

# Charitable Giving in Wartime: Evidence from Donations during Russia's Invasion of Ukraine

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- Many nations and citizens rely on charitable giving to weather extreme events.
- Charitable giving can comprise up to 1-2.1% of GDP in some countries.
- There is extensive literature on general charitable giving, e.g. to organizations, and to giving to recover from natural disasters, but not wars.

# Research Question

- Understanding donor behavior during political conflict and war is important for strategic planning.
- How different is donation behavior in response to war as compared to natural disasters?
- **How do war events and the media surrounding those events affect charitable giving in the context of the full-scale invasion in Ukraine?**

The literature on the charitable donations in the wake of disasters converges on several stylized facts (Andreoni and Payne, 2013; Brown et al., 2012; Deryugina, 2021; Deryugina and Marx, 2021; Echazu and Nocetti, 2015; Eckel et al., 2007; Jayaraman et al., 2023; Schwirplies, 2023) :

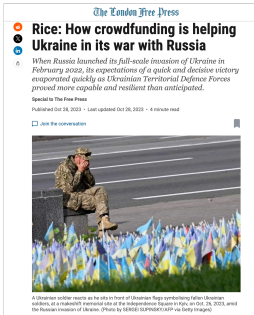
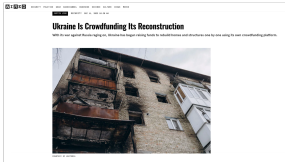
- The number of casualties is positively associated with the volume of donations;
- There is a significant, immediate increase, but short-lived increase in charitable donations following a natural disaster. Donations peak shortly after the disaster and quickly decline;
- The amount and intensity of media coverage play a role in the volume of donations.



## Context: Russian Invasion of Ukraine

- Annexation of Crimea by Russia and further Russian-sponsored "separatist" movements in Eastern Ukraine in 2014.
- These events led to the formation of civil society organizations supporting defense efforts (e.g. Come Back Alive).
- Full-scale invasion began on February 24, 2022 → huge resistance from Ukrainian military and civilians.
- Widespread donations to charities that support Ukrainian army → voluntary contribution to public good.

# Crowdfunding the War



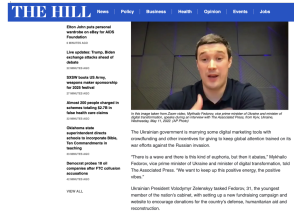
## The Economist explains

## How crowdfunding is shaping the war in Ukraine

Civilians on both sides are buying kit, from high-tech equipment to essentials



Jul 27th 2022

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## Crowdfunding a War: How Online Appeals Are Bringing War to Ukraine

By The New York Times  
May 11, 2022  
[Comments](#)

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## Context: Come Back Alive Foundation

- The Come Back Alive Foundation was established in 2014 to enhance the effectiveness of the Armed Forces of Ukraine.
- Purchases arms and equipment to help equip the Armed Forces of Ukraine and provide additional training to soldiers.
- Raised > 249 million dollars in 2014 - 2023 [Come Back Alive (2023)].
- Second largest fundraiser to support Ukraine during the invasion [Forbes (2023)].

- 1 **Come Back Alive:** 3 million unique donations from February 24, 2022 - December 31, 2023 donations, including amount, currency, timestamp, processing bank, and fundraiser events.
- 2 **Violent Incident Information from News Articles (VIINA)**  
**Zhukov and Ayers (2023):** information on missile attacks, artillery shelling, hospital attacks, and military and civilian fatalities from Ukrainian and Russian media.
- 3 **Global Database of Events, Language and Tone (GDELT):** tracks media mentions of events related to Ukraine (e.g. military, missile, civilian violence, de-escalation, occupation, and frontline mentions) as well as global news.

$$\text{Number of Donations}_t = \beta_0 + \beta_1 X_t + \omega \text{mil\_mentions}_t + \eta_1 \text{WorldEvents}_t + \eta_2 \text{CBAEvent}_t + \eta_3 \text{Holidays}_t + \gamma_t + m_t + \delta_t + \varepsilon_t \quad (1)$$

