

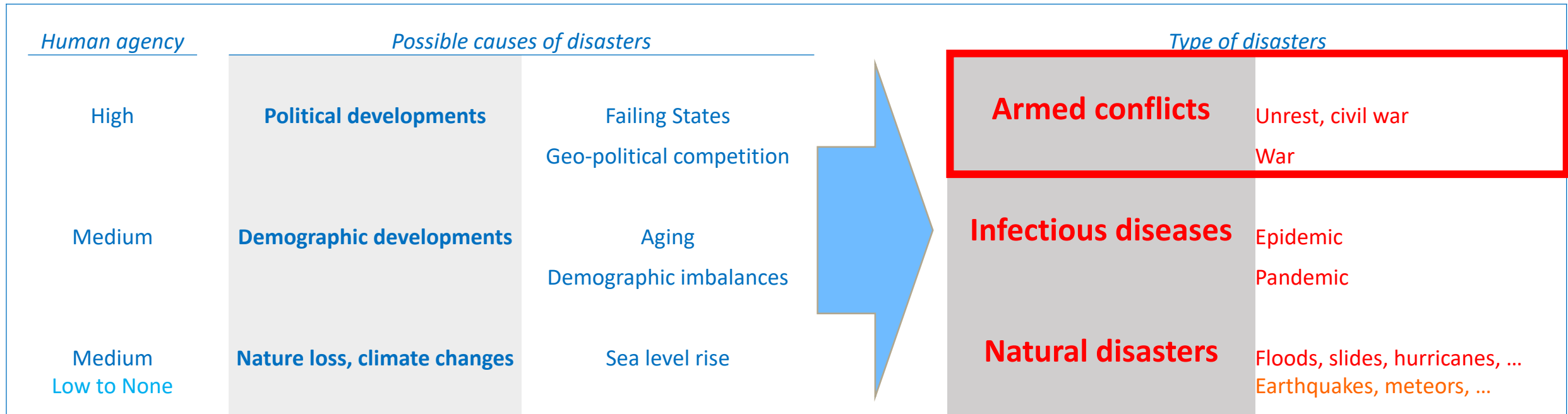
Banks, Firms and Sanctions

Steven Ongena, *University of Zurich, Swiss Finance Institute, KU Leuven, NTNU Business School, CEPR*

THE EFFECTS OF NEW GEOPOLITICAL RISKS ON
FINANCIAL MARKETS AND FIRMS
Swedish House of Finance Annual Conference
August 22-23, 2023 – Stockholm, Sweden

