 2019; Rüdig and Karyotis, 2014) find that a citizen's propensity to participate in political protests depends on personal characteristics such as religiosity, protest experiences, or personal resources such as civil skills, time, money, etc.. Some other scholars (Li Donni, Marino and Welzel, 2021; Rüdig and Karyotis, 2014; Kleiner, 2018; Gleditsch and Rivera, 2017) focus on the impact of social norms and the diffusion of protests. Emancipative values and the dividend of normative notion matter for the propensity of nonviolent protests in a country (Li Donni, Marino and Welzel, 2021; Kleiner, 2018). Nonviolent campaigns and political protests in neighboring countries have positive spillover effects (Gleditsch and Rivera, 2017). Our study sheds light on the importance of the previously ignored foreign culture imported from democratic countries and furthers our understanding of the causes of protest participation.

2 Argument and Hypotheses

Developed democratic countries dominate global film exports. The United States alone accounts for 70% of the foreign market revenue, followed by the United Kingdom, China, French, Japan, and Germany[2]. Since our focus is the impact of the globalization of democratic ideas and culture via films, we will examine protest movies

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[2]See the *Movie Production Countries* reported by Nash Information Services: https://www.the-numbers.com/movies/production-countries/tab=territory

produced by and imported from democratic countries. Moreover, because civil liberties and access to information differ qualitatively between democracies and non-democracies, we analyze the impact of imported movies separately between regime types.

Foreign movies could directly demonstrate different lifestyles and expand cultural diffusion. Film scholars (e.g. Ryan and Kellner, 1988; Hilliard, 2009) find that Hollywood films are closely connected with the ideological, social, and political movement of the time. The exchange of movies represents a widespread cultural diffusion driven by the spiritual need for cultural products. Observing different lifestyles could stimulate self-reflection on the audience's lives, especially when movies spread particular ideological preferences. Some scholars (e.g. Fu and Govindaraju, 2010) find that the world's taste in movies has been increasingly homogeneous over the years, indicating that the exchange of movies enhances both cultural diffusion and convergence.

During cultural diffusion along with the movie trade, democratic value-enriched movies, especially political protest-related movies, may stimulate more cultural shock in the audience in non-democracies. These movies include scenes and plots such as fighting against injustice, defending democratic values, or securing voting rights. They can be incredibly informative, education, and stimulating when the importing country does not have democratic norms and citizens do not experience similar events in real life.

These movies could affect the audience's likelihood of protest participation in three ways, by showcasing citizens' rights under democratic values, demonstrating how to fight for such rights, and strengthening the social network-protest nexus.

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First, when the audience observes foreign citizens fighting for civil liberties and democratic values in a movie, the experience could stimulate reflection on their society. That citizens in other democracies and non-democracies could protest over war, poverty, anti-Semitism, racism, social justice, politics, sexism, and labor rights may resonate with the audience (Hilliard, 2009). The effect could be particularly acute when the audience lives in a society without democratic norms and rarely have similar experiences in their own lives. The rarity of such experiences in personal lives and the exposure to foreign movies interact to stimulate self-reflection and induce changes in ideological preferences. Only when citizens realize that there is an alternative lifestyle and political arrangement and that option guarantees more freedom and dignity will they start to think about making changes in their society. If the audience suffers from political corruption and human rights violations, watching protest movies is more likely to trigger protest behaviors.

Second, protest movies may not only show democratic values but also teach how to fight for and defend such values. The illustrated method is protest. Watching how others fight against injustice and defend their freedom and human rights through protest becomes an educational and enabling experience. Movie plots may help the audience learn how to litigate and get organized (Asimow, 2008). Social activists may utilize movies to "inform and mobilise upcoming demonstrations" (Kosmala, 2011).

Third, in addition to the effects of the intrinsic attributes of protest movies, watching a movie often involves the social network influence described by scholars of political protest. McAdam (1986) points out that an individual's social network is a pull factor for the individual to engage in social activism. Arikan and Bloom (2019)

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find that even involvement in religious social networks increases an individual's protest participation by building civic skills, fostering shared identity and information dissemination, and facilitating mobilization. Using randomized experiments to study Hong Kong university students' participation in anti-authoritarian protests, Bursztyn et al. (2021) find that the protest participation of those in an individual's social network raises the likelihood of the individual's protest attendance. Friendship could induce protest turnout by increasing social utility from protest participation, reducing coordination costs, and changing beliefs or preferences (Bursztyn et al., 2021). The social network-protest nexus is consistent with and likely strengthened by movie watching. Movie watching is typically a group activity one engages in with family and friends. Watching imported political protest movies with family and friends could induce similar social network effects. These friends may view protest as a fun thing to do together, change their political beliefs, and learn to coordinate protest activities.

These discussions lead to the following hypothesis regarding the impact of protest movies on protests in non-democracies.

Hypothesis 1: Public consumption of imported political protest movies from democratic countries encourages anti-government demonstrations in non-democracies.

The effect of imported protest movies works differently in democratic regimes. Since the democratic society already grants civil liberties, including freedom of assembly, freedom of expression, and freedom of speech, and may even have well-developed democratic norms, domestically produced political protest movies are

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common and widely shown. Hence, imported protest movies are less likely to be more stimulating and serve as additional stimulus toward protest activities. It is true that citizens in democratic countries also organize many political protests, which tend to be driven by the masses' discontent with the government caused by political corruption, unpopular economic policies, etc. They are less likely to be motivated by popularized movie plots associated with political protests, as such information is not new in democratic societies. In other words, if a society is already democratized, watching citizens from another society fight for the democratic value may not engender ideological change that leads to protests. Thus, we expect that the positive effect of imported protest movies on anti-government protests will unlikely be significant in democracies.

