



Joint Discussion Paper Series in  
Economics

*by the Universities of*  
Aachen • Gießen • Göttingen  
Kassel • Marburg • Siegen

ISSN 1867-3678

No. 02-2026

Mohammad Reza Farzanegan and Hassan F.  
Gholipour

**Economic Sanctions and Nationalist Solidarity: An  
Empirical Test of the Rally-Aroundthe-Flag Effect in  
Iran (2005-2020)**

This paper can be downloaded from:

<https://www.uni-marburg.de/en/fb02/research-groups/economics/macroeconomics/research/magks-joint-discussion-papers-in-economics>

Coordination: Bernd Hayo  
Philipps-University Marburg  
School of Business and Economics  
Universitätsstraße 24, D-35032 Marburg  
Tel: +49-6421-2823091, Fax: +49-6421-2823088, e-mail: [hayo@wiwi.uni-marburg.de](mailto:hayo@wiwi.uni-marburg.de)

# **Economic Sanctions and Nationalist Solidarity: An Empirical Test of the Rally-Around-the-Flag Effect in Iran (2005-2020)**

**Mohammad Reza Farzanegan <sup>a\*</sup> & Hassan F. Gholipour <sup>b</sup>**

<sup>a</sup> Philipps-Universität Marburg, Center for Near & Middle Eastern Studies (CNMS), School of Business and Economics, Marburg, Germany, [farzanegan@uni-marburg.de](mailto:farzanegan@uni-marburg.de)

<sup>b</sup> Western Sydney University, School of Business, Sydney, Australia,  
[H.Fereidouni@westernsydney.edu.au](mailto:H.Fereidouni@westernsydney.edu.au)

## **Abstract**

Over the past two decades, Iran has been the target of various international economic sanctions, notably the U.S. “maximum pressure” campaign, aimed at compelling regime change by imposing costs and stirring public discontent. This study examines patterns consistent with a “rally-around-the-flag” (RAF) response in Iran using pooled cross-sectional survey data from the World Value Survey (WVS) in 2005 (pre- international sanctions) and 2020 (under international sanctions). During the period of harshest sanctions, the percentage of Iranian citizens prioritizing “A strong defense force” more than doubled (from 12.6% to 35.4%), national pride increased across all age groups (from 62.8% to 83.5% expressing they were “Very proud”), and public confidence in the armed forces rose sharply (from 21.4% to 70.2% choosing “A great deal” of confidence), while confidence in the civilian government and parliament showed only marginal increases. Ordinary least squares (OLS) and probit estimations show that the sanction period is positively associated with these nationalist attitudes, even when controlling for a wide range of demographic and attitudinal variables. The strong concentration of confidence in the military rather than in civilian institutions aligns with the theoretical expectations of external-threat mobilization in stable autocracies. These findings suggest that the period of intensified sanctions corresponded with heightened nationalist sentiment and increased solidarity behind key non-civilian state institutions, patterns that are consistent with the behavior of stable autocracies with high repressive capacity.

**Keywords:** Iran, Sanctions, Patriotism, Nationalism, Defense, Regime stability, WVS

---

\* Correspondence address: CNMS, Deutschhausstraße 12, 35032 Marburg, Germany.

## 1. Introduction

Iran has faced a range of international sanctions over the past twenty years, imposed by the United Nations (UN) Security Council, the United States (US), and the European Union (EU), largely in response to its nuclear program<sup>1</sup>. US sanctions, particularly those under the Trump administration, have been explicitly designed to pressure the Iranian government by increasing public dissatisfaction (Walt, 2018).

Several international relations and foreign affairs experts and observers have argued that the sanctions against Iran and abandoning the Joint Comprehensive Plan of Action (JCPOA)<sup>2</sup> have made the Iranian people more nationalistic because Iran has a strong tradition of nationalism and statecraft and a history of resisting foreign domination (Zakaria 2019). In an analysis published in the *Washington Post*, Malekzadeh (2018) argues that "the more Iranians are faced with external threats to the nation, the more they are likely to rally around key marks of cultural identity". He also notes that "patriotic defense of the country isn't a passing phase but the default position, the big idea that holds Iran together".

The central theoretical mechanism underlying this argument is the "rally-round-the-flag" (RAF) effect. The RAF sparked by the September 11, 2001, attacks on New York and Washington and by President George W. Bush's prompt launching of the War on Terrorism cries out for the kind of timely analysis that political scientists sometimes can provide. A rally effect is the sudden and substantial increase in public approval of the president that occurs in response to certain kinds of dramatic international events involving the US (Hetherington and Nelson 2003; Mueller 1973). While large-scale economic sanctions may not have the suddenness of a military strike, they impose a prolonged and highly visible external threat that can similarly trigger RAF dynamics. Unlike acute military crises, sanctions create sustained economic hardship and highlight the actions of foreign adversaries, which can gradually consolidate nationalist sentiment and support for key state institutions. This continuous exposure to an external threat can function as a rally-inducing mechanism, even if the timing and intensity differ from traditional RAF events.<sup>3</sup>

---

<sup>1</sup> For a review of the sanctions imposed on Iran's economy, see Farzanegan and Habibi (2025)

<sup>2</sup> For details on the JCPOA, see [https://eeas.europa.eu/archives/docs/statements-eeas/docs/iran\\_agreement/iran\\_joint-comprehensive-plan-of-action\\_en.pdf](https://eeas.europa.eu/archives/docs/statements-eeas/docs/iran_agreement/iran_joint-comprehensive-plan-of-action_en.pdf)

<sup>3</sup> For a review of the psychological mechanisms underlying the 'rally-round-the-flag' effect, see Lambert et al. (2011).

In recent years, due to the US sanctions against some countries such as Iran, North Korea, and Russia, few studies have been conducted to test the hypothesis of the RAF effect in target countries. For example, Frye (2017), using nationally representative surveys in 2016 and 2017 across Russia, found that the US sanctions against Russia themselves do not influence levels of support for the Russian leadership among Russians. However, he shows that Russians are rallying around the flag because of the reason the sanctions were put in place, the wildly popular annexation of Crimea, rather than the sanctions themselves. As highlighted by Frye (2017), this strand of literature is still at an initial phase of development, and therefore there is a need for more research on the impact of economic sanctions on public opinion in countries under the US economic sanctions.