- Estimation is in log-log
- $X_t$  represents a war-related variable, such as total civilian casualties in Ukraine, or occurrences like air alerts, air strikes, artillery shelling, hospital attacks, occupation, sanctions, tank battles, or changes in territorial control
- $\text{mil\_mentions}_t$  denotes the total mentions of military-related events in the Ukrainian media on a given day
- $\text{world\_events}_t$ : number of global events recorded in GDELT each day.
- $\text{CBAEvent}_t$ : a large fundraiser launch or other important event for the foundation.
- $\gamma_t$ ,  $m_t$  and  $\delta_t$ : day of the week, month, year FE

# Summary statistics

Variables	Before war		After war	
	Mean	SD	Mean	SD
Number of donations	74.98	612.17	3517.76	3461.10
Log number of donations	3.89	0.55	8.02	0.46
Donated amount	31621.41	273533.73	3060338.68	6317410.10
Log donated amount	9.66	0.89	14.34	0.97
Total world events	154223.73	50724.63	115730.58	34559.11
Holidays	0.05	0.21	0.03	0.17
Come Back Alive events	0.01	0.11	0.07	0.25
Log Ukrainian mentions	7.65	0.95	7.68	0.52
Log military mentions	5.46	0.91	5.97	0.67
Log civilian violence mentions	-0.01	0.87	2.31	1.11
Log missile mentions	-0.11	0.82	2.29	1.12
Log deescalation mentions	2.69	0.98	3.10	0.83
Log occupation mentions	1.37	1.00	1.93	0.98
Log frontline mentions	5.20	0.91	5.70	0.69
Observations	2246		676	

Note: The table provides a summary and t-test results of various variables for the sample before and after the full-scale invasion. We denote the period before the invasion as January 1, 2016 - February 23, 2022, while the period after is February 24, 2022 - December 31, 2023.

# Stylized facts I

The number of casualties is positively associated with the volume of donations?

# Donations respond to casualties

	<i>Log number of donations</i>		
	(1)	(2)	(3)
Log Ukrainian civilian casualties	0.134*** (0.018)		0.140*** (0.024)
Log military mentions		0.110*** (0.034)	-0.015 (0.030)
R2	0.453	0.415	0.452
N	676	676	676
R2	0.550	0.551	0.552
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.



# Donations respond to casualties

	<i>Log donated amount</i>		
	(1)	(2)	(3)
Log Ukrainian civilian casualties	0.113*** (0.034)		0.061 (0.042)
Log military mentions		0.187*** (0.052)	0.133** (0.056)
R2	0.550	0.551	0.552
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total amount of daily donations. Standard errors in parentheses.

- Robustness with high-dimensional controls.
- Follow Chernozhukov et al. (2017, 2018) and use ML regularization procedures for model selection which allow to control for higher order polynomials, time trends and interactions.
- We use 279 controls, including 3rd order polynomials, their interactions of time covariates and other controls.

# Robustness checks: Double machine learning

	<i>Log donated transactions</i>			
	(1)	(2)	(3)	(4)
	lasso-lasso	lasso-ridge	ridge-lasso	ridge- ridge
Log Ukrainian civilian casualties	0.12 (0.02) [0.0]	0.05 (0.02) [0.02]	0.12 (0.02) [0.0]	0.05 (0.03) [0.07]
Log military mentions	0.15 (0.02) [0]	0.03 (0.03) [0.47]	0.13 (0.02) [0]	0.0 (0.04) [0.95]
Log Ukrainian civilian casualties	0.1 (0.03) [0]	0.08 (0.03) [0.03]	0.11 (0.03) [0]	0.08 (0.04) [0.03]
Log military mentions	0.06 (0.03) [0.03]	-0.05 (0.04) [0.2]	0.07 (0.03) [0.01]	-0.07 (0.04) [0.1]

Robust standard errors in parentheses. Pvalues in brackets.