Hypothesis 2: Public consumption of imported political protest movies from democratic countries have no significant impact on anti-government demonstrations in democracies.

3   Data and Methodology

Since we expect protest dynamics to differ systematically between regime types, we estimate the protest model for democratic and non-democratic countries separately. Following previous studies, a country is coded as a democracy if its POLITY2 variable from the Polity IV dataset is larger than or equal to +6, and as a non-democracy otherwise. Our estimation samples include 24 non-democratic coun-

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tries[3] and 65 democratic countries[4]. Data on movie box office was sparse for non-democratic countries before 2000, so our analysis focuses on the 2000-2018 period.[5] Descriptive statistics for all variables are presented for the two estimation samples in Table 1.

3.1 Dependent Variable

Our dependent variable is the annual number of mass demonstrations against the government in each country from 2000 to 2018. Data on the dependent variable are from the Cross-National Time-Series Data Archive (CNTS). The CNTS data covers anti-government demonstrations in 200 countries from 2000 to 2018. Most of the data are derived from the New York Times. The variable anti-government demonstration refers to "any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature."[6]

As shown in Table 1, the average number of protests is close to three in both non-democracies and democracies in the sample period. The sample standard de-

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[3]Azerbaijan; Bahrain; Bangladesh; Burkina Faso; China; Ecuador; Egypt; Georgia; Iran; Kazakhstan; Kuwait; Malaysia; Nigeria; Oman, Russia; Saudi Arabia; Singapore; Sri Lanka; Syria; Thailand; Turkey; Ukraine; Uzbekistan; Venezuela. Our initial sample included many additional countries, which were dropped from estimation due to the lack of within-country variation in the movie variables.

[4]Albania; Argentina; Australia; Austria; Bangladesh; Belgium; Bolivia; Brazil; Bulgaria; Canada; Chile; Colombia; Costa Rica; Croatia; Cyprus; Czech Republic; Denmark; Ecuador; Estonia; Finland; France; Georgia; Germany; Ghana; Greece; Hungary; India; Indonesia; Ireland; Israel; Italy; Japan; Kenya; Korea, Rep.; Latvia; Lebanon; Lithuania; Malaysia; Mexico; Netherlands; New Zealand; North Macedonia; Norway; Panama; Paraguay; Peru; Philippines; Poland; Portugal; Romania; Russian Federation; Slovak Republic; Slovenia; South Africa; Spain; Sri Lanka; Sweden; Switzerland; Thailand; Turkey; Ukraine; United Kingdom; United States; Uruguay; Venezuela, RB

[5]Our original data collection went back to 1918, but the box office data appeared sparse and not highly reliable before 2000.

[6]https://manuals.plus/cross-national/cross-national-time-series-data-archive-user-s-manual

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viation is 7.11 and 9.51 for the two regimes, respectively, indicating that countries experience large variations in protest activities. Figure 1 compares the anti-government protest trends in democracies and non-democracies from 2000 to 2018. Both types of countries experienced more protest activities after 2010. During the period, non-democratic countries had 1634 anti-government protests, and democracies had 3476.

3.2   Movie Data and Key Independent Variables

A major contribution of our study is to introduce and explore a new dataset on imported political protest movies. For data collection, we first obtained the list of protest movies from IMDBPro.com by searching the plot keyword that contains "political protest." We then recorded detailed movie information such as rating, language, producer country, release location/country, and the box office in each country. During the 2000-2018 period, we identified 68 movies produced in democratic countries with plots labeled as political protests.[7] The average number of countries a protest movie is transmitted through is 33.6, and the median is 35, with the minimum being one and the maximum being 63. Figure 2 illustrates the trend of protest movies produced and released annually. On average, 4.4 protest movies are produced each year. The year 2009 has the highest number of nine protest movie releases. In total, non-democracies imported 32 protest movies, and democracies imported 68.

We employ the movie data to test our argument and construct several independent variables. The primary variable is the logged total box office value of imported protest movies in a country in a year. Imported movies can only affect the percep-

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[7]Non-democratic countries produced only one political protest movie during the period, which was excluded from the analysis.

tions and behaviors of audiences when those movies are not only shown but also watched. Thus, we use the box office value to measure the extent of public consumption and popularity of imported movies. According to our hypotheses, the variable should have a significant positive impact on protest behaviors in non-democracies but not in democracies.

Protest movies exhibit large variations in their box office values. The most popular one earned $337 million, and the least popular $406. Our original box office variable equals the total box office income of imported protest movies in a country each year. The median value is $214,600. The total box office value is $6,350,645 in non-democratic countries and $612,000,000 in democratic ones. Imported protest movies collected less revenue in non-democracies than in democracies. Figure 3 shows the annual logged box office values of imported protest movies for both democracies and non-democracies. The box office values have large variations over time for both regime types.

One logical implication of our argument is that imported but not widely watched protest movies are unlikely to motivate the audience's protest behaviors. Many movies are imported but only shown at film festivals. In addition, movies are also often imported and released in different formats, such as in theaters, on internet streaming platforms, or TV. To test this implication of our argument, we separate movies into those with box office values and those without because the box office measures the extent of public consumption. We construct two variables: the number of releases of imported protest movies with box office values and the number of releases of imported protest movies without box office values. We expect that in non-democratic countries, the former should significantly positively affect protests but

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not the latter. Their coefficient equality test should be statistically significant. Figure 4 shows the annual numbers of releases of imported protest movies in democracies and non-democracies, with and without box office values in two panels, respectively. Democracies have more political protest movie releases than non-democracies. In both types of countries, many protest movie releases do not have box office values.