In this study, using survey data collected by the World Value Survey (WVS) from Iranian population across provinces of Iran in 2005 and 2020, we empirically test the hypothesis of the RAF effect in Iran caused by the economic sanctions on Iran. Our findings provide strong evidence supporting the presence of the RAF effect in Iran.

While a variety of domestic and regional developments occurred between the two survey waves, the escalation of international sanctions during 2018–2020 represents the only major external shock imposed on Iran from abroad. Its timing, intensity, and visibility sharply distinguish it from endogenous political or economic processes. This makes the sanctions environment a plausible driver of attitudinal shifts consistent with a rally response.

The contributions of our study are twofold. First, while several theoretical and empirical studies have examined the RAF effect in sanctioned countries such as Russia, relatively few have focused on Iran, which has been subject to severe sanctions for over four decades. The exceptions are Rezaeedyakenari et al. (2025), and Sadeqi Mohammadi and Weaver (2025); however, these studies rely exclusively cross-sectional designs or conceptual analysis. Our study is the first to explore the RAF effect in Iran over a 15-year period using individual-level data across two distinct phases of light and heavy sanctions. Second, to the best of our knowledge, this is the first study to employ three distinct proxies to test the RAF effect: national pride, preference for national defense, and confidence in the armed forces.

The remainder of the article is organized as follows: Section 2 presents the conceptual background and research hypotheses; Section 3 describes the dataset, variables, and estimation method; Section 4 reports and discusses the results; and Section 5 concludes with policy implications.

## **2. Conceptual Background and Hypotheses**

### **2.1 The Rally-Around-the-Flag (RAF) Effect**

The RAF effect refers to a surge in public support for political leaders and heightened patriotism in response to external threats.

Several explanations for the RAF effect have been proposed. Lambert et al. (2011) summarize these perspectives as follows: *Opinion leadership* view suggests that rally effects arise when reduced presidential criticism creates perceived elite consensus, prompting public support for the president - even among those who might otherwise oppose them (Baker & O'Neal, 2001; Lambert et al., 2011). The second perspective, *patriotism*, is rooted in social identity theory (Tajfel & Turner, 1986), which posits that individuals strive to maintain a positive view of their groups, especially during intergroup conflict. These perspectives suggest that heightened anxiety and a need for security drive support for leaders during uncertainty. However, Lambert et al. (2011) argue rally effects also stem from anger-driven desires for retaliation.

### **2.2 The RAF effects in Wars vs. Economic Sanctions**

While early research primarily examined wars and military conflicts, scholars have increasingly considered whether economic sanctions, which are coercive but non-military pressures targeting economies or elites, can trigger similar reactions. However, wars and military conflicts tend to produce stronger rally effects than sanctions, as they pose immediate threats, evoke anger and fear, and foster elite unity.

### **2.3 Conditionality of the RAF Effects**

RAF effects during wartime are well documented but appear conditional on factors such as regime type, elite cohesion, media environment, clarity of the threat, as well as casualties and conflict duration (e.g., Baker & Oneal, 2001; Gelpi et al., 2005; Hale, 2022; Oneal & Bryan, 1995). In other words, the literature emphasizes that RAF arises not merely from the existence of external threats, but from how those threats are communicated, interpreted, and politicized. Two dominant perspectives emerge in the literature: (1) autocratic regimes strategically employ media to foster strong RAF effects, and (2) individuals responding to surveys under such regimes frequently conceal their true preferences due to perceived political risks (Hale, 2022).

## **2.4 The RAF Effects and Economic Sanctions**

Compared to wars, research on sanctions and RAF is fragmented, with mixed and context-dependent findings. Sanctions may strengthen regime support by signalling external hostility, allowing leaders to frame economic hardship as foreign aggression, redirect blame toward sanctioning actors, and mobilize patriotism (Farzanegan and Gutmann, 2025). For example, Bussmann and Natalia (2024) show that international conflicts during Putin's and Medvedev's presidencies enhanced presidential popularity, suggesting a clear RAF effect. Conversely, sanctions may erode regime support by worsening economic conditions, lowering performance evaluations, and weakening elite coalitions. For example, cross-country studies show that sanctions often harm civilians in targeted countries (e.g., Peksen, 2009; Allen and Lektzian, 2013), which can increase citizen dissatisfaction and fuel protests.

Economic sanctions differ from military shocks in being gradual, sustained, and diffuse. Nevertheless, in autocracies with strong state control and propaganda capacity, such sustained threats can still produce a RAF effect. In these contexts, the regime can frame sanctions as attacks on national welfare, mobilizing nationalist sentiment and directing public attention toward institutions responsible for national defence, such as the military, rather than civilian authorities.

## **2.5 The RAF Effects in the Iranian Context**

Since the early 1980s, Iran has faced a series of international sanctions, primarily in response to its nuclear program, missile development, and, at times, human rights issues. These measures have been imposed by the US, the UN, the EU, and several other states. Although some restrictions were occasionally eased, sanctions have generally been comprehensive and persistent, creating severe economic and social pressures<sup>4</sup>.

Few studies have examined the RAF effect in Iran. Rezaeedyakenari et al. (2025), analyzing tweets from over 1,000 Iranian influencers between 2016 and 2019, find that comprehensive sanctions improved sentiments toward the government, even among moderate opposition groups. Similarly, in their descriptive analysis of Iran and Cuba, Sadeqi Mohammadi and Weaver (2025) argue that sanctions can foster resistance economies, strengthen domestic capacities, promote national unity, and encourage diplomatic realignment.

---

<sup>4</sup> For more details on international sanctions against Iran, see <https://www.unitedagainstnucleariran.com/international-iran-sanctions-database>

The effectiveness of sanctions is constrained by the rally-grievance dualism. While the goal is to generate public discontent (the grievance pathway) to coerce political change, the external nature of the threat can generate public solidarity (the rally pathway), especially in autocracies with high state control and propaganda capacity (Farzanegan and Gutmann 2025).