# Type of events matter

	<i>Log number of donations</i>				
	(1)	(2)	(3)	(4)	(5)
Log air alert	0.095*** (0.018)				0.037* (0.020)
Log air strike		0.071*** (0.013)			-0.017 (0.018)
Log art. shelling			0.151*** (0.021)		0.144*** (0.032)
Log hospital attack				0.058** (0.024)	0.037 (0.023)
R2	0.422	0.423	0.443	0.406	0.447
N	676	676	676	676	676
Month FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

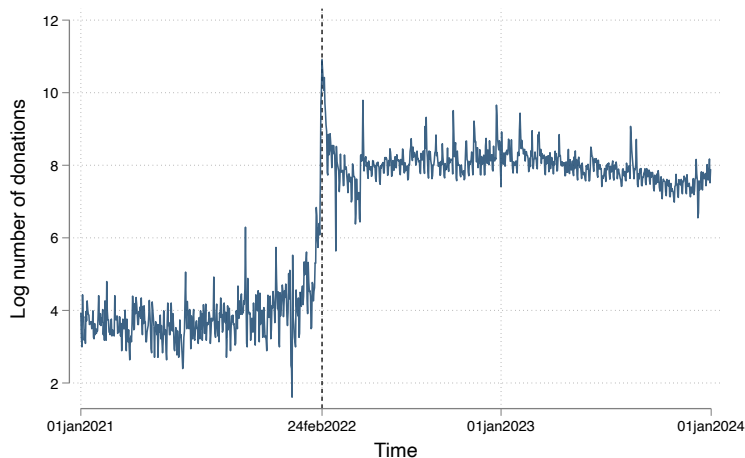
# Type of events matter

	<i>Log number of donations</i>				
	(1)	(2)	(3)	(4)	(5)
Log occupation	0.093*** (0.019)				0.056*** (0.018)
Log sanctions		0.116*** (0.014)			0.092*** (0.014)
Log tank battles			0.052*** (0.016)		0.028* (0.015)
Log territory control claim				0.117*** (0.019)	0.061*** (0.016)
R2	0.432	0.439	0.409	0.442	0.476
N	676	676	676	676	676
Month FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

There is a significant, immediate increase, but short-lived increase in charitable donations following a natural disaster. Donations peak shortly after the disaster and quickly decline

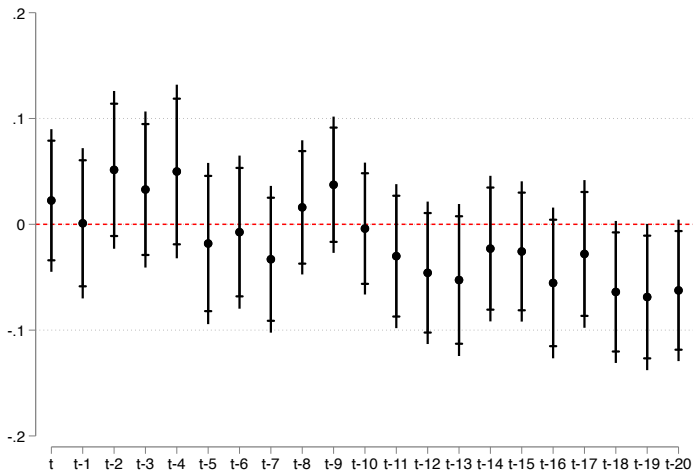
# Donations rose significantly after the start of the war



Logarithm of total number of donations between January 2021 and December 2023.

Neither the year prior to the war nor the two years following the war show evidence of trends. However, there is clear evidence of a weakly cyclical pattern, with a higher number of donations during weekdays and a lower number during weekends.

# The effect of casualties on donations is not lasting



Note: The circles represent OLS coefficient estimates from a regression of the logarithm of the number of donations on the logarithm of Ukrainian civilian casualties on that day, as well as on lags from the previous 20 days. The horizontal bars indicate 90% and 95% confidence intervals.



## Stylized facts III

The amount and intensity of media coverage play a role in the volume of donations.