Another logical implication of our argument is that if protest movies contain information that motivates protest behaviors, non-protest movies should have no such effect. To test this implication of our argument, we collected data on imported family romance movies. During the 2000-2018 period, democratic countries produced 87 family-romance movies. Non-democratic countries imported 31 of those, and democratic countries imported 49. In total, family-romance movies received $468,000,000 dollars in non-democracies and $8,880,000,000 dollars in democracies. Figure 5 shows the box office values of family romance movies over time, demonstrating large variations for both regime types. Relative to protest movies, family-romance movies collected more revenue in both regime types.

To compare the effects of imported protest and family romance movies, we use the following two variables: logged box office of imported protest movies and logged box office of imported family romance movies. We expect that in non-democratic countries, the former should have a significant positive effect on protests, but not the latter. Their coefficient equality test should be statistically significant.

One may wonder if domestically produced protest movies also affect protest behaviors inside the producer country. The production and release of such movies within a country may correlate with public resentment toward the government and instigate protest activities. We create a variable for the number of domestically pro-

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duced protest movies in a country in a year. Since, according to our data collection, non-democratic countries produced only one political protest movie during the period, and our analysis focuses on protest movies produced in democratic countries, the domestic protest movie variable does not produce estimable results in the sample of non-democratic countries.

3.3 Control Variables

We include a set of control variables to rule out possible omitted variable bias. Because political protest movies contain sensitive information, non-democracies tend to restrict the production and import of such movies. Thus, the box office value of imported protest movies may reflect the degree of a country's political and media openness rather than measuring the impact of imported culture and ideas. To eliminate this possibility, we control for a country's media censorship. A non-democratic country that imposes media censorship is likely to restrict the impact of foreign culture and repress political freedom, both associated with fewer protests. We take the Government Censorship Effort index from the Varieties of Democracy(VDem) dataset and multiply -1 with the index so that higher values indicate greater censorship.

Following previous studies on the spill-over effect of foreign protests, we construct a neighbors' protests variable that equals the total number of anti-government protests in a country's neighbors in a year. We use the Contiguity dataset from the Correlation of War project to determine a country's land-contiguous neighbors in a year. Changing the contiguity definition does not change our main results.

Following the protest models in Li Donni, Marino and Welzel (2021), we also

control for GDP per capita, GDP growth, population, and university enrollment per capita. Economic development and growth could affect the propensity and capacity of a country to import foreign movies and the possibility of mass protests. A country's population size is likely to positively affect the demand for imported movies and the number of political protests. University enrollment level may increase the demand for imported movies and influence political protests. We obtain data for these four variables from various sources, including the World Development Indicator, the Maddison Project Database, and the United Nations Educational, Scientific, and Cultural Organization(UNESCO).[8] We log-transformed GDP per capita, population, and university enrollment per capita variables due to their skewed distributions.

3.4   Methods

According to Silva and Tenreyro (2006), the presence of many zeroes in the dependent variable, together with heteroskedastic error variance, results in a correlation between covariates and the error term and inconsistent statistical estimates. Using Monte-Carlo simulation, they demonstrate that in such situations, the Poisson pseudo maximum likelihood (PPML) estimator is superior to OLS and negative binomial models. In addition, the PPML estimator is consistent when there is under-dispersion and over-dispersion in the count data.[9] In our case, the dependent variable is a count variable with a large number of zeroes, and its variance is much larger than its mean, implying possible over-dispersion in the data. Thus, we apply

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[8]We supplemented the Maddison Project's data on university enrollment per capita with university enrollment data from (UNESCO). The correlation between the university enrollment variable from the two sources is extremely high (0.98).

[9]See, e.g., https://personal.lse.ac.uk/tenreyro/LGW.html

the widely used Poisson pseudo maximum likelihood estimator (PPML).[10]

We lag all independent variables one year behind the dependent variable to avoid reverse causality. We follow previous research and correct for possible heteroskedastic error variance and temporal dependence within a country by estimating robust standard errors clustered over country. We also control for the country- and year-fixed effects to rule out the confounding impact of unobserved country heterogeneity and year-specific shocks. The PPML estimator is optimal when dealing with high-dimensional fixed effects (Correia, Guimarães and Zylkin, 2020).

4 Findings

Table 2 presents our main estimation results for non-democracies and democracies using the box office value variable. Models 1 and 3 include only the logged box office variable, plus the country and year fixed effects; Models 2 and 4 include other control variables. The results in Table 2 are broadly consistent with our expectations.

For non-democratic countries, the coefficient of the box office variable is positive but statistically insignificant in the under-specified model, and it is positive and statistically significant when the control variables are included. Public consumption of imported political protest movies promotes anti-government protests in non-democracies. According to Model 2, when the box office of imported protest movies increases by 1%, the number of political protests rises by 0.074%. For democratic countries, the coefficient of the box office variable is positive and statistically

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[10]We employ the ppmlhdfe command in stata, written by **?**, for estimation. Our results are almost identical when we apply xtpoisson in stata.

insignificant in all models. As expected, imported protest movies do not appear to encourage protest activities in democracies.

In the fully specified non-democracy model, the control variable results are largely in line with our expectations. Media censorship, which correlates with a country's restriction over movie imports and political freedom, has a significant negative effect on protest activities. As a country's neighbors experience an increase in protest activities, its number of anti-government protests also increases. A country's per capita college enrollment is negatively associated with its protest activities. Countries with large populations tend to experience more political protests. In contrast, a country's GDP per capita and GDP growth do not appear to have any statistically significant effect.