In the Iranian context, we argue that comprehensive economic sanctions constitute a salient external threat that the regime can exploit to generate a military-focused RAF effect. Rather than eroding support for the regime broadly, the sanctions are likely to increase public confidence in the armed forces, strengthen national pride, and shift priorities toward national defense.

## 2.6 Hypotheses

Based on this argument, we formulate three testable hypotheses using three proxies from the WVS:

- *Hypothesis 1 (National Pride)*: The period of harsh sanctions will be correlated with a statistically significant increase in the proportion of the population expressing being "Very proud" of their nationality.
- *Hypothesis 2 (National Defense over Economy)*: The external economic threat will increase the proportion of the population prioritizing "A strong defense forces" over "A high level of economic growth".
- *Hypothesis 3 (Focus on Military)*: The increase in confidence will be substantially concentrated on the Armed Forces rather than the civilian Government or Parliament, as the military is the primary institution of national defense against the perceived external threat.

The broad, sustained nature of international sanctions, which have imposed severe economic and social costs on Iranians and were widely perceived as attacks on national welfare (Peyravi and Marzaleh 2020; Farzanegan and Habibi 2025), provides an ideal context for activating this nationalist rally and consolidating support for the military (Peksen, 2019).

### 3. Data and Empirical Strategy

#### 3.1. Data

The empirical analysis utilizes two nationally representative cross-sectional surveys conducted by the WVS (Inglehart et al., 2014; Haerpfer et al., 2022): Wave 5 in 2005 (N=2,667) and Wave 7 in 2020 (N=1,499). The 2005 survey represents a period when Iran was not under heavy sanctions, while the early 2020 survey was conducted during the period of the harshest economic and financial sanctions since 2012 (intensified in 2018-2019 by the Trump “maximum pressure” campaign).

The primary independent variable is the sanction exposure, operationalized as a binary variable, where 0 = 2005 (pre- international sanctions) and 1 = 2020 (under international sanctions)<sup>5</sup>. While using survey year as a proxy for sanctions may capture other temporal changes, we treat the 2020 wave as capturing the population under the most severe external pressure since 2005. No other event in this period matches the sanctions escalation in terms of exogeneity, duration, and salience. Although survey year cannot isolate sanctions from all contemporaneous shifts, the “maximum pressure” campaign constituted the defining external disruption in Iran’s international environment, making it the most credible source of the threat perceptions underlying changes in nationalist attitudes.

The key dependent variables reflecting the rally effect are:

1. *National Pride*: Coded 1 if the respondent chose "Very proud" of their nationality.
2. *Prioritization of Defense*: Coded 1 if the respondent chose "A strong defense forces" as the country's most important aim.
3. *Confidence in Armed Forces*: Coded 1 if the respondent chose "A great deal" of confidence in the Armed Forces.

The questions related to the key dependent variable in the WVS are provided in Appendix B.

---

<sup>5</sup> Note that this survey was conducted between March and April 2020, before the significant expansion of COVID-19 in Iran.

### **3.2. Empirical Strategy**

The analysis proceeds in two steps. First, we provide descriptive statistics to illustrate changes in the key outcome variables between the 2005 and 2020 samples. Percentage differences are reported to highlight shifts in nationalist attitudes and related measures.

Second, we estimate regression models to assess the statistical significance of the sanction period and to account for potential confounding factors. We employ both Linear Probability Models (OLS) and Probit regressions. In the OLS models, coefficients represent the average percentage-point change in the probability of expressing a nationalist attitude (or other outcomes) associated with the sanction period. In the Probit models, we compute Average Marginal Effects (AMEs) to capture the change in the probability of being very proud (or other outcomes) when moving from 2005 to 2020, holding all covariates constant. Robust standard errors are used throughout to account for heteroskedasticity.

We control for individual-level characteristics such as age, gender, marital status, religiosity, interest in politics, social class, income level, and employment status to ensure that the observed differences are not simply driven by demographic or socioeconomic shifts. Nonetheless, with only two cross-sectional waves, the analysis cannot fully separate the effect of sanctions from other time-specific factors. The estimates should therefore be interpreted as associations consistent with a sanctions-induced rally response rather than precise causal effects. Even with this limitation, the pattern of results aligns closely with the theoretical mechanisms of external-threat mobilization.

## **4. Results**

### **4.1. Descriptive Evidence**

The descriptive statistics derived from the WVS data demonstrate a substantial shift in public attitudes consistent with a successful rally effect.

While 62.8% of respondents were "Very proud" of their nationality in 2005, the share rose substantially to 83.5% in 2020 (Table 1). The increase in national pride is a universal effect, observed across all age cohorts: the highest level of nationalism in 2020 was in the 50-years-and-up cohort (93%), compared with the up to 29 cohort (72.9%) and 30-49 cohort (85.1%).

At the global level, the share of respondents who were “very proud” was 58.5% in WVS Wave 5, with Iran (62.8%) close to this average. By Wave 7, the global average declined slightly to 56.7%, while Iran experienced a significant increase to 83.5%. Interestingly, in Russia—which has faced extensive sanctions following the annexation of Crimea and Sevastopol in 2014—the sense of nationalism among Russians (measured as being “very proud” of their nationality) remained unchanged between WVS Wave 5 (44.2%) and Wave 7 (44.2%).

**Table 1.** Increased National Pride (Hypothesis 1)

How proud are you to be	<i>WVS 2005 (N=2,667)</i>	<i>WVS 2020 (N=1,499)</i>
Very proud	62.8%	83.5%
Quite proud	28.4%	10.7%
Not very proud	6.3%	2.8%
Not at all proud	2.1%	1.8%
No answer	0.3%	0.1%
Don't know	0.1%	0.3%

Given the fact that Iran's economy has hit harshly by the sanctions (high unemployment rate, slow or even negative economic growth and high inflation rates), this significant difference between 2005 and 2020 regarding choosing national defense over economic growth (Table 2) provides strong support for the hypothesis of the RAF effects in Iran. In 2005, the priority for defense was almost equal to the average of all sample countries (11%), but in 2020, Iran was ranked among top six countries in the sample countries (the global average = 21.8%).