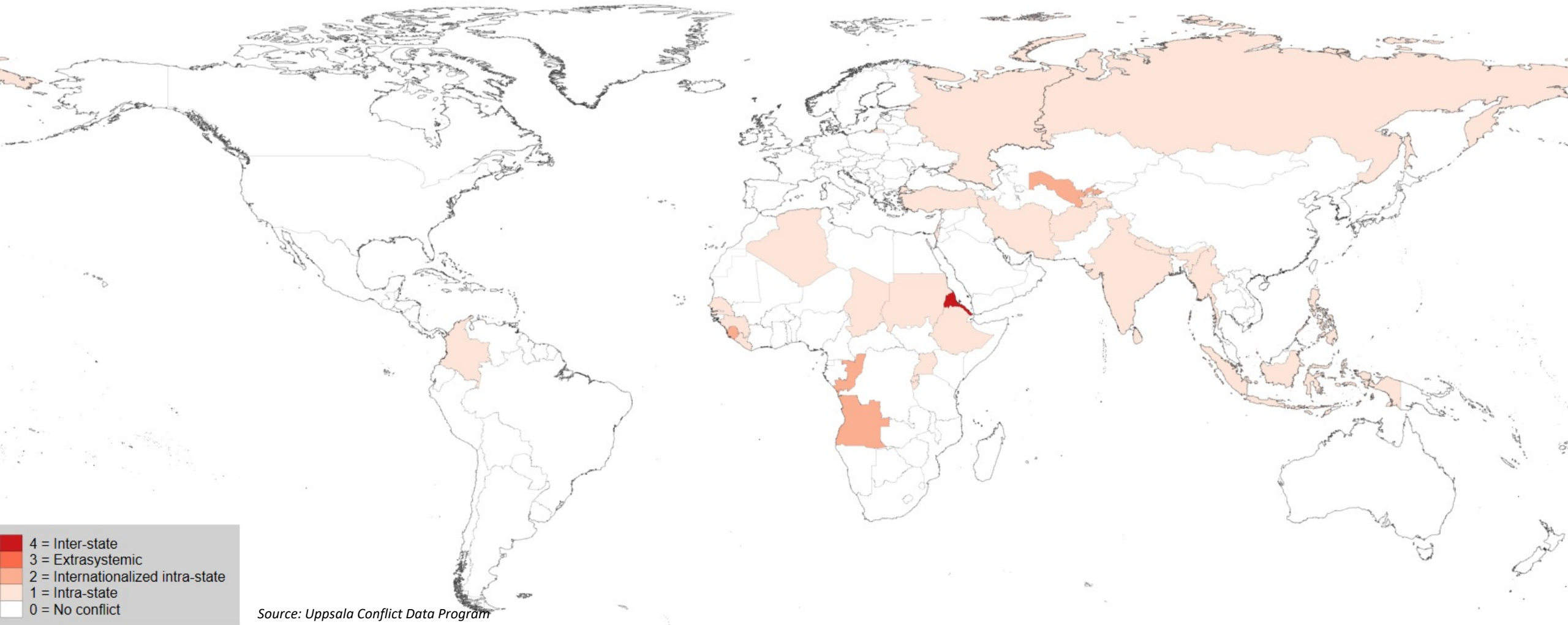


Disasters and (Bank) Activity

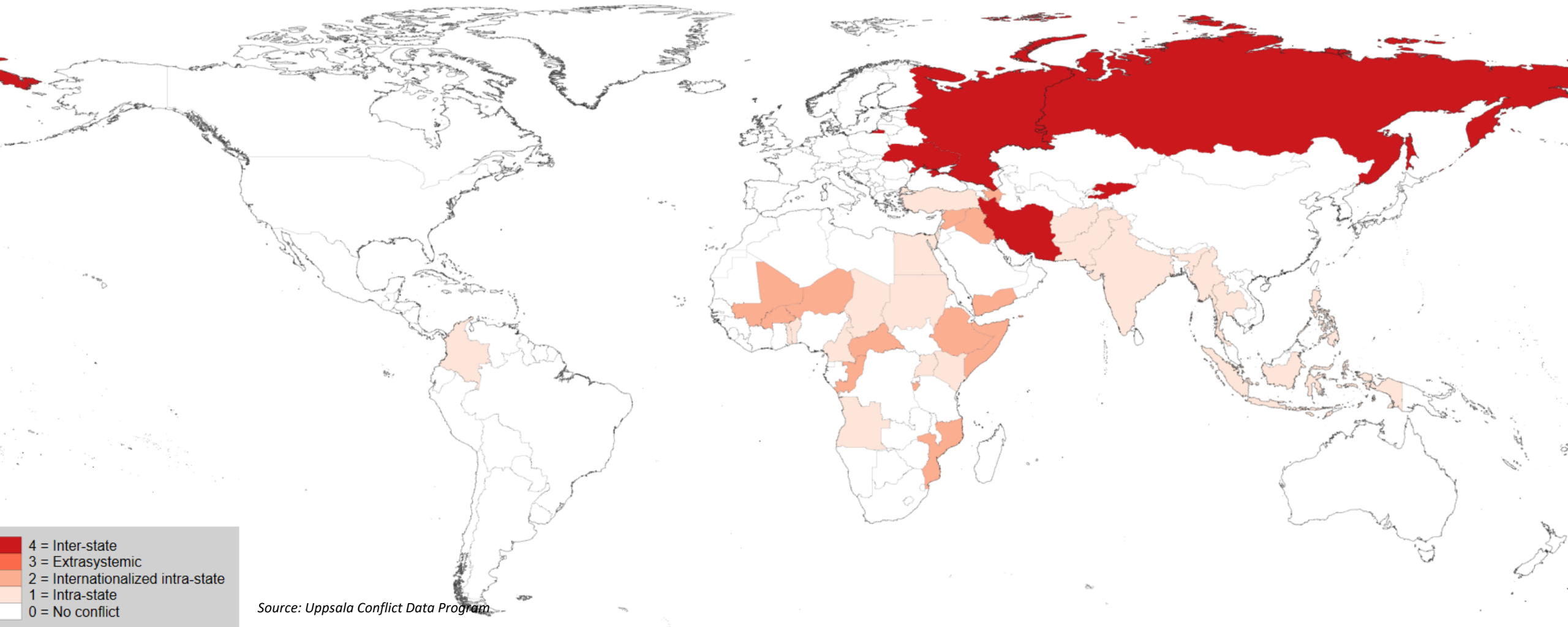


Financial Sanctions, Lockdowns, Response, ...