# Media coverage increases donations

	<i>Log number of donations</i>		
	(1)	(2)	(3)
Log military mentions	0.110*** (0.034)		
Log civilian violence mentions		0.042*** (0.013)	
Log missile mentions			0.042*** (0.013)
R2	0.415	0.406	0.407
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

# Media coverage increases donations

	<i>Log number of donations</i>		
	(1)	(2)	(3)
Log deescalation mentions	0.083*** (0.018)		
Log occupation mentions		0.051*** (0.018)	
Log frontline mentions			0.105*** (0.029)
R2	0.413	0.405	0.415
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

## Additional results

# Russian military casualties

	<i>Log number of donations</i>		
	(1)	(2)	(3)
Log Russian military casualties	0.169*** (0.021)		0.161*** (0.023)
Log military mentions		0.110*** (0.034)	0.027 (0.022)
R2	0.466	0.415	0.466
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

# Source of the media coverage matters

	<i>Log number of donations</i>				
	(1)	(2)	(3)	(4)	(5)
Log Ukrainian mentions	0.069 (0.043)		-0.306*** (0.068)		-0.421*** (0.096)
Log Russian mentions		0.124*** (0.046)	0.341*** (0.059)		0.350*** (0.059)
Log international mentions				0.061* (0.033)	0.091 (0.056)
R2	0.403	0.419	0.437	0.404	0.439
N	676	676	676	676	676
Month FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

# International aid

	<i>Log number of donations</i>		
	(1)	(2)	(3)
Log military aid	-0.003 (0.005)		-0.004 (0.006)
Log financial aid		0.005 (0.008)	0.006 (0.008)
Log humanitarian aid		0.003 (0.005)	0.003 (0.005)
R2	0.399	0.399	0.398
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

# Conscription announcements

	<i>Log number of donations</i>			
	(1)	(2)	(3)	(4)
Conscription	-0.119*** (0.043)	-0.112*** (0.040)	-0.089 (0.056)	-0.149*** (0.057)
Log military mentions		0.109*** (0.034)		
Log Ukrainian civilian casualties			0.134*** (0.018)	
Log Russian military casualties				0.170*** (0.021)
R2	0.399	0.414	0.452	0.466
N	676	676	676	676
Month FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.



# Conclusion

- a 10%  $\uparrow$  in Ukrainian civilian casualties leads to a 1.3%  $\uparrow$  in a number of transactions.
- The donations increased significantly after the Russian full-scale invasion, but remained at a stable level afterwards.
- Different military events and media mentions affect donation behavior.
- The effect of the casualties on donations is short-lasting.
- 10%  $\uparrow$  in Russian military casualties leads to a 1.7%  $\uparrow$  in a number of transactions
- The number of donations tends to increase with mentions by Russian sources and decrease with mentions from Ukrainian sources
- No evidence that international aid crowds out donations.
- Conscription announcements reduce the number of donations.