**Table 2.** The Rise in Prioritization of National Defense (Hypothesis 2)

	<i>WVS 2005(N=2667)</i>	<i>WVS 2020 (N= 1499)</i>
A high level of economic growth	58.8%	44.4%
A strong defense forces	12.6%	35.4%
People have more say about how things	20.2%	12.2%
Trying to make our cities more beautiful	6.7%	7.7%
No answer	0.7%	0.1%
Don't know	0.9%	0.1%

As can be seen from Table 3, there is a significant rise in confidence in armed forces (from 21.4% to 70.2%) and only slight increases in confidence in government (from 16.9% to 18.9%) and parliament (from 12.5% to 19.9%). This highly selective surge in confidence, with the military seeing a threefold increase while civilian institutions saw marginal changes, provides the strongest evidence for a rally effect directed specifically at the national defense apparatus. Interestingly, Iran (70.2%) is ranked third (among 89 countries) globally in terms of having "A great deal" for confidence in armed forces in 2020 (compared to its 21st ranking

from 55 countries in 2005). One possible reason why Iranians have lower confidence in the government and parliament is the high level of corruption and the scandals involving public officials and parliament members, which receive significant attention on social media.

**Table 3.** High Confidence in Armed Forces (Hypothesis 3)

	WVS 2005 (N=2,667)	WVS 2020 (N=1,499)
% of respondents chose “A great deal” for confidence in armed forces	21.4%	70.2%
% of respondents chose “A great deal” for confidence in government	16.9%	18.9%
% of respondents chose “A great deal” for confidence in parliament	12.5%	19.9%

## 4.2. Quantitative Results

### 4.2.1. Linear Probability Model (LPM)

Regression analysis corroborates the strength of the rally effect even when controlling for individual heterogeneity. Although the dependent variable is binary, we follow the common practice in applied political economy and present linear probability models as our main results. Coefficients can be directly interpreted (von Hippel, 2015) as percentage-point changes in the probability of being very proud of one’s nationality (and other selected outcome variables). Probit results (available in the appendix) yield virtually identical marginal effects.

Table 4 reports the LPM estimates for national pride. Across all eight models, the coefficient on the sanctions variable is positive and statistically significant. The association ranges from roughly a 20-percentage-point increase in the probability of being “very proud” in Model 1 to about 18 percentage points in Model 8, which includes the full set of controls. This finding provides strong support for existing research on the relationship between sanctions and the RAF effect in Iran (Rezaeedyakenari et al., 2025; Sadeqi Mohammadi and Weaver, 2025).

Control variables are added progressively from Model 1 to Model 8. All age groups show a positive association with national pride, with a noticeably stronger effect among respondents over 50. Married respondents also report higher national pride, though the magnitude is smaller. Employment status shows no statistically significant relationship with national pride, and subjective middle-class identification is also unrelated. High-income respondents exhibit no clear pattern, while those in the middle-income group show a negative but only marginally significant association. Religious respondents display a strong positive association: identifying as religious is linked to roughly a 23-percentage-point increase in the

probability of being “very proud.” Finally, political interest is positively related to national pride, though the size of this association is modest compared with other positive correlates.

**Table 4.** Sanctions and National Pride in Iran; LPM results

Dependent variable: Very proud to be Iranian (1 = “Very proud”, 0 otherwise)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sanction	0.207*** (15.401)	0.207*** (15.418)	0.179*** (12.794)	0.185*** (13.283)	0.186*** (13.180)	0.183*** (12.323)	0.182*** (12.664)	0.179*** (12.269)
Male		-0.017 (-1.218)	-0.024* (-1.719)	-0.021 (-1.490)	-0.013 (-0.893)	-0.014 (-0.927)	0.000 (0.034)	-0.001 (-0.090)
Age<30			0.333** (2.145)	0.389** (2.508)	0.395** (2.546)	0.388** (2.536)	0.396** (2.648)	0.393** (2.627)
Age between 30-49			0.422*** (2.723)	0.432*** (2.788)	0.441*** (2.850)	0.433*** (2.831)	0.435*** (2.915)	0.432*** (2.895)
Age>50			0.488*** (3.136)	0.497*** (3.200)	0.502*** (3.236)	0.493*** (3.215)	0.486*** (3.248)	0.484*** (3.228)
Married				0.085*** (4.875)	0.086*** (4.846)	0.084*** (4.759)	0.065*** (3.715)	0.064*** (3.692)
Full time job					-0.026 (-1.188)	-0.026 (-1.175)	-0.022 (-1.030)	-0.022 (-1.024)
Unemployed					-0.011 (-0.576)	-0.015 (-0.752)	-0.015 (-0.772)	-0.015 (-0.801)
Government job					-0.012 (-0.582)	-0.011 (-0.539)	-0.012 (-0.595)	-0.013 (-0.605)
Middle class						0.014 (0.731)	0.014 (0.748)	0.014 (0.766)
High income						-0.008 (-0.259)	0.015 (0.508)	0.013 (0.456)
Middle income						-0.040** (-2.312)	-0.031* (-1.796)	-0.030* (-1.794)
Religious							0.234*** (11.946)	0.233*** (11.871)
Interest in politics								0.050** (2.404)
Constant	0.628*** (67.090)	0.636*** (55.133)	0.256* (1.657)	0.170 (1.094)	0.168 (1.082)	0.192 (1.245)	-0.005 (-0.035)	-0.004 (-0.024)
Rsq.	0.05	0.05	0.06	0.07	0.07	0.07	0.11	0.11
Obs.	4166	4166	4166	4166	4166	4166	4166	4166

Note: t-statistics are reported in parentheses and are based on robust standard errors. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels. The estimation method is OLS.