Conflicts 2000



Conflicts 2022

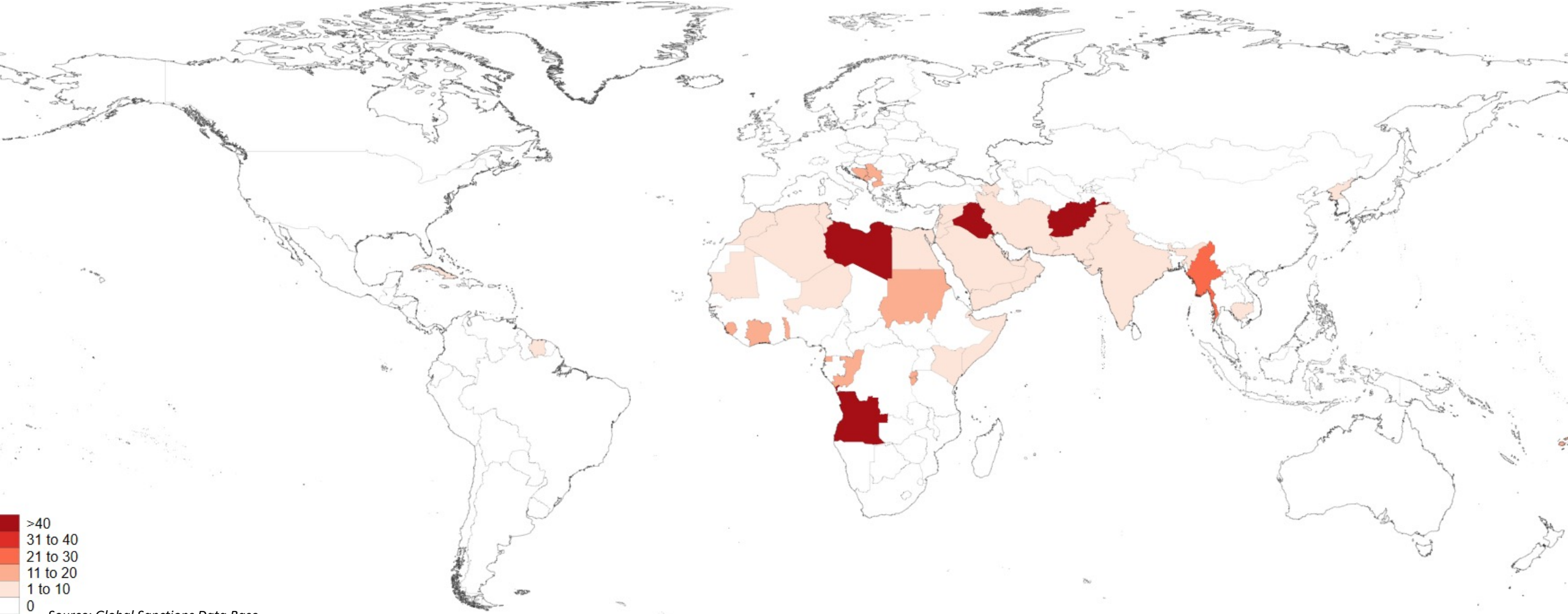


Sanctions

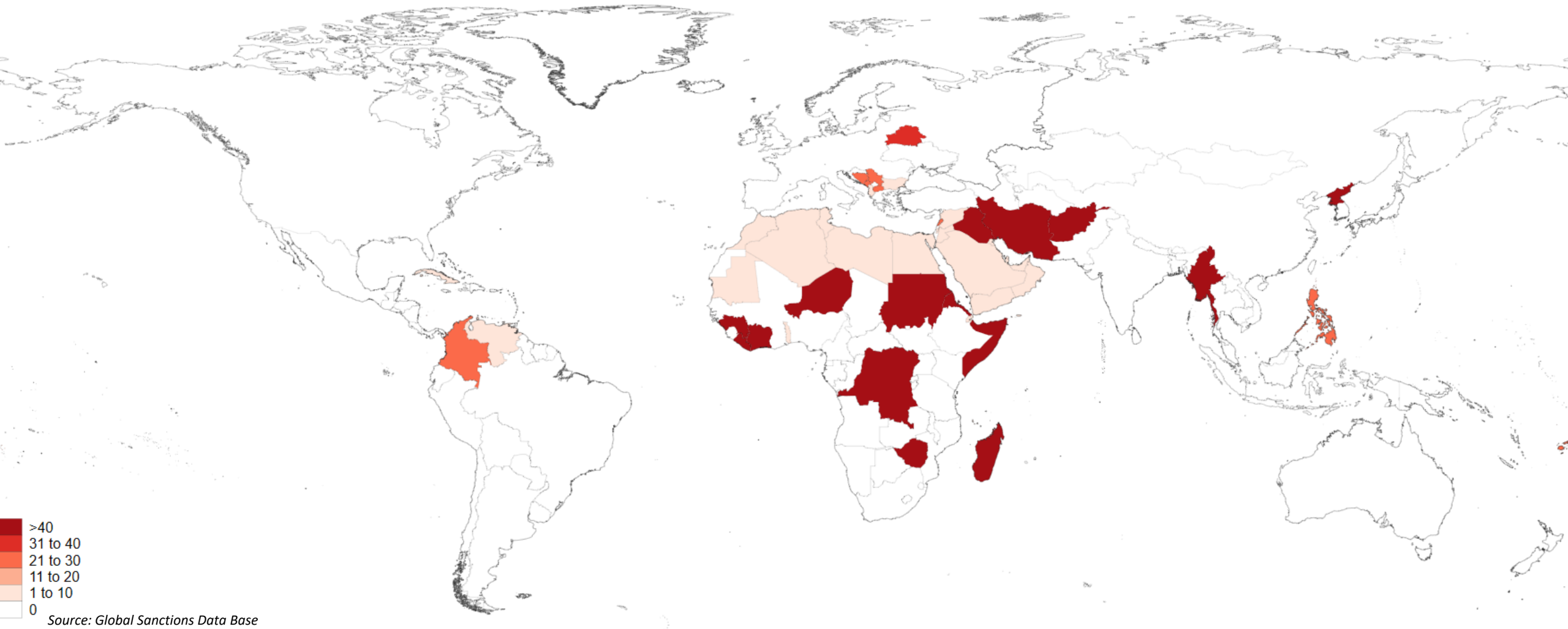
	By / On	Individual(s)	Corporation(s)	Country(s)
Individual(s)				
Corporation(s)				
Country(s)				
Multilateral Organizations				

- Sports
- Diplomatic
- Travel
- Economic
 - Trade:
 - Import
 - Export
 - **Financial**

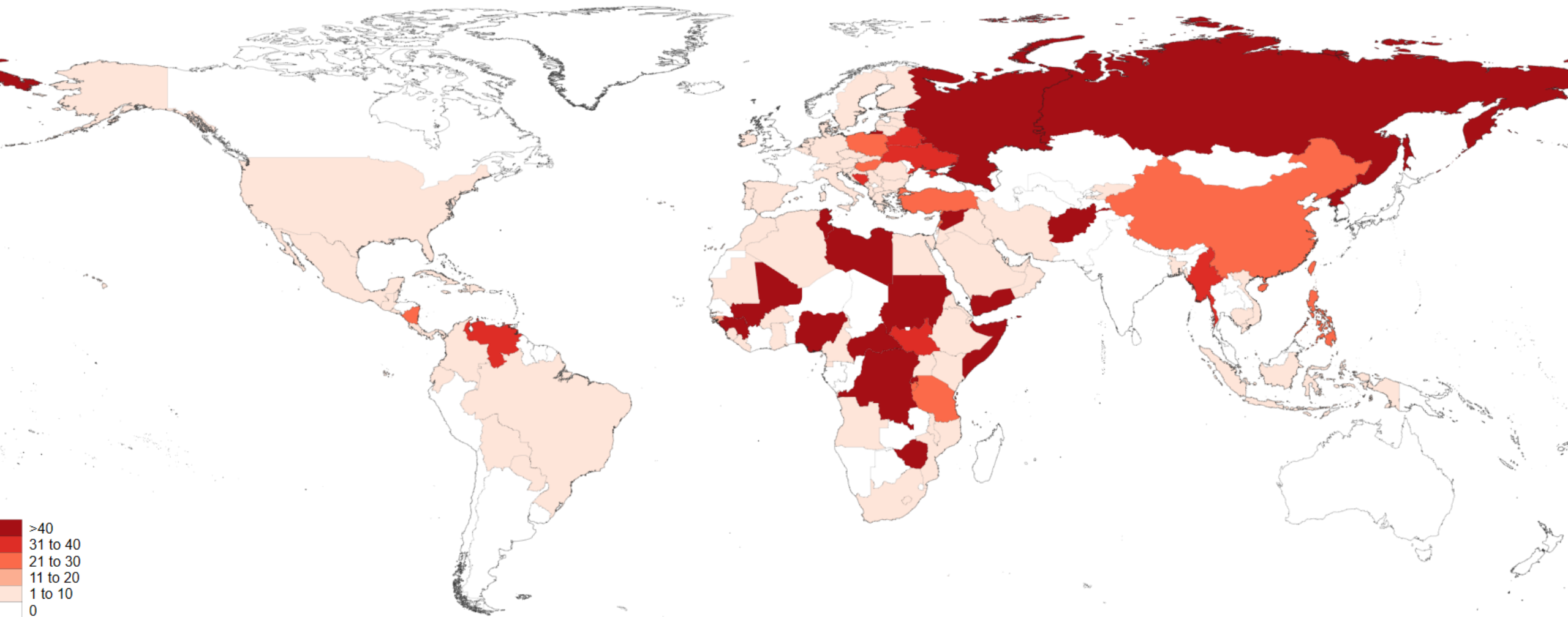
Number of Financial Sanctions on a Country 2000