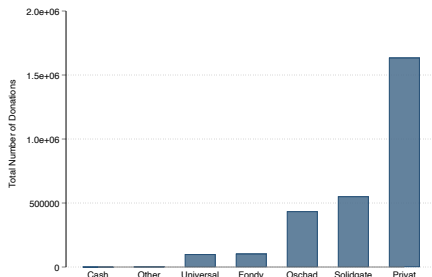
## Appendix

# Summary statistics

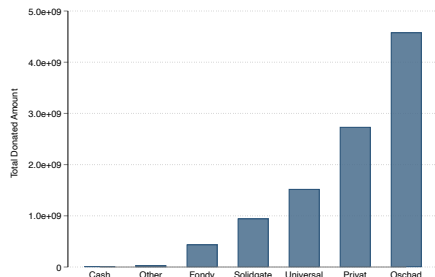
	N	Mean	Standard deviation	Min	Max
Number of donations	3517.76	3517.76	3461.10	281.00	54601.00
Log number of donations	8.02	8.02	0.46	5.64	10.91
Donated amount	3060338.68	3060338.68	6317410.10	236327.48	90335312.00
Log donated amount	14.34	14.34	0.97	12.37	18.32
Total world events	115730.58	115730.58	34559.11	40518.00	212164.00
Holidays	0.03	0.03	0.17	0.00	1.00
Come Back Alive events	0.07	0.07	0.25	0.00	1.00
Log Russian military casualties	1.95	1.95	1.33	-0.69	4.96
Log Ukrainian civilian casualties	2.66	2.66	1.46	-0.69	5.38
Log air alert	2.26	2.26	1.81	-0.69	4.96
Log air strike	2.28	2.28	1.40	-0.69	5.17
Log art. shelling	4.02	4.02	1.19	1.39	6.04
Log hospital attack	0.10	0.10	0.93	-0.69	3.30
Log tank battles	0.62	0.62	1.26	-0.69	4.03
Log territory control claim	1.84	1.84	1.30	-0.69	4.55
Russia initiated event	101.71	101.71	81.45	8.00	526.00
Ukraine initiated event	39.72	39.72	39.37	1.50	260.00
Occupation	3.60	3.60	6.26	0.50	50.00
Log Ukrainian mentions	7.68	7.68	0.52	-0.69	8.66
Log military mentions	5.97	5.97	0.67	-0.69	7.11
Log civilian violence mentions	2.31	2.31	1.11	-0.69	5.43
Log missile mentions	2.29	2.29	1.12	-0.69	5.43
Log deescalation mentions	3.10	3.10	0.83	-0.69	5.20
Log occupation mentions	1.93	1.93	0.98	-0.69	4.80
Log frontline mentions	5.70	5.70	0.69	-0.69	6.84
Log sanctions	1.62	1.62	1.41	-0.69	4.23
Log total mentions	9.33	9.33	0.75	-0.69	11.48
Log financial aid	15.58	15.58	2.06	14.90	27.53
Log humanitarian aid	13.44	13.44	3.08	11.81	24.17
Log military aid	13.56	13.56	3.02	12.37	26.15
Observations	676				

The table presents summary statistics for the key variables in the dataset for the post full scale invasion period from the 24th of February 2022 until the 31st of December 2023. The donated amount is given in UAH in 2010 prices.

# Summary statistics by source



(a) Number of donations



(b) Donated amount

Note: (a) represents the total number of donations, while (b) depicts the amount donated, categorized by the bank through which the transactions took place. The sample comprises all donations made between the 24th of February 2022 and the 31st of December 2023.

- Oschadbank: A state-owned bank known for its extensive branch network and role in implementing government financial policies.
- Fondy: An innovative online payment processing company offering solutions for e-commerce and digital services.
- Solidgate: A global payment processing platform providing comprehensive payment solutions for businesses.
- PrivatBank: The largest commercial bank in Ukraine, recognized for its technological advancements and extensive range of banking services.

# Types of events matter: amount

	<i>Log donated amount</i>				
	(1)	(2)	(3)	(4)	(5)
Log air alert	0.046 (0.036)				-0.039 (0.040)
Log air strike		0.101*** (0.025)			0.113*** (0.038)
Log art. shelling			0.099** (0.042)		-0.042 (0.061)
Log hospital attack				0.194*** (0.036)	0.176*** (0.036)
R2	0.542	0.552	0.545	0.561	0.566
N	676	676	676	676	676

Note. The dependent variable is the logarithm of the total daily donated amount. Standard errors in parentheses.