Table 5 uses respondents’ preference for “strong defense” as the most important national aim as the dependent variable. Sanctions are positively and significantly associated with this preference, and the estimated effect is stable across all eight models, reaching roughly a 21-percentage-point increase in Model 8. This pattern is consistent with the idea that external pressure heightens perceived security threats and shifts public priorities toward defense.

Among the control variables, higher-income respondents are more likely to prioritize strong defense, and the same holds for more religious individuals. Full-time employment shows

a negative, though only marginally significant, association with this preference. Other covariates do not display consistent or meaningful effects.

**Table 5.** Sanctions and preference for strong defense in Iran; LPM results

Dependent variable: A strong defense forces as the country's most important aim								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sanction	0.228*** (16.357)	0.228*** (16.389)	0.220*** (15.555)	0.221*** (15.540)	0.220*** (15.399)	0.215*** (14.723)	0.215*** (14.774)	0.213*** (14.526)
Male		-0.023* (-1.933)	-0.025** (-2.059)	-0.024** (-2.008)	-0.017 (-1.348)	-0.016 (-1.287)	-0.012 (-0.971)	-0.013 (-1.056)
Age<30			-0.262 (-1.522)	-0.253 (-1.466)	-0.248 (-1.439)	-0.256 (-1.478)	-0.254 (-1.485)	-0.256 (-1.494)
Age between 30-49			-0.229 (-1.331)	-0.228 (-1.321)	-0.220 (-1.275)	-0.229 (-1.321)	-0.228 (-1.335)	-0.230 (-1.344)
Age>50			-0.209 (-1.209)	-0.207 (-1.200)	-0.205 (-1.185)	-0.213 (-1.226)	-0.215 (-1.253)	-0.217 (-1.262)
Married				0.014 (0.937)	0.014 (0.926)	0.013 (0.884)	0.008 (0.517)	0.008 (0.500)
Full time job					-0.033* (-1.763)	-0.035* (-1.870)	-0.034* (-1.819)	-0.034* (-1.818)
Unemployed					-0.010 (-0.604)	-0.013 (-0.795)	-0.013 (-0.798)	-0.014 (-0.816)
Government job					0.002 (0.105)	0.004 (0.199)	0.004 (0.187)	0.004 (0.181)
Middle class						-0.014 (-0.779)	-0.014 (-0.784)	-0.014 (-0.773)
High income						0.057** (2.082)	0.063** (2.318)	0.063** (2.284)
Middle income						-0.017 (-1.048)	-0.014 (-0.882)	-0.014 (-0.881)
Religious							0.067*** (4.618)	0.066*** (4.561)
Interest in politics								0.030 (1.292)
Constant	0.126*** (19.636)	0.138*** (15.433)	0.381** (2.218)	0.367** (2.128)	0.365** (2.118)	0.393** (2.255)	0.337* (1.954)	0.338* (1.959)
Rsq.	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
Obs.	4166	4166	4166	4166	4166	4166	4166	4166

Note: t-statistics are reported in parentheses and are based on robust standard errors. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels. The estimation method is OLS.

Table 6 reports results using “a great deal of confidence in the armed forces” as the dependent variable. Sanctions are positively and significantly associated with this outcome, with an estimated increase of about 47 percentage points in Model 8. This association is stable across various specifications and does not depend on the inclusion of additional controls, suggesting that external pressure consistently strengthens public confidence in the military.

Religiosity, higher income, and being married are also positively associated with greater confidence in the armed forces. In contrast, middle-class respondents show a negative

association with this outcome, and a similar negative pattern is observed across several age groups.

**Table 6.** Sanctions and great deal of confidence in the armed forces in Iran; LPM results

	Dependent variable: A great deal of confidence in the Armed Forces							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sanction	0.488*** (34.276)	0.488*** (34.317)	0.480*** (32.549)	0.486*** (33.151)	0.487*** (33.064)	0.477*** (30.986)	0.476*** (31.439)	0.475*** (31.060)
Male		-0.027** (-2.002)	-0.027** (-2.000)	-0.023* (-1.764)	-0.018 (-1.312)	-0.019 (-1.351)	-0.009 (-0.624)	-0.009 (-0.680)
Age<30			-0.679*** (-5.738)	-0.625*** (-5.255)	-0.620*** (-5.215)	-0.623*** (-5.027)	-0.618*** (-4.861)	-0.619*** (-4.870)
Age between 30-49			-0.634*** (-5.349)	-0.625*** (-5.275)	-0.619*** (-5.221)	-0.625*** (-5.049)	-0.623*** (-4.912)	-0.624*** (-4.920)
Age>50			-0.628*** (-5.250)	-0.618*** (-5.178)	-0.613*** (-5.137)	-0.618*** (-4.958)	-0.623*** (-4.877)	-0.624*** (-4.885)
Married				0.082*** (4.993)	0.081*** (4.864)	0.078*** (4.694)	0.064*** (3.896)	0.064*** (3.889)
Full time job					-0.014 (-0.663)	-0.017 (-0.810)	-0.015 (-0.699)	-0.015 (-0.698)
Unemployed					-0.017 (-0.958)	-0.021 (-1.191)	-0.021 (-1.212)	-0.022 (-1.225)
Government job					-0.014 (-0.638)	-0.007 (-0.313)	-0.008 (-0.349)	-0.008 (-0.354)
Middle class						-0.047** (-2.499)	-0.047** (-2.532)	-0.047** (-2.524)
High income						0.038 (1.350)	0.054* (1.928)	0.054* (1.904)
Middle income						0.004 (0.220)	0.011 (0.634)	0.011 (0.635)
Religious							0.169*** (10.484)	0.168*** (10.445)
Interest in politics								0.021 (0.901)
Constant	0.214*** (26.978)	0.228*** (21.561)	0.882*** (7.468)	0.799*** (6.706)	0.799*** (6.710)	0.839*** (6.630)	0.697*** (5.348)	0.698*** (5.354)
Rsqr.	0.23	0.23	0.24	0.24	0.24	0.24	0.26	0.26
Obs.	4166	4166	4166	4166	4166	4166	4166	4166

Note: t-statistics are reported in parentheses and are based on robust standard errors. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels. The estimation method is OLS.