Number of Financial Sanctions on a Country 2010



Number of Financial Sanctions on a Country 2022

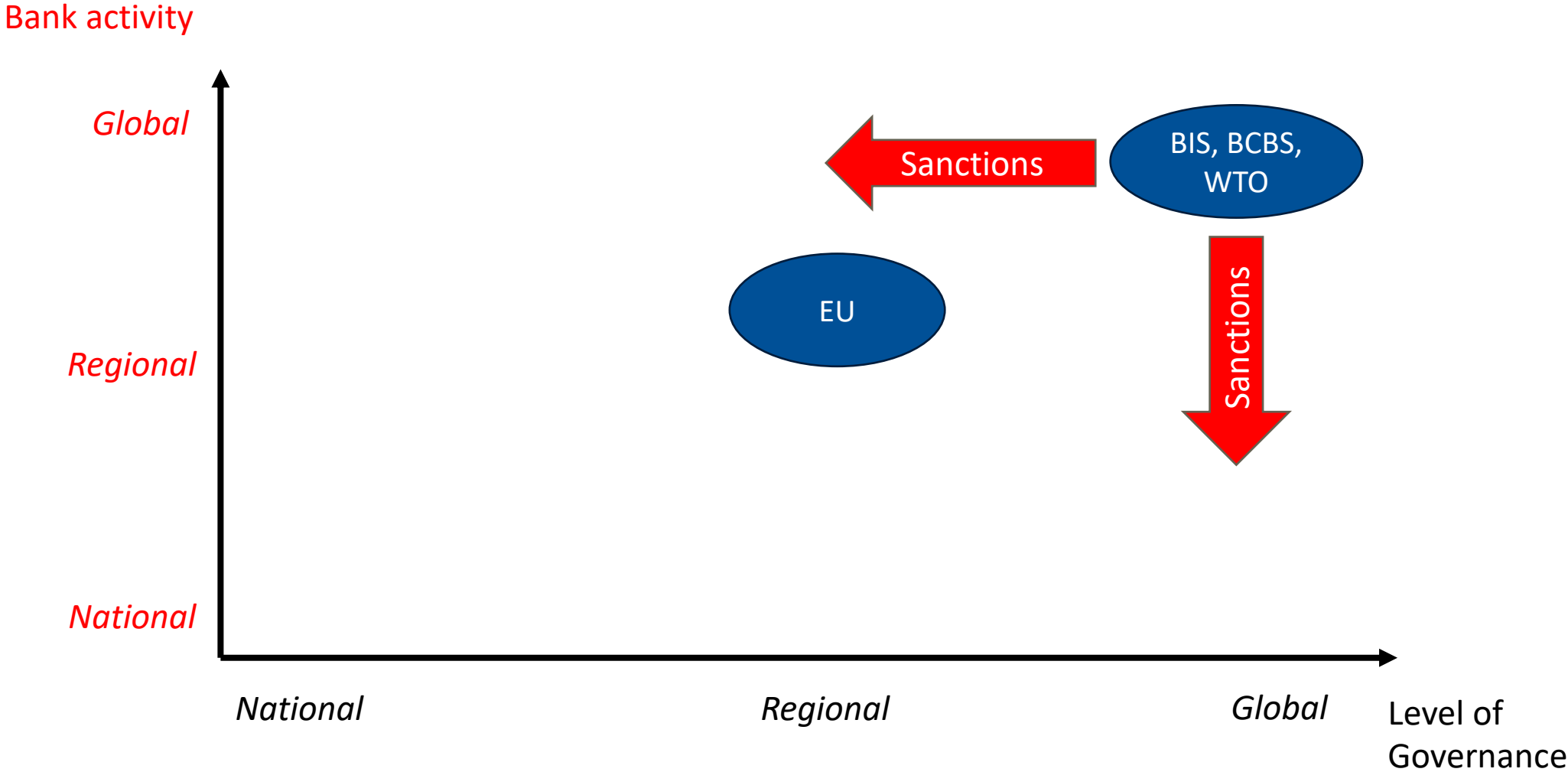


Source: Global Sanctions Data Base

Financial Sanctions on Banks?

- Banks are **opaque**
 - Able to hide, and difficult for regulators to know what to optimally do?
- Banks are “nimble”
 - Able to “arbitrage” the sanctions?
- Banks are **politically connected**
 - Able to block, and/or influence the writing and enforcement of sanctions?

Impact of Financial Sanctions



“Crime and Punishment”? How Banks Anticipate and Propagate Global Financial Sanctions

s : f

Mikhail Mamonov (*Toulouse Business School*)

Anna Pestova (*Toulouse Business School*)

Steven Ongena (*Zurich, Swiss Finance Institute, KU Leuven, NTNU Business School, CEPR*)



Joint Work with, and Work by, Mikhail Mamonov and Anna Pestova



- Mamonov, Mikhail, Anna Pestova and Steven Ongena, 2023, Disasters and (bank) financing, December, LTI Report.
- Mamonov, Mikhail, Anna Pestova and Steven Ongena, 2023, "Crime and punishment?" How Russian banks anticipated and dealt with global financial sanctions, July, CEPR DP 16705.
- Mamonov, Mikhail, and Anna Pestova, 2023, The price of war: Economic effects of financial sanctions on the Russian economy, mimeo.
- Pestova, Anna; Mikhail Mamonov and Steven Ongena, 2022, The price of war: Macroeconomic effects of the 2022 sanctions on Russia, in Garicano, Luis, Dominic Rohner and Beatrice Weder di Mauro (eds.), Global economic consequences of the war in Ukraine: Sanctions, supply chains and sustainability (CEPR, London), 71-78.
- Mamonov, Mikhail, Anna Pestova and Steven Ongena, 2022, "Crime and Punishment": How Russian banks anticipated and dealt with global financial sanctions, in Garicano, Luis, Dominic Rohner and Beatrice Weder di Mauro (eds.), Global economic consequences of the war in Ukraine: Sanctions, supply chains and sustainability (CEPR, London), 28-35.
- Mamonov, Mikhail, Steven Ongena and Anna Pestova, 2022, Reducing the inequality: Cross-sectional effects of financial sanctions on households and firms in Russia, VoxEU, October 14.
- Pestova, Anna, Mikhail Mamonov and Steven Ongena, 2022, The price of war: Macroeconomic effects of the 2022 sanctions on Russia, VoxEU.org, April 15.
- Mamonov, Mikhail, Anna Pestova and Steven Ongena, 2021, "Crime and punishment." How Russian banks anticipated and dealt with global financial sanctions?, VoxEU.org, June 10.

Motivation

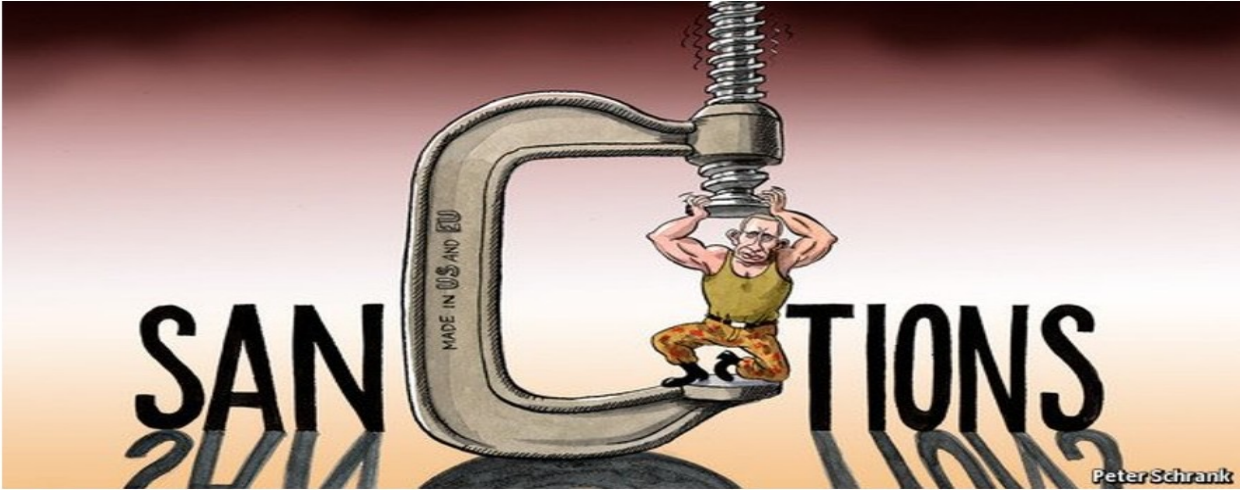
in 2014:

Europe | Sanctions on Russia

This is going to hurt



The cost of Vladimir Putin's gamble in Ukraine is going up, but he shows no sign of changing course



Aug 2nd 2014 | LONDON AND MOSCOW

Share

Motivation

in 2014:

Europe | Sanctions on Russia

This is going to hurt

The Economist

The cost of Vladimir Putin's gamble in Ukraine is going up, but he shows no sign of changing course



Aug 2nd 2014 LONDON AND MOSCOW

Share

...and in early 2022:

The Economist

The Economist explains

How much pain will the West's sanctions cause Vladimir Putin?