In the fully specified democracy model, the domestic movie box office variable has the expected positive and statistically significant effect. Public consumption of domestically produced protest movies encourages more protest activities in democracies. However, none of the other control variables has statistically significant effects. These results suggest that protest dynamics differ between regime types. Thus, separate analyses for regime types are warranted.

Table 3 presents the results for two robustness tests of the implications of our argument. Model 1 tests the differential effects of imported protest movie releases with box office and those without box office. As expected, imported protest movies that are widely watched have a statistically significant positive effect on protest behaviors, whereas imported movies without a wide audience do not. Their coefficient equality chi-square test rejects the null hypothesis that these two types of movie releases have the same effect. These results add support to our argument.

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Model 2 tests the differential effects of the box office values of imported protest and family romance movies. As expected, public consumption of imported protest movies has a statistically significant positive effect on protests, but public consumption of imported family romance movies does not. Their coefficient equality chi-square test rejects the null hypothesis that these two types of movies have the same effect. These results provide further support for our argument.

Models 3 and 4 re-estimate Models 1 and 2 for democratic countries. In general, the results of the related movie variables do not exhibit the same patterns as those in non-democratic countries, as expected.

We further conduct one additional set of placebo tests of our argument. According to our argument, when imported protest movies are consumed and watched by the audience, the movies could subsequently motivate protest behaviors. If this argument holds, we should not find these movies to influence protests that occurred before the importation of those movies. Hence, we re-estimate Model 2 in Table 2, Models 1 and 2 in Table 3, but with the dependent variable being the number of anti-government protests in year t-1, the key imported movie-related variables from year t, and other control variables from year t-1. Table 4 presents the results for these three models. As expected, protest movies imported in year t have no impact on political protests in year t-1. These results should give us more confidence in the validity of our argument.

5 Conclusion

In this study, we examine whether the importation of protest movies leads to increased anti-government protests in the importing country. We argue that imported

protest movies encourages protest participation in autocracies but not democracies. Using a novel dataset on imported protest movies, we conducted an empirical analysis of 24 non-democracies and 65 democracies from 2000 to 2018. We find that public consumption of imported protest movies promotes mass anti-government demonstrations in non-democracies. Nevertheless, imported movies that do not have a large audience or have no political protest content fail to impact protest behaviors. Moreover, foreign movies have no impact on protests in democracies.

Our research contributes to the literature on the impact of globalization. We show that globalization of culture and ideas can directly affect citizens' political behaviors in non-democratic countries. Since imported protest movies encourage political protests in autocracies, the globalization of culture and ideas also shapes the domestic political environment of the importing countries.

Our study also contributes to the literature on international service trade. We show that unlike the distributional outcome of manufacturing goods that might affect politics via economic growth, the distributional effect of service trade could directly affect the domestic political environment. The consumption of certain foreign movies helps to spread political values dominated by advanced industrial countries. Winners in the international service trade thus could influence foreign citizens' political preferences directly.

Finally, our research contributes to the extensive literature on the sources of mass political protests by identifying the role of foreign culture. The significant impact of protest movies in autocracies highlights the role of external influence in mass politics. To the extent that mass protests encourage democratization, as various scholars (Aidt and Leon, 2016; Marino et al., 2020; Teorell, 2010; Cook, Goodwin

and Jasper, 2004) point out, our study also contributes to our understanding of democratization.

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Figure 1: Annual Number of Anti-Government Protests, 2000-2018
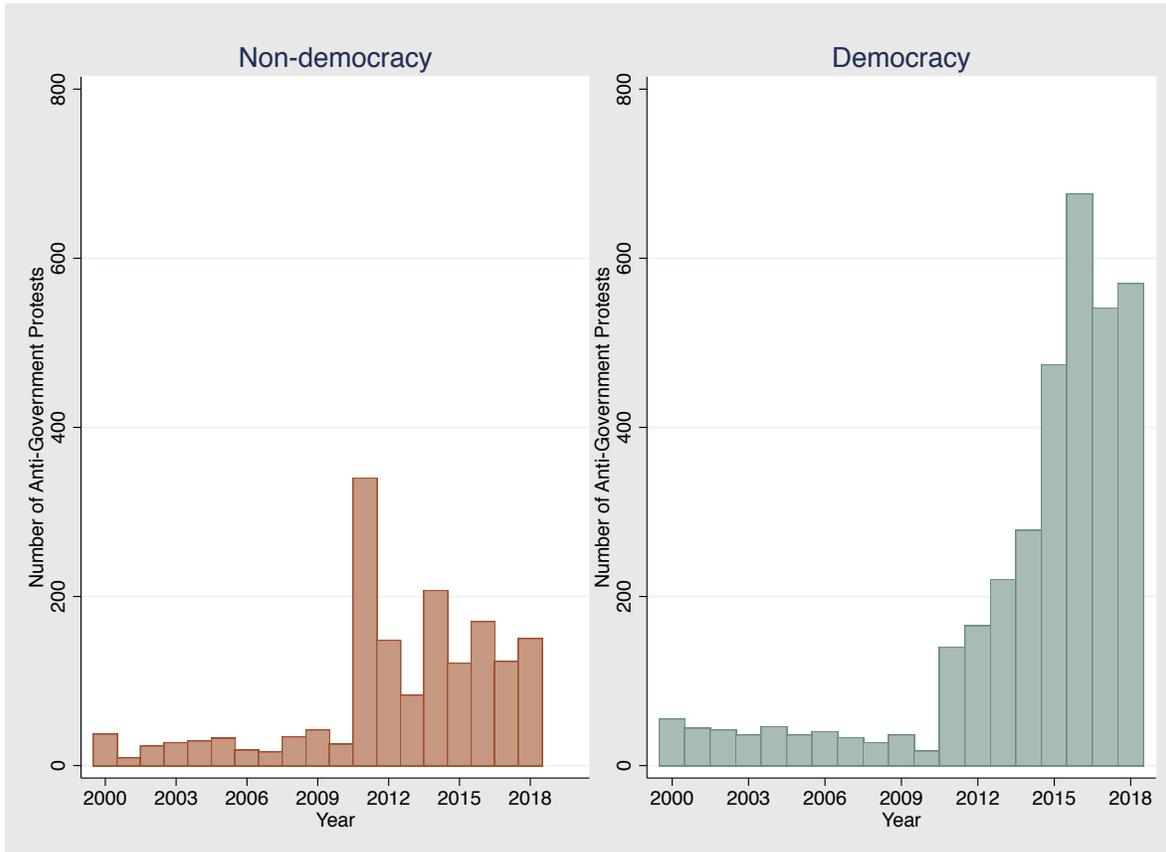
Source: National Time-Series Data Archive (CNTS).
Note: Non-democracies had 1634 anti-government protests and democracies had 3476.