#### 4.2.2. Probit model

For robustness, we re-examined our three hypotheses using a probit model. This approach accounts for the non-linear relationship between the predictors and a binary outcome, ensuring predicted probabilities remain within the [0,1] range and addressing potential limitations of the LPM. We report marginal effects after the probit estimation to present the impact of each covariate on the probability of the outcome, allowing for straightforward interpretation and

comparison with the LPM results. We have reported the marginal effects following probit models in the Appendix (see Tables A1- A3).

Table A1 reports the results using national pride as the dependent variable. Sanctions show a positive and statistically significant association with the probability of being proud of one's nationality. In Model 8, sanctions correspond to an 18-percentage-point increase in the predicted probability of being very proud of one's nationality, after controlling for a set of individual characteristics. The sign and significance of the control variables are broadly consistent with the LPM estimates.

Table A2 reports the marginal effects of sanctions and the other explanatory variables on the predicted probability of viewing strong defense as the country's main objective. Consistent with the LPM results, sanctions show a positive and statistically significant association with this outcome. In Model 8, sanctions are linked to a 19-percentage-point increase in the predicted probability of identifying strong defense as the primary national aim. The pattern of effects across control variables also aligns with expectations, suggesting that the finding is not driven by shifts in individual characteristics.

Table A3 shows that sanctions are positively and significantly associated with a higher predicted probability of having a great deal of confidence in the Iranian armed forces. In Model 8, being under sanctions corresponds to roughly a 40-percentage-point increase in the predicted probability of expressing strong confidence in the national army. The sign and significance of the control variables remain broadly in line with the LPM results, indicating that the observed association is not driven by changes in the underlying individual characteristics.

The empirical results from both descriptive and regression analysis lend strong support to the hypothesis of the RAF effects in Iran caused by the economic sanctions on Iran.

The case of Iran highlights a crucial mechanism of sanction failure in an autocracy:

1. *Humanitarian crisis as a rally trigger*: The sanctions on Iran have drastically constrained the ability of the country to finance humanitarian imports, including medicines, causing serious hardships for ordinary Iranians and threatening their right to health (Moradi-Lakeh, Majdzadeh, et al., 2025; Moradi-Lakeh, Gibson, et al., 2025; Sajadi et al., 2023; 2024; 2025). This negative externality fueled the government's narrative of foreign aggression, providing a clear external enemy to rally against.

2. *Selective mobilization*: The rally effect is selectively channeled toward the most unifying state symbol: the Armed Forces. Although Iranians do not have much higher confidence in the civilian rulers of the country, they still have strong confidence in their armed forces. This suggests the government successfully framed the sanctions as a threat to national integrity, diverting nationalist sentiment away from the accountability of civilian leadership and toward the security state.
3. *Crystallizing events*: The massive economic pressure was likely crystallized by specific events, such as the assassination of Qasem Soleimani<sup>6</sup> in January 2020, which provided a focal point for national unity and a boost to support for the military apparatus.

The final conclusion is that the sanctions, despite causing massive economic hardship (Farzanegan and Habibi, 2025), are not a powerful tool to collapse the regime through discontenting ordinary Iranians. Instead, the campaign of "maximum pressure" inadvertently became a tool for maximum political consolidation for a strategically repressive regime (Peksen, 2019; Farzanegan and Gutmann, 2025).

## 5. Conclusion

The empirical findings indicate a pronounced rally effect in Iran during the period of the most severe economic sanctions imposed by the US, EU, and UN. The observed shift toward defense priorities, the increase in national pride, and the rise in confidence in the armed forces point to a response consistent with heightened external pressure. Among the various forces shaping Iran's political environment, the escalation of sanctions represents the most salient and externally imposed disruption during this period, and the selective concentration of confidence in the armed forces rather than in civilian institutions aligns with the mechanisms through which external threats generate rally outcomes in stable autocracies.

The Iranian case illustrates how comprehensive sanctions can generate unintended political outcomes in stable autocracies. In contexts with strong coercive institutions and centralized message control, an external threat is readily reframed as a national struggle, allowing the government to mobilize solidarity and mute economic dissatisfaction. The concentration of public confidence in the armed forces, rather than in civilian institutions,

---

<sup>6</sup> As the commander of the Quds Force (the overseas operations arm of the Revolutionary Guards), Soleimani played a key role in shaping Iran's strategy throughout the Middle East (BBC, 2020).

underscores how external pressure strengthens the security apparatus rather than broadens domestic legitimacy. Because the analysis relies on two pooled cross-sections, the findings should be understood as sanctions-consistent associations rather than definitive causal effects. Even so, the timing of the “maximum pressure” campaign and the institution-specific pattern of responses suggest that the sanctions environment played an important role in shaping public attitudes. Future research should examine whether these attitudinal shifts persist once external pressure eases and whether similar mechanisms operate in other sanctioned autocracies.