So far, not much. And tougher measures would have drawbacks for the West

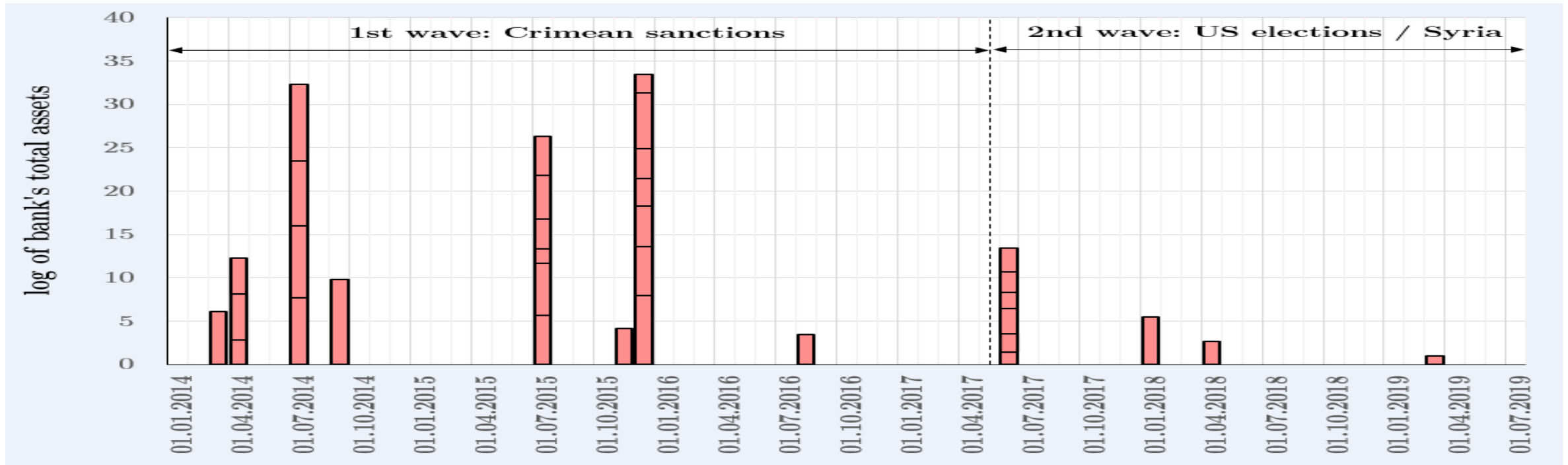


Feb 23rd 2022

Motivation

- Corporate external debt = 30% of Russia's GDP in 2013
- Financial sanctions of the West on Russia:
 - “Crime”: Crimea's annexation and more (2014), Syria (2015), US elections (2016)
 - “Punishment”: Full or partial ban on international operations
- Two stylized facts:
 - only state-connected banks targeted
 - staggered policy implementation (from 2014 to 2019)
- This paper:
 - **Not yet sanctioned banks**: in-advance adaptation of international operations?
 - **Treatment diffusion**: private banks with political connections are affected too?
 - **Real effects**: how sanctions are transmitted through banks to borrowing firms?

Staggered Implementation of Sanctions



Twelve announcements by US Office of Foreign Asset Control (OFAC) hitting 44 state-connected banks with sanctions on either their:

- **debt** (sectoral, Sectoral Sanctions Identifications, SSI)
- **assets** (entity, Specially Designated Nationals, SDN)

(i) 75% of total credit to the non-financial firms, (ii) 67% of total credit to households, (iii) 52% of banking system's total assets

What We Do?

I. In-advance adaptation to sanctions

- Match sanctioned and never-sanctioned banks on observables
- Event study
- Modified staggered difference-in-differences (MSDID)
- Aggregate the MSDID estimates for use in a structural vector autoregression (SVAR)

Antolin-Diaz & Rubio-Ramirez (AER 2018)

II. Two-stage treatment diffusion approach

Pre-stage: reveal political connections of private banks` owners/governors

1st stage: logit analysis: the risk of punishment for political connections

2nd stage: DID analysis on the extended treatment group

III. The real effects of sanctions on banks` corporate borrowers

- Match banks and borrowers using syndicated loan data
- DID estimates of the reduction in loan supply, and in firm performance

Khwaja & Mian (AER 2008); Degryse, De Jonghe, Jakovljević, Mulier & Schepens (JFI 2019)

What We Find

I. The overall effect of sanctions ≈ 0 in the 2010s, but both $\ll 0$ (*intended*) and $\gg 0$ effects (*unintended*)

I.A. The *first sanction announcement* causes strong **anticipation effects**

I.B. Added effect of *later sanction announcements* is limited

I.C. Credit reallocation: Firm credit decreases by 4% of GDP, household credit increases by 4.1% of GDP

- The government support channel matters!

II. Treatment diffuses to politically-connected private banks

- The more intense the political connections, the more severe the **anticipation effects**
- Effects on extended treatment group are 25-60% lower, but still significant

III. Real effects of financial sanctions:

- *Not yet sanctioned banks* reduce the loan supply by 20% **after the first announcement**
- Non-trivial transmission to the balance sheets of firms:
 - *sanctioned bank – sanctioned firm*: Employment, Investment and Revenues decrease by more than 40%
 - *unsanctioned bank – sanctioned firm*: Employment, Investment increase by more than 50% while Revenues contract by almost 20%

TAKE
AWAY

TAKE
AWAY

TAKE
AWAY

TAKE
AWAY

TAKE
AWAY

Intended Contributions

- The effects of economic sanctions on:

- The Russian economy

Dreger, Kholodilin Ulbricht & Fidrmuc (JCE 2016); Ahn & Ludema (EER 2020); Crozet, Hinz, Stammann & Wanner (EER 2021), Nigmatulina (2022)