# Types of events matter: amount

	<i>Log donated amount</i>				
	(1)	(2)	(3)	(4)	(5)
Log occupation	0.106*** (0.030)				0.076** (0.032)
Log sanctions		0.044 (0.031)			0.019 (0.032)
Log tank battles			0.062*** (0.024)		0.042* (0.024)
Log territory control claim				0.104*** (0.036)	0.053 (0.038)
R2	0.551	0.542	0.544	0.549	0.552
N	676	676	676	676	676
Month FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes

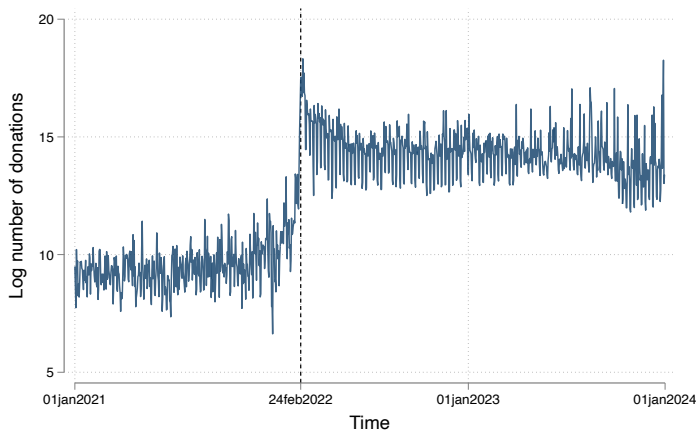
Note. The dependent variable is the logarithm of the total daily donated amount. Standard errors in parentheses.

# Origins of events: amount

	<i>Log donated amount</i>		
	(1)	(2)	(3)
Russia initiated event	0.004*** (0.001)		0.004*** (0.001)
Ukraine initiated event		0.007*** (0.001)	0.001 (0.001)
R2	0.594	0.579	0.593
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total daily donated amount. Standard errors in parentheses.

# Donation amount rose significantly after the start of the war



Logarithm of donated amount between January 2021 and December 2023.



# Media mentions increases donations: amount

	<i>Log donated amount</i>			
	(1)	(2)	(3)	(4)
Log Ukrainian mentions	0.156** (0.077)			
Log military mentions		0.187*** (0.052)		
Log civilian violence mentions			0.120*** (0.026)	
Log missile mentions				0.122*** (0.025)
R2	0.546	0.551	0.555	0.556
N	676	676	676	676

Note. The dependent variable is the logarithm of the total daily donated amount. Standard errors in parentheses.

# Media mentions increases donations: amount

	<i>Log donated amount</i>			
	(1)	(2)	(3)	(4)
Log military mentions	0.187*** (0.052)			
Log deescalation mentions		0.055 (0.035)		
Log occupation mentions			0.063* (0.036)	
Log frontline mentions				0.176*** (0.047)
R2	0.551	0.542	0.543	0.551
N	676	676	676	676
Month FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total daily donated amount. Standard errors in parentheses.

# Source of the media coverage matters: amount

	<i>Log donated amount</i>				
	(1)	(2)	(3)	(4)	(5)
Log Ukrainian mentions	0.156** (0.077)		0.193 (0.148)		-0.725*** (0.186)
Log Russian mentions		0.103** (0.047)	-0.034 (0.107)		0.043 (0.105)
Log international mentions				0.279** (0.117)	0.730*** (0.100)
R2	0.546	0.544	0.545	0.567	0.588
N	676	676	676	676	676
Month FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total daily donated amount. Standard errors in parentheses.

# International aid: amount

	<i>Log donated amount</i>		
	(1)	(2)	(3)
Log military aid	-0.007 (0.008)		-0.007 (0.009)
Log financial aid		-0.005 (0.012)	-0.003 (0.013)
Log humanitarian aid		-0.004 (0.009)	-0.004 (0.009)
R2	0.542	0.541	0.540
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total daily donated amount. Independent variables are in levels. Standard errors in parentheses.

# Conscription announcement: amount

	<i>Log donated amount</i>			
	(1)	(2)	(3)	(4)
Conscription	-0.034 (0.256)	-0.023 (0.270)	-0.009 (0.266)	-0.053 (0.273)
Log military mentions		0.187*** (0.052)		
Log Ukrainian civilian casualties			0.113*** (0.034)	
Log Russian military casualties				0.103** (0.042)
R2	0.541	0.551	0.549	0.546
N	676	676	676	676
Month FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total daily donated amount. Standard errors in parentheses.