## References

- Allen, S. H., & Lektzian, D. J. (2013). Economic sanctions: A blunt instrument? *Journal of Peace Research*, 50(1), 121–135.
- Baker, W. D., & Oneal, J. R. (2001). Patriotism or opinion leadership? The nature and origins of the “rally ’round the flag” effect. *Journal of Conflict Resolution*, 45(5), 661–687.
- BBC. (2020, July 9). Qasem Soleimani: US strike on Iran general was unlawful, UN expert says. *BBC News*. <https://www.bbc.com/news/world-middle-east-53345885>
- Bussmann, M., & Iost, N. (2024). Presidential popularity and international crises: An assessment of the rally-’round-the-flag effect in Russia. *Post-Soviet Affairs*, 40(2), 105–118.
- Farzanegan, M. R., & Gutmann, J. (2025). *Intensity of international sanctions and internal conflict: The case of Iran* (Working Paper No. 1786). ERF. <https://erf.org/publications/intensity-of-international-sanctions-and-internal-conflict-the-case-of-iran/>
- Farzanegan, M. R., & Habibi, N. (2025). The effect of international sanctions on the size of the middle class in Iran. *European Journal of Political Economy*, 90, 102749.
- Frye, T. M. (2017, August 3). *Do economic sanctions cause a rally around the flag?* Center on Global Energy Policy, Columbia University SIPA. <https://www.energypolicy.columbia.edu/publications/do-economic-sanctions-cause-rally-around-flag/>
- Hale, H. E. (2022). Authoritarian rallying as reputational cascade? Evidence from Putin’s popularity surge after Crimea. *American Political Science Review*, 116(2), 580-594.
- Hetherington, M. J., & Nelson, M. (2003). Anatomy of a rally effect: George W. Bush and the war on terrorism. *PS: Political Science & Politics*, 36(1), 37–42.
- Lambert, A. J., Schott, J. P., & Scherer, L. (2011). Threat, politics, and attitudes: Toward a greater understanding of rally-’round-the-flag effects. *Current Directions in Psychological Science*, 20(6), 343–348.
- Malekzadeh, S. (2018). What Trump doesn’t get about ideology in Iran: It’s about nationalism, not theocracy. *The Washington Post*. <https://www.washingtonpost.com/news/monkey-cage/wp/2018/06/25/what-trump-doesnt-get-about-ideology-in-iran-its-about-nationalism-not-theocracy/>
- Moradi-Lakeh, M., Gibson, R., Farzanegan, M. R., Gutmann, J., & Majdzadeh, R. (2025). Health safeguards under the UN’s reimposition of sanctions on Iran. *The Lancet*, 406(10515), 2056–2057.
- Moradi-Lakeh, M., Majdzadeh, R., Farzanegan, M. R., & Naghavi, M. (2025). Iran and beyond: Perilous threats to population health. *The Lancet*, 406, 1001–1002.
- Mueller, J. E. (1973). *War, presidents, & public opinion*. John Wiley & Sons.

- Peksen, D. (2019). When do imposed economic sanctions work? A critical review of the sanctions effectiveness literature. *Defence and Peace Economics*, 30(6), 6.
- Peyravi, M., & Ahmadi Marzaleh, M. (2020). The effect of the US sanctions on humanitarian aids during the great flood of Iran in 2019. *Prehospital and Disaster Medicine*, 35(2), 233–234.
- Sajadi, H. S., Farzanegan, M. R., & Majdzadeh, R. (2024). WHO EMRO's initiative on economic sanctions: Delayed but promising. *The Lancet*, 404(10463), 1638–1639.
- Sajadi, H. S., Moradi-Lakeh, M., Farzanegan, M. R., & Majdzadeh, R. (2025). Beyond national resilience: Liability for sanctions impact. *The Lancet Global Health*. [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(25\)00366-3/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(25)00366-3/fulltext)
- Sajadi, H. S., Yahyaei, F., Ehsani-Chimeh, E., & Majdzadeh, R. (2023). The human cost of economic sanctions and strategies for building health system resilience: A scoping review of studies in Iran. *The International Journal of Health Planning and Management*. <https://doi.org/10.1002/hpm.3651>
- Tajfel, H., & Turner, J. C. (1986). *The Social Identity Theory of Inter-Group Behavior*. 1986. Chigago: Nelson-Hall.
- von Hippel, P. (2015, July 5). Linear vs. logistic probability models: Which is better, and when?. *Statistical Horizons*. <https://statisticalhorizons.com/linear-vs-logistic/>
- Walt, S. M. (2018). The art of the regime change. *Foreign Policy*. <https://foreignpolicy.com/2018/05/08/the-art-of-the-regime-change/>
- Zakaria, F. (2019). Trump is strangling Iran: It's raising tensions across the Middle East. *The Washington Post*. [https://www.washingtonpost.com/opinions/trump-is-strangling-iran-its-sowing-resentment-across-the-middle-east/2019/07/11/511b13c4-a413-11e9-b732-41a79c2551bf\\_story.html](https://www.washingtonpost.com/opinions/trump-is-strangling-iran-its-sowing-resentment-across-the-middle-east/2019/07/11/511b13c4-a413-11e9-b732-41a79c2551bf_story.html)

## Appendix

**Table A1.** Marginal effects from probit model: probability of being very proud of nationality

	Dependent variable: very proud of nationality							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sanction	0.214*** (15.037)	0.214*** (15.053)	0.187*** (12.751)	0.194*** (13.246)	0.194*** (13.154)	0.191*** (12.402)	0.192*** (12.830)	0.188*** (12.454)
Male		-0.017 (-1.201)	-0.024* (-1.743)	-0.019 (-1.383)	-0.012 (-0.841)	-0.013 (-0.884)	0.001 (0.101)	-0.000 (-0.026)
Age<30			0.282* (1.785)	0.336** (2.136)	0.341** (2.169)	0.335** (2.156)	0.339** (2.266)	0.334** (2.240)
Age between 30-49			0.367** (2.320)	0.374** (2.385)	0.383** (2.444)	0.376** (2.420)	0.374** (2.511)	0.370** (2.488)
Age>50			0.448*** (2.818)	0.455*** (2.886)	0.459*** (2.914)	0.451*** (2.888)	0.440*** (2.938)	0.437*** (2.919)
Married				0.083*** (5.035)	0.084*** (5.024)	0.083*** (4.929)	0.064*** (3.849)	0.063*** (3.836)
Full time job					-0.028 (-1.306)	-0.028 (-1.299)	-0.024 (-1.137)	-0.024 (-1.135)
Unemployed					-0.007 (-0.348)	-0.010 (-0.525)	-0.009 (-0.509)	-0.010 (-0.527)
Government job					-0.007 (-0.306)	-0.006 (-0.253)	-0.007 (-0.307)	-0.007 (-0.334)
Middle class						0.012 (0.608)	0.011 (0.571)	0.011 (0.592)
High income						-0.009 (-0.317)	0.012 (0.432)	0.011 (0.374)
Middle income						-0.041** (-2.279)	-0.031* (-1.756)	-0.031* (-1.763)
Religious							0.207*** (13.195)	0.206*** (13.093)
Interest in politics								0.063** (2.516)
Pseudo R2	0.0410	0.0412	0.0557	0.0607	0.0613	0.0625	0.0940	0.0952
Obs.	4166	4166	4166	4166	4166	4166	4166	4166