- Other countries/sectors and/or world-wide

Neuenkirch & Neumeier (JDE 2016); Haidar (EP 2017); Efung, Goldbach & Nitsch, (2019); Felbermayr, Kirilakha, Syropoulos, Yalcin & Yotov, (EER 2020)

- The relevancy of political connections

Fisman (AER 2001); Sapienza (JFE 2004); Khwaja & Mian (QJE 2005); Faccio (AER 2006); Bagchi & Svejnar (JCE 2015); Enikolopov & Mityakov (2021); Kempf, Luo, Schafer & Tsoutsoura, (2022)

- Anticipation of treatment by not yet treated agents

Gissler, Oldfather & Ruffino, (JME 2016); D'Acunto, Weber & Xie, (2019); Sun & Abraham (JoE 2020); Goodman-Bacon (JoE 2021); Baker, Larcker & Wang (JFE 2022)

Mechanics of Financial Sanctions

OFAC: Sectoral sanctions (SSI)

restrict new debt issues

Debt sanctions

Liabilities

Assets



LESS HARMFUL

Entity sanctions (SDN)

restrict any operation with the West

Asset sanctions

Liabilities

Assets



MORE HARMFUL

44 Sanctioned Banks

- **Sectoral (debt) sanctions (SSI)** — on 20 banks, 2014–2018:
 - ▶ 4 state-owned or -controlled commercial banks: Sberbank, VTB, Gazprombank, and the Russian Agricultural Bank (“*Big-4*”)
 - ▶ 1 state-owned development bank (VEB),
 - ▶ 15 major subsidiaries of the “Big-4” or VEB.
- **Entity (asset) sanctions (SDN)** — on 24 banks, 2014–2019:
 - ▶ 12 banks operating in the Crimean peninsula
 - ▶ at least 4 banks controlled by the Kovalchiuk & Rotenberg (richest oligarchs)
 - ▶ 10 banks controlled by local governments or other state-owned entities

Data

- **Bank-level data:**

- ① Balance sheets + P&Ls, the Central Bank of Russia (CBR): Jan.2004–Dec.2019
- ② Full sample: [Desc Stats](#)

- **Personal-level data:** political connections

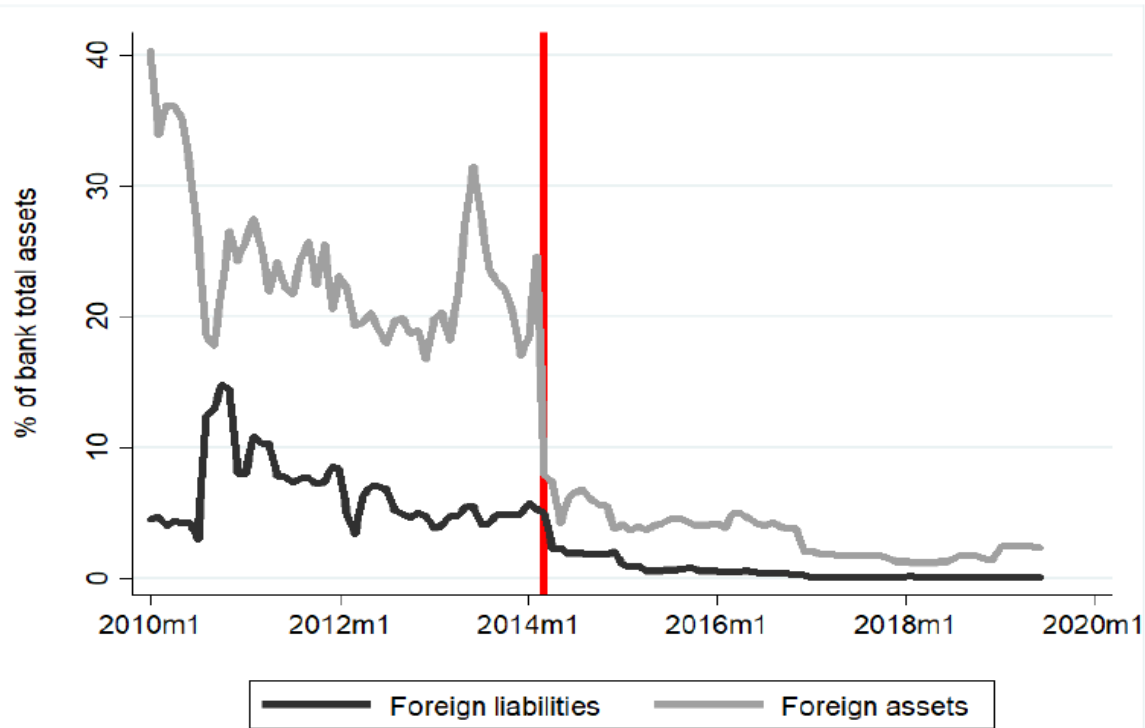
- ① Banks' annual reports \Rightarrow Structure of the board of directors \Rightarrow persons' CVs
- ② Google search on the persons

- **Syndicated loan-level / Eurobonds data:** <https://cbonds.com/>

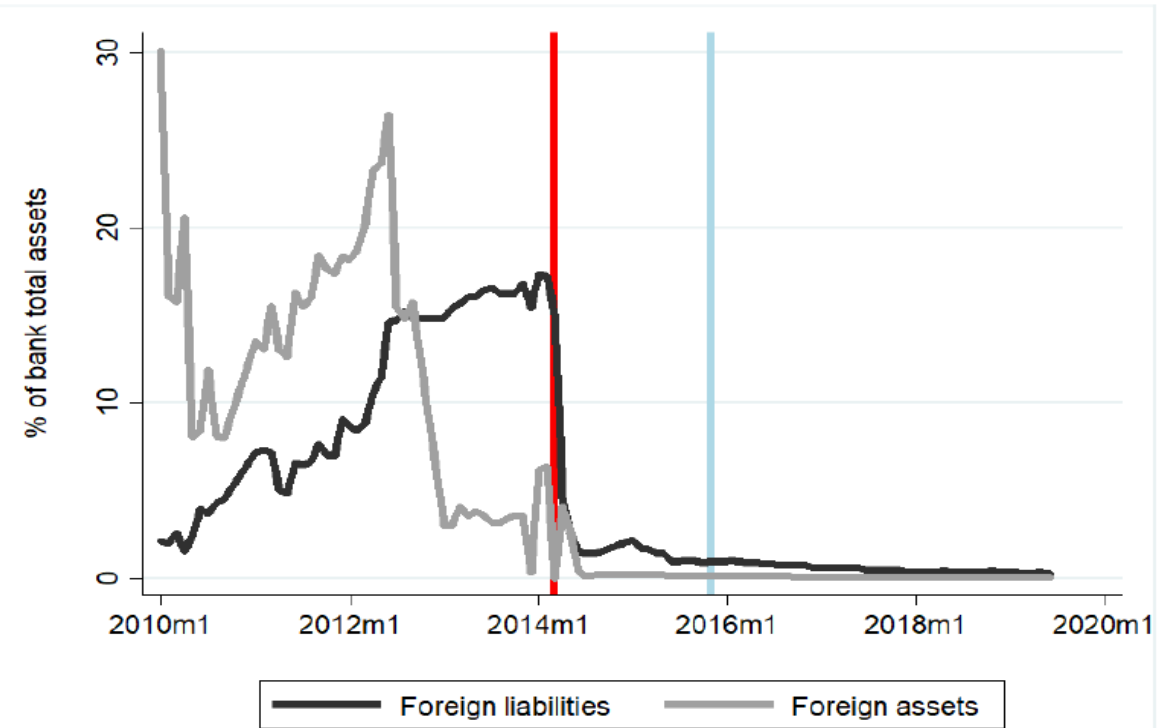
- **Firm-level data:** <https://spark-interfax.com/>