Figure 2: Annual Number of Protest Movies Produced by Democratic Countries, 2000-2018
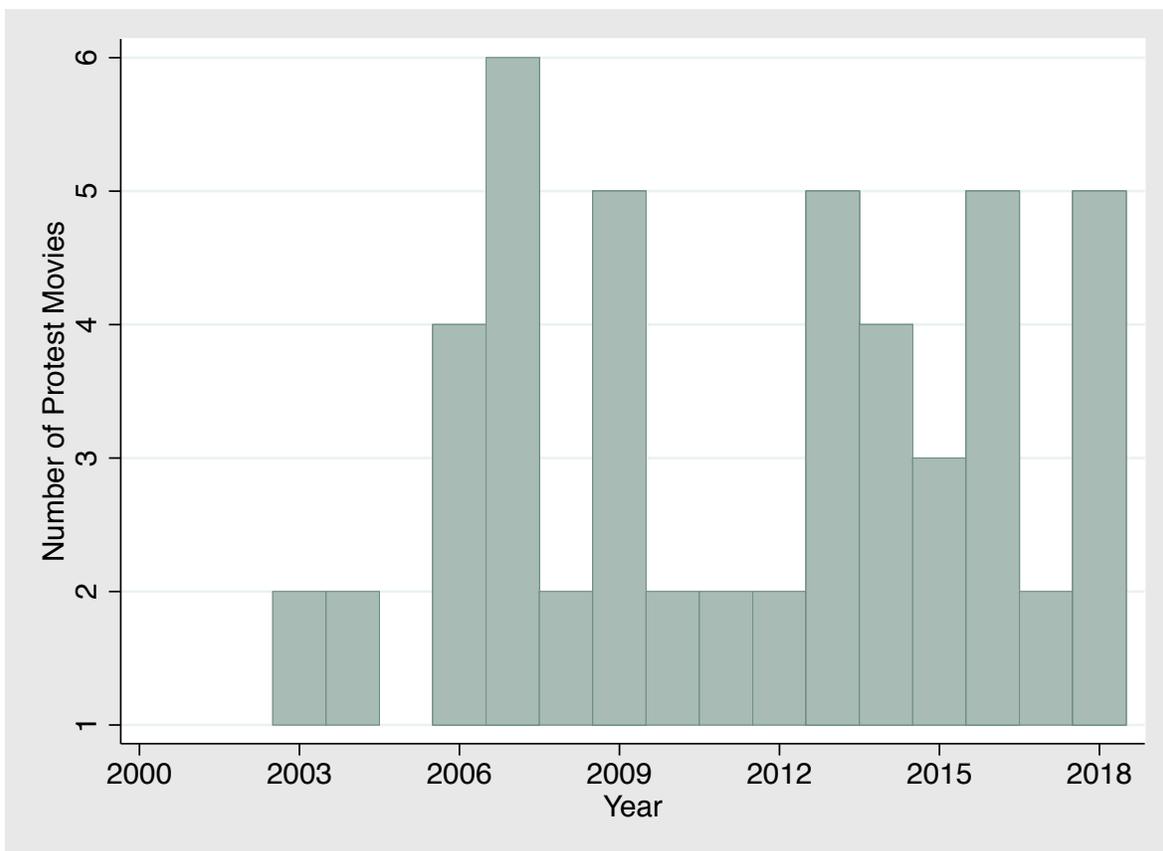
Source: Author-collected dataset from imbd.com.
Note: Non-democratic countries produced only one political protest movie during the period, which was excluded from the analysis.