**Notes:** Marginal effects are reported from probit estimations using margins, dydx(\*). Z-statistics are reported in parentheses and are based on Delta-method standard errors. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

**Table A2.** Marginal effects from probit model: probability of viewing strong defense as the country's primary aim

	Dependent variable: Strong defense as most important aim of country							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sanction	0.205*** (18.413)	0.206*** (18.450)	0.197*** (17.223)	0.198*** (17.170)	0.197*** (17.006)	0.193*** (16.071)	0.192*** (16.057)	0.190*** (15.751)
Male		-0.023* (-1.903)	-0.025** (-2.026)	-0.024** (-2.008)	-0.017 (-1.319)	-0.016 (-1.236)	-0.011 (-0.883)	-0.012 (-0.968)
Age<30			-0.234* (-1.938)	-0.226* (-1.865)	-0.221* (-1.829)	-0.230* (-1.896)	-0.227* (-1.900)	-0.228* (-1.911)
Age between 30-49			-0.200* (-1.654)	-0.198 (-1.642)	-0.190 (-1.576)	-0.200* (-1.653)	-0.198* (-1.660)	-0.199* (-1.672)
Age>50			-0.185 (-1.522)	-0.183 (-1.511)	-0.181 (-1.490)	-0.189 (-1.556)	-0.190 (-1.589)	-0.192 (-1.601)
Married				0.012 (0.791)	0.012 (0.774)	0.011 (0.745)	0.005 (0.345)	0.005 (0.321)
Full time job					-0.035* (-1.816)	-0.037* (-1.937)	-0.036* (-1.878)	-0.036* (-1.883)
Unemployed					-0.011 (-0.651)	-0.015 (-0.854)	-0.014 (-0.840)	-0.015 (-0.855)
Government job					0.003 (0.167)	0.006 (0.297)	0.006 (0.297)	0.006 (0.300)
Middle class						-0.012 (-0.746)	-0.012 (-0.708)	-0.011 (-0.690)
High income						0.057** (2.295)	0.064*** (2.577)	0.063** (2.533)
Middle income						-0.016 (-1.045)	-0.013 (-0.861)	-0.014 (-0.867)
Religious							0.070*** (4.120)	0.070*** (4.076)
Interest in politics								0.025 (1.243)
Pseudo R2.	0.0684	0.0692	0.0722	0.0723	0.0732	0.0762	0.0803	0.0807
Obs.	4166	4166	4166	4166	4166	4166	4166	4166

**Notes:** Marginal effects are reported from probit estimations using margins,  $dydx(*)$ . Z-statistics are reported in parentheses and are based on Delta-method standard errors. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

**Table A3.** Marginal effects from probit model: probability of having strong confidence in the armed forces

	Dependent variable: Having a great deal of confidence in the armed forces							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sanction	0.412*** (49.866)	0.412*** (49.937)	0.402*** (45.101)	0.408*** (45.906)	0.409*** (45.558)	0.400*** (40.542)	0.400*** (40.934)	0.398*** (40.086)
Male		-0.027** (-2.032)	-0.027** (-2.030)	-0.024* (-1.839)	-0.019 (-1.362)	-0.019 (-1.367)	-0.008 (-0.606)	-0.009 (-0.659)
Age<30			-0.620*** (-3.518)	-0.563*** (-3.209)	-0.558*** (-3.184)	-0.555*** (-3.109)	-0.544*** (-3.029)	-0.545*** (-3.036)
Age between 30-49			-0.574***	-0.562***	-0.555***	-0.555***	-0.548***	-0.549***
Age>50			(-3.255)	(-3.208)	(-3.175)	(-3.113)	(-3.052)	(-3.058)
Married			-0.568*** (-3.210)	-0.556*** (-3.164)	-0.551*** (-3.137)	-0.549*** (-3.068)	-0.549*** (-3.049)	-0.550*** (-3.055)
Full time job				0.082*** (5.047)	0.081*** (4.919)	0.078*** (4.743)	0.063*** (3.881)	0.063*** (3.863)
Unemployed					-0.015 (-0.710)	-0.018 (-0.848)	-0.015 (-0.707)	-0.014 (-0.701)
Government job					-0.018 (-0.993)	-0.022 (-1.212)	-0.022 (-1.213)	-0.022 (-1.231)
Middle class					-0.013 (-0.598)	-0.006 (-0.273)	-0.008 (-0.380)	-0.008 (-0.390)
High income						-0.044** (-2.434)	-0.042** (-2.329)	-0.042** (-2.322)
Middle income						0.037 (1.324)	0.053* (1.901)	0.052* (1.876)
Religious						0.004 (0.246)	0.010 (0.606)	0.010 (0.609)
Interest in politics							0.177*** (9.785)	0.176*** (9.748)
								0.019 (0.819)
Pseudo R2	0.1749	0.1756	0.1806	0.1852	0.1856	0.1871	0.2049	0.2050
Obs.	4166	4166	4166	4166	4166	4166	4166	4166

**Notes:** Marginal effects are reported from probit estimations using margins, dydx(\*). Z-statistics are reported in parentheses and are based on Delta-method standard errors. \*\*\*, \*\*, and \* indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

**Appendix B.** The questions related to the key dependent variable in the WVS

- How proud are you to be [Iranian]?
  - (1) Very proud
  - (2) Quite proud
  - (3) Not very proud
  - (4) Not at all proud.
  
- People sometimes talk about what the aims of this country should be for the next ten years. On this ‘card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important? (*Code one answer only under “first choice”*)
  1. A high level of economic growth
  2. Making sure this country has strong defense forces
  3. Seeing that people have more say about how things are done at their jobs and in their communities
  4. Trying to make our cities and countryside more beautiful
  
- I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them [The armed forces]: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?
  1. A great deal
  2. Quite a lot
  3. Not very much
  4. None at all