# DML: amount

	<i>Panel B: Log donated amount</i>			
	(1)	(2)	(3)	(4)
Log Ukrainian civilian casualties	0.14 (0.04) [0]	0.14 (0.04) [0]	0.13 (0.04) [0]	0.11 (0.03) [0]
Log military mentions	0.26 (0.05) [0.0]	0.18 (0.06) [0.0]	0.24 (0.05) [0.0]	0.14 (0.02) [0.02]
Log Ukrainian civilian casualties	0.04 (0.05) [0.45]	0.09 (0.05) [0.06]	0.06 (0.05) [0.24]	0.08 (0.05) [0.09]
Log military mentions	0.16 (0.06) [0]	0.07 (0.07) [0.35]	0.16 (0.06) [0]	0.09 (0.07) [0.21]

Robust standard errors in parentheses. Pvalues in brackets. Controls include 279 variables of 3rd order polynomial terms and their interactions of time covariates and other controls, as well as fixed effects for day, dow, week, month, year, holidays, cba events, and total world events.

# Shares of mentions types

	<i>Log number of donations</i>						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Share military mentions	1.269*** (0.318)						
Share civilian violence mentions		3.371** (1.631)					-4.101 (11.519)
Share missile mentions			3.403** (1.639)				4.621 (11.620)
Share deescalation mentions				5.182*** (1.793)			4.107** (1.835)
Share occupation mentions					13.867** (7.027)		11.882* (7.202)
Share frontline mentions						1.342*** (0.353)	1.253*** (0.377)
R2	0.416	0.401	0.401	0.405	0.406	0.415	0.423
N	675	675	675	675	675	675	675
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

## Shares of source of events

	<i>Log number of donations</i>		
	(1)	(2)	(3)
Share Ukrainian mentions	-0.607* (0.339)		-1.767*** (0.351)
Share Russian mentions		0.998*** (0.352)	1.839*** (0.377)
R2	0.401	0.409	0.425
N	675	675	675

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.



## Donations before full-scale war: mentions type

	<i>Log number of donations</i>			
	(1)	(2)	(3)	(4)
Log Ukrainian mentions	0.021** (0.009)			
Log military mentions		0.026** (0.012)		
Log civilian violence mentions			0.016 (0.011)	
Log missile mentions				0.019 (0.012)
R2	0.464	0.464	0.464	0.464
N	2246	2246	2246	2246

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

## Donations before full-scale war: mentions type

	<i>Panel A: Log number of donations</i>			
	(1)	(2)	(3)	(4)
Log military mentions	0.026** (0.012)			
Log deescalation mentions		0.044*** (0.014)		
Log occupation mentions			0.055*** (0.010)	
Log frontline mentions				0.024** (0.012)
R2	0.464	0.466	0.470	0.464
N	2246	2246	2246	2246

Note. The dependent variable in Panel is the logarithm of the total number of daily donations. Standard errors in parentheses.

## Donations before full-scale war: mentions source

<i>Panel A: Log number of donations</i>				
	(1)	(2)	(3)	(4)
Log Ukrainian mentions	0.021** (0.009)		-0.032 (0.036)	-0.049 (0.037)
Log Russian mentions		0.027** (0.011)	0.058 (0.040)	-0.020 (0.037)
Log international mentions				0.094*** (0.023)
R2	0.464	0.464	0.464	0.470
N	2246	2246	2246	2246

Note. The dependent variable is the logarithm of the total number of daily donations. Standard errors in parentheses.

# Russian casualties: amounts

	<i>Log donated amount</i>		
	(1)	(2)	(3)
Log Russian military casualties	0.103** (0.041)		0.056 (0.047)
Log military mentions		0.187*** (0.052)	0.158*** (0.055)
R2	0.547	0.551	0.552
N	676	676	676
Month FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Controls	Yes	Yes	Yes

Note. The dependent variable is the logarithm of the total amount of daily donations. Standard errors in parentheses.

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