Figure 3: Boxoffice of Imported Protest Movies, 2000-2018
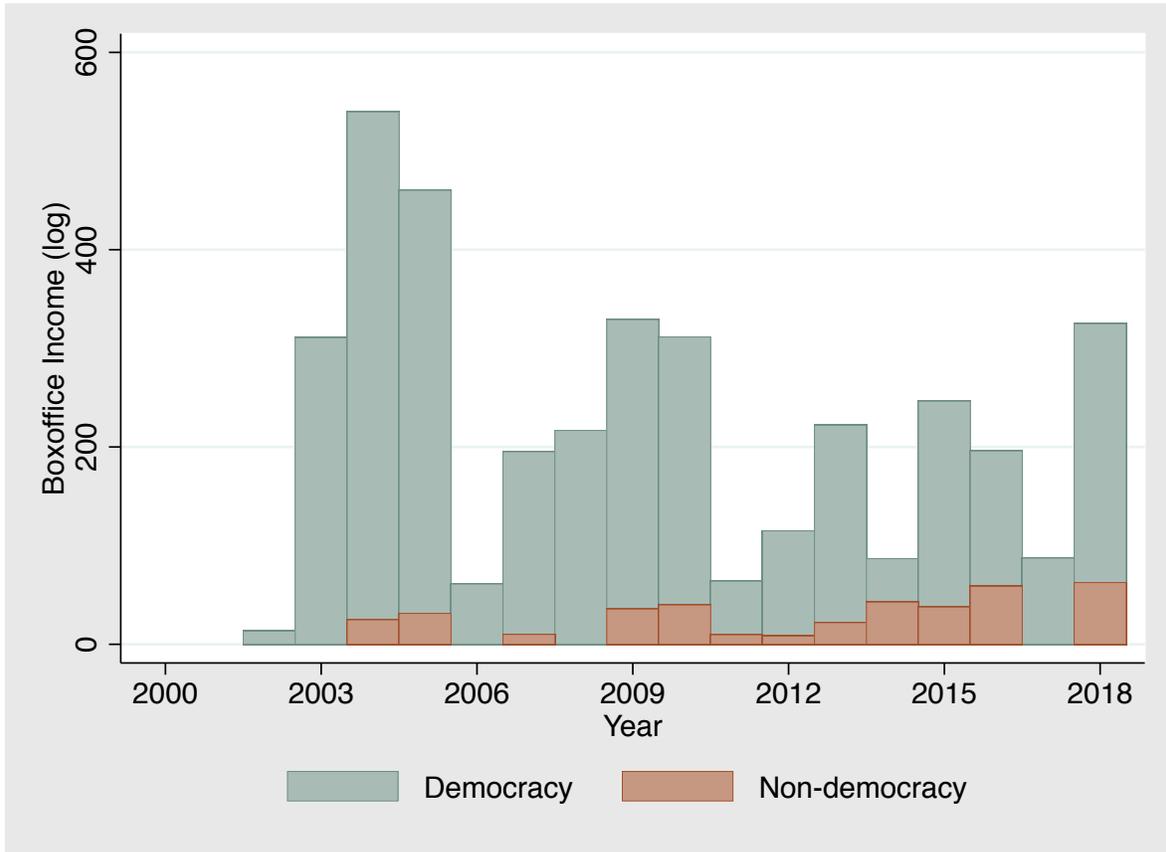
Source: Author-collected dataset from imbd.com.
Note: During the period, non-democracies imported 32 protest movies, and democracies imported 68. The total box office value is $6,350,645 in non-democratic countries and $612,000,000 in democratic countries.

Figure 4: Numbers of Releases of Imported Protest Movies in Democracies and Non-democracies, 2000-2018
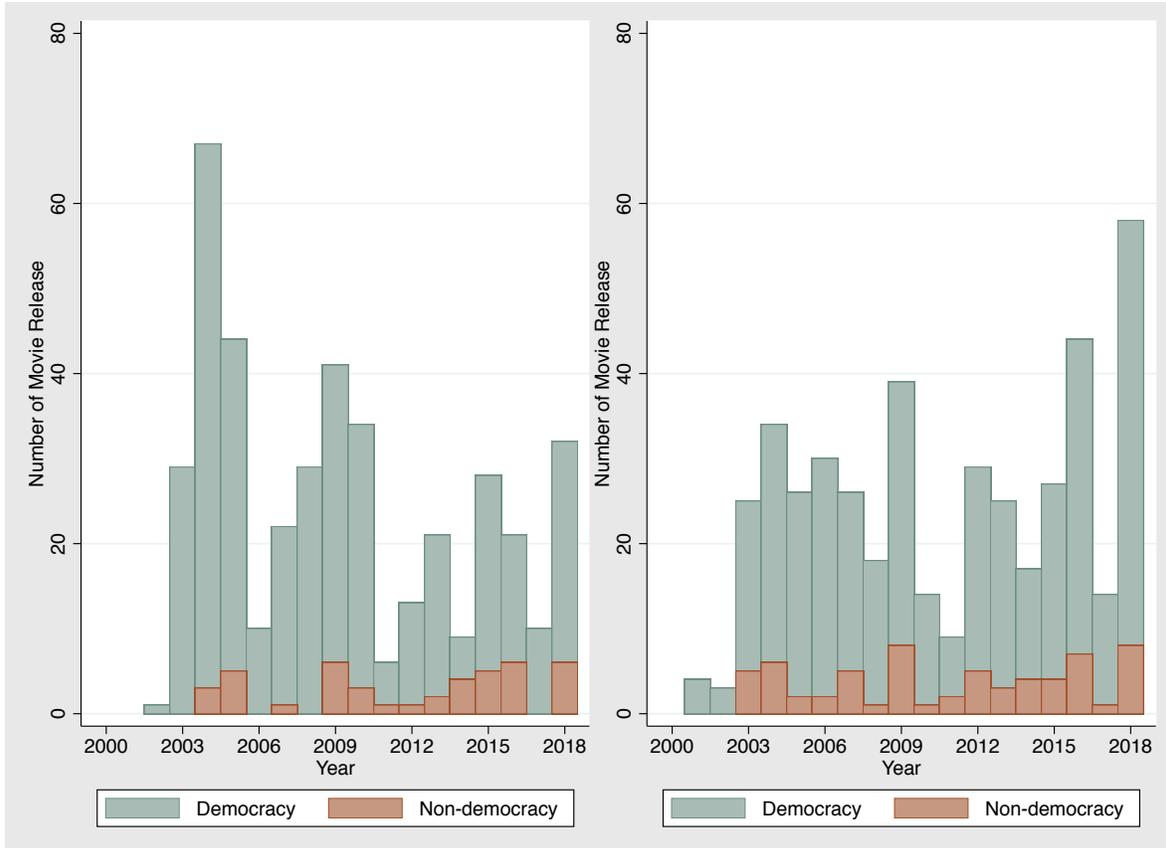
Note: In non-democracies, 43 releases of imported protest movies have box office values, and 65 do not. In democracies, 417 releases of imported protest movies have box office values, and 442 do not.