Empirical Strategy: Case Studies

- Examples of *asset*-sanctioned banks



(a) Bank "Rossiya"
(*the first bank under sanctions*)



(b) "Russian National Commercial Bank"
(RNCB, operates in Crimea)

Empirical strategy: (MS)DID on Matched Samples

- Matching of sanctioned and never-sanctioned banks
- 1st sanction announcement effects ($t_1 = 2014M3$):

$$Y_{b,t} = \alpha_b + \gamma_t + \beta \left(SANCTION_b \times POST.FIRST_t \right) + \xi' \mathbf{X}_{b,t} + \varepsilon_{b,t}, \quad \text{if } t \in [t_1 - k, t_1 + k]$$

- Added value of further sanction announcements ($t_b \geq t_1$):

$$Y_{b,t} = \alpha_b + \gamma_t + \beta \left(SANCTION_b \times POST.FIRST_t \right) + \xi' \mathbf{X}_{b,t} + \delta \left(SANCTION_b \times POST.NEXT_{b,t} \right) + \varepsilon_{b,t}, \quad \text{if } t \in [t_b - k, t_b + k]$$

Empirical strategy: Matching

- **Treatment group:** 44 banks from the OFAC's list
 - ▶ 20 state-owned or -controlled banks \Rightarrow **debt** sanctions
 - ▶ 24 private banks with *recognized* political connections \Rightarrow **asset** sanctions
- **Control group:** similar *never-sanctioned* banks
 - ▶ 1:4 nearest-neighborhood matching by observables, [Abadie & Imbens \(2011 RES\)](#)
 - ▶ observables = bank-specific characteristics, from [Gropp et al. \(2019 RFS\)](#)
 - ▶ match banks *prior* to 1st sanction announcement ($t_1 = 2014M3$, bank "Rossiya")

Results: Matching Sanctioned and Never-sanctioned banks

Two-sided Welch test on mean differences in the pre-sanction period (2012–2013)

Never-sanction banks

Sanction banks

Difference

N obs

Mean

N obs

Mean

Panel 1: Not yet *debt-sanctioned* banks vs. matched banks

Log of total assets	37	4.2	16	5.6	-1.4**
Equity capital / total assets	37	13.7	16	12.1	1.6
Loans to individuals and firms / total assets	37	51.3	16	48.7	2.6
Deposits of individuals and firms / total assets	37	40.5	16	39.4	1.1
Net income (monthly) / total assets	37	0.10	16	0.04	0.06
Net interest income (monthly) / total assets	37	0.37	16	0.32	0.05
Cash & reserves / total assets	37	5.6	16	4.1	1.5
Non-performing loans / total assets	37	4.1	16	6.6	-2.5

Panel 2: Not yet *asset-sanctioned banks* vs. matched banks

Log of total assets	61	2.3	16	2.3	0.0
Equity capital / total assets	61	16.9	16	18.1	-1.2
Loans to individuals and firms / total assets	61	50.1	16	45.1	5.0
Deposits of individuals and firms / total assets	61	62.5	16	59.9	2.6
Net income (monthly) / total assets	61	0.10	16	0.12	-0.02
Net interest income (monthly) / total assets	61	0.37	16	0.34	0.03
Cash & reserves / total assets	61	8.2	16	9.1	-0.9
Non-performing loans / total assets	61	3.8	16	5.6	-1.8

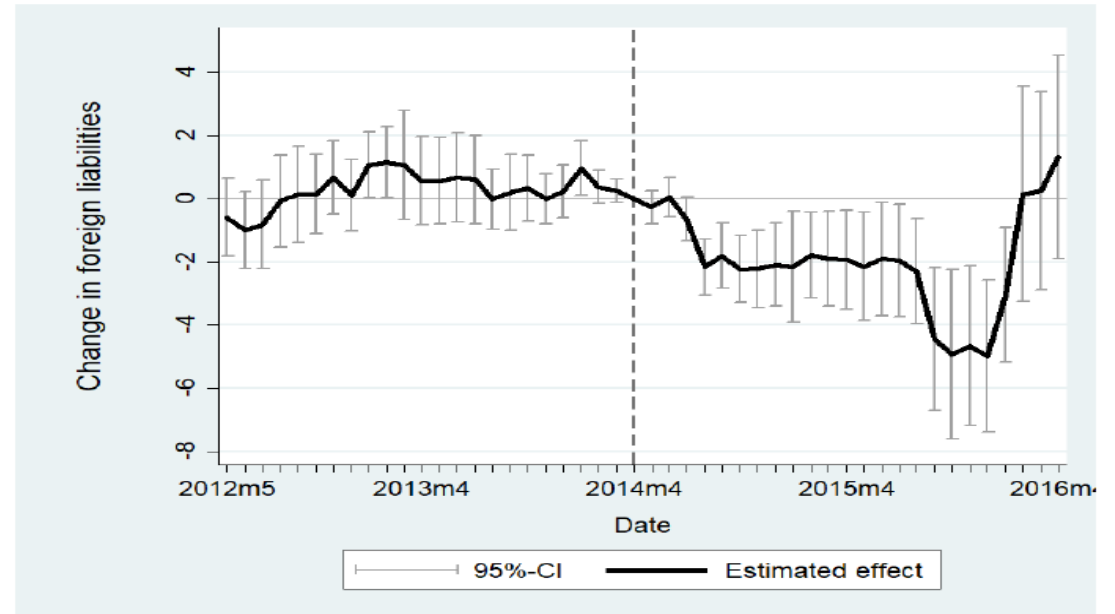
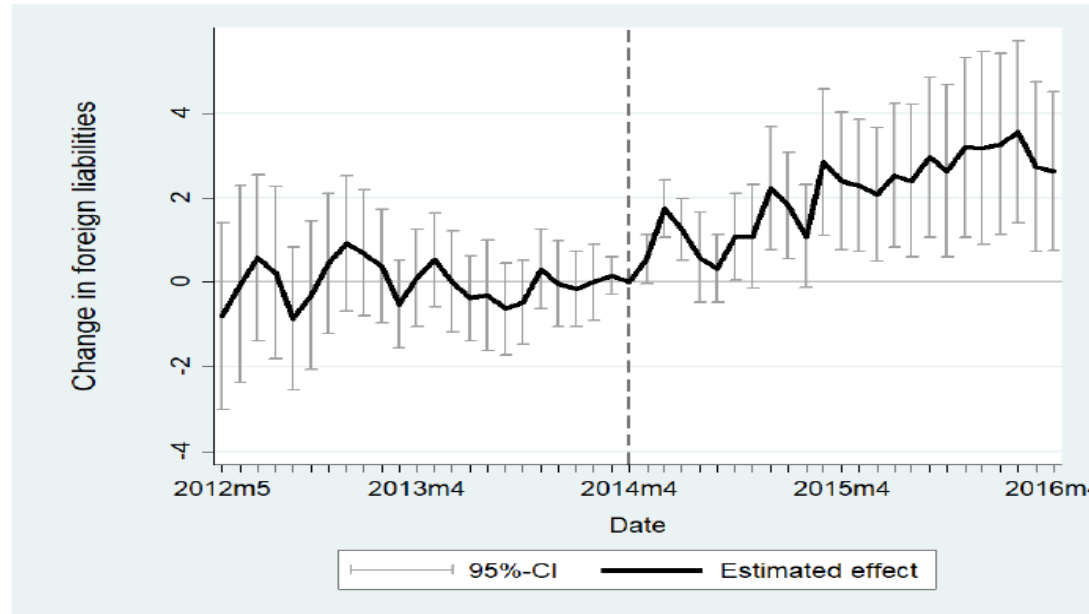
Part I.A