Figure 5: Boxoffice Values of Imported Family Romance Movies, 2000-2018
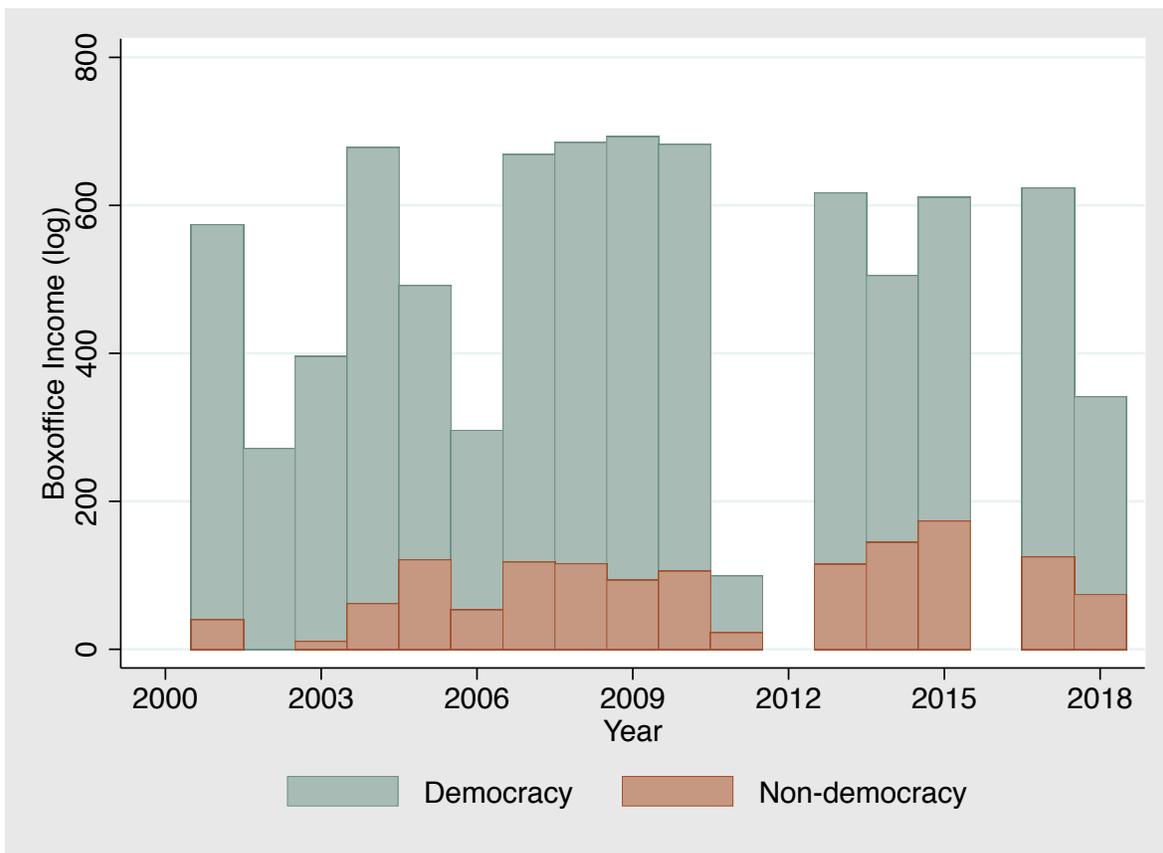
Source: Author-collected dataset from imbd.com.
Note: Non-democracies imported 31 family-romance movies, and democracies imported 49.
Family romance movies received $468,000,000 dollars in non-democracies and
$8,880,000,000 dollars in democracies.

Table 1: Descriptive Statistics for Estimation Samples

Non-democracy	Obs	Mean	Std.Dev	Min	Max
Protest	298	2.896	7.113	0	74
Boxoffice(log)	298	0.776	2.798	0	14.72
Movie Releases with Boxoffice	298	0.0872	0.337	0	3
Movie Releases without Boxoffice	298	0.185	0.541	0	4
Romance Movie Boxoffice(log)	298	3.031	5.617	0	18.27
Media Censor	298	-0.995	1.138	-2.959	1.409
Neighbors' Protests	298	14.51	31.34	0	237
GDP per capita (log)	298	9.491	0.968	7.135	11.23
GDP Growth	298	4.949	5.217	-26.34	34.50
University Enrollment per capita (log)	282	5.400	0.828	2.398	6.860
Population (log)	298	10.14	1.652	6.510	14.14
Year	298	2009	5.292	2000	2018
Polity IV	298	-2.879	4.998	-10	5

Democracy	Obs	Mean	Std.Dev	Min	Max
Protest	1078	2.768	9.519	0	149
Boxoffice(log)	1078	3.334	5.481	0	19.10
Movie Releases with Boxoffice	1078	0.368	0.670	0	4
Movie Releases without Boxoffice	1078	0.400	0.733	0	4
Romance Movie Boxoffice(log)	1078	7.272	6.986	0	20.04
Domesitc Movie Boxoffice(log)	1078	0.357	2.250	0	19.09
Media Censor	1078	1.976	1.007	-1.122	3.516
Neighbors' Protests	1078	7.908	14.21	0	135
GDP per capita (log)	1078	9.874	0.758	7.303	11.35
GDP Growth	1078	3.180	3.388	-15.14	25.18
University Enrollment per capita (log)	1059	5.868	0.508	2.398	6.718
Population (log)	1078	9.705	1.503	6.705	14.08
Year	1078	2009	5.468	2000	2018
Polity IV	1078	8.944	1.301	6	10

Table 2: Effect of Imported Political Protest Movies on Anti-Government Protests, 2000-2018

VARIABLES	(1) Non-democracy	(2) Non-democracy	(3) Democracy	(4) Democracy
BoxOffice (log)	0.026	0.074***	0.011	0.005
	(0.72)	(2.91)	(0.93)	(0.53)
Domestic Movie boxoffice (log)				0.026**
				(2.13)
Media Censorship		-0.436*		0.110
		(-1.81)		(0.98)
Neighbor's Protests		0.008***		0.001
		(3.15)		(0.34)
GDP per capita (log)		-0.027		0.881
		(-0.07)		(0.92)
GDP Growth		0.027		-0.027
		(1.21)		(-1.02)
University Enrollment per capita (log)		-0.440**		0.287
		(-2.13)		(0.71)
Population (log)		6.722**		-1.331
		(2.31)		(-1.04)
Constant	1.994***	-71.243**	2.307***	7.269
	(30.71)	(-2.36)	(67.20)	(0.40)
Observations	336	298	1,128	1,078
Year FEs	Yes	Yes	Yes	Yes
Country FEs	Yes	Yes	Yes	Yes
Pseudo R-squared	0.574	0.649	0.692	0.713

Notes: Poisson pseudo-maximum likelihood coefficient estimates, with robust standard errors clustered by country. Robust z-statistics in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 3: Robustness Tests for Effect of Imported Protest Movies on Anti-Government Protests, 2000-2018

	(1) Non-Democracy	(2) Non-Democracy	(3) Democracy	(4) Democracy
Movie Releases With Boxoffice	0.692**		0.090	
	(2.39)		(1.41)	
Movie Releases Without Boxoffice	0.061		0.080	
	(0.40)		(1.21)	
Coefficient Equality Test	2.88*		0.01	
Boxoffice (log)		0.073***		0.005
		(2.89)		(0.49)
Romance Movie Boxoffice (log)		0.005		-0.017*
		(0.28)		(-1.86)
Coefficient Equality Test		4.38**		2.42
Domestic Movie Boxoffice (log)			0.020*	0.028**
			(1.73)	(2.37)
Media Censorship	-0.446*	-0.450*	0.088	0.113
	(-1.88)	(-1.87)	(0.79)	(0.93)
Neighbors' Protests	0.008***	0.007***	0.001	0.002
	(2.96)	(2.75)	(0.31)	(0.63)
GDP per capita (log)	0.054	-0.012	0.973	0.971
	(0.14)	(-0.03)	(1.02)	(0.99)
GDP Growth	0.026	0.027	-0.027	-0.028
	(1.16)	(1.20)	(-1.03)	(-1.11)
University Enrollment per capita (log)	-0.446**	-0.434**	0.265	0.298
	(-2.14)	(-2.14)	(0.68)	(0.74)
Population (log)	6.386**	6.698**	-1.322	-1.462
	(2.17)	(2.31)	(-1.02)	(-1.17)
Constant	-68.133**	-71.131**	6.320	7.896
	(-2.24)	(-2.35)	(0.34)	(0.44)
Observations	298	298	1,078	1,078
Year FEs	Yes	Yes	Yes	Yes
Country FEs	Yes	Yes	Yes	Yes
Pseudo R-squared	0.647	0.649	0.714	0.714

Notes: Poisson pseudo-maximum likelihood coefficient estimates, with robust standard errors clustered by country. Robust z-statistics in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 4: Placebo Tests of Effects of Imported Protest Movies in Year t on Anti-Government Protests in Year t-1 in Non-Democracies, 2000-2018

VARIABLES	(1)	(2)	(3)
BoxOffice(log)	0.001		0.000
	(0.03)		(0.01)
Movie Releases With Boxoffice		-0.043	
		(-0.24)	
Movie Releases Without Boxoffice		-0.152	
		(-1.38)	
Romantic Movies' Boxoffice(log)			-0.004
			(-0.41)
Media Censorship	-0.426**	-0.412**	-0.425**
	(-2.42)	(-2.24)	(-2.39)
Neighbor's Protests	0.011***	0.011***	0.011***
	(5.79)	(5.85)	(5.80)
GDP per capita(log)	-0.518	-0.517	-0.517
	(-1.19)	(-1.17)	(-1.17)
GDP Growth	-0.012	-0.011	-0.011
	(-1.36)	(-1.15)	(-1.30)
University Enrollment per capita(log)	-0.736***	-0.720***	-0.742***
	(-3.39)	(-3.37)	(-3.38)
Population(log)	8.772***	8.716***	8.755***
	(3.47)	(3.53)	(3.45)
Constant	-86.423***	-85.898***	-86.204***
	(-3.44)	(-3.50)	(-3.42)
Observations	295	295	295
Year FEs	Yes	Yes	Yes
Country FEs	Yes	Yes	Yes
Pseudo R-squared	0.681	0.683	0.682

Notes: Poisson pseudo-maximum likelihood coefficient estimates, with robust standard errors clustered by country. Robust z-statistics in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.