Anticipation of Treatment by Not Yet Sanctioned Banks

In-advance Adaptation: Foreign Borrowings

- **Event-study approach:**

$$Y_{b,t} = \alpha_b + \sum_{k=-24, k \neq 0}^{k=24} \beta_k \cdot \left(SANCTION_b \times \mathbf{1}_{t=k} \right) + \xi' \mathbf{X}_{b,t} + \varepsilon_{b,t}$$



(a) **Not yet debt-sanctioned banks:**
Foreign liabilities, % of bank total assets

(b) **Not yet asset-sanctioned banks:**
Foreign liabilities, % of bank total assets

Note: The figures report the event-study estimates on a time window of $[-24, 24]$ months around the sanction imposition on the bank “Rossiya” (i.e., March 2014 is $k = 0$). Sanctioned and never-sanctioned banks are matched over 2 years before $k = 0$.

Eurobonds Data: Not yet Sanctioned Banks

	Not yet sanctioned banks		Never-sanctioned banks	
	Amount, bn USD	Interest rate, %	Amount, bn USD	Interest rate, %
After the Crimea's annexation: Feb.2014 to Jul.2014	7.3	4.4%	0.2	10.2%
Before the Crimea's annexation:				
— Oct.2013 to Feb.2014	3.4	4.4%	2.8	9.4%
— Feb.2013 to Jul.2013	3.4	4.4%	2.8	9.4%

Note: According to the cbonds.com data, the Big-4 state-owned banks—Sberbank, VTB, Gazprombank, and the Russian Agricultural Bank—issued 8 Eurobonds between the end of February to July 2014, i.e., the period after Crimea's annexation and before they were actually sanctioned (*Not yet sanctioned banks*). As a comparison group, we consider all other banks—privately-held financial institutions—that issued Eurobonds within the same period (*Never sanctioned banks*).

Exploring Heterogeneity: Foreign Borrowings

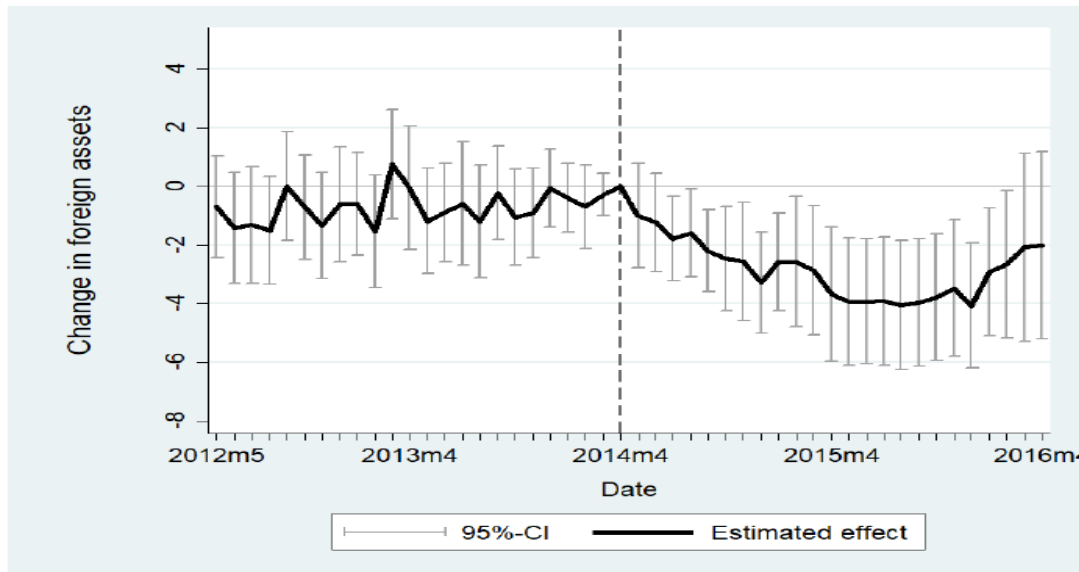
Sanction bank type:	Not yet debt - sanctioned	Not yet asset - sanctioned
	(1)	(2)
<i>Panel 1: Dependent variable = Foreign liabilities, as % of bank total liabilities</i>		
SANCTION _b × POST.FIRST _t	2.637*** (0.722)	-2.944*** (0.815)
SANCTION _b × POST.FIRST _t × DISTANCE _b	-1.280** (0.517)	-0.776 (0.537)
SANCTION _b × POST.FIRST _t × DISTANCE _b × ln OIL _{r(b)}	0.126** (0.057)	0.292** (0.115)
<i>N</i> obs	2,241	3,148
<i>N</i> treated / control banks	14 / 35	16 / 59
R^2_{within}	0.626	0.465
Mean distance (km): treated / control	284/904	929/1,183
Mean oil extrac. (mln tons): treated / control	20/10	0.7/10

Note: Bank FE, Month FE, and other bank-specific controls are included but not reported. Estimation window: $[t_1 - 24, t_1 + 24]$ months, where $t_1 = 2014M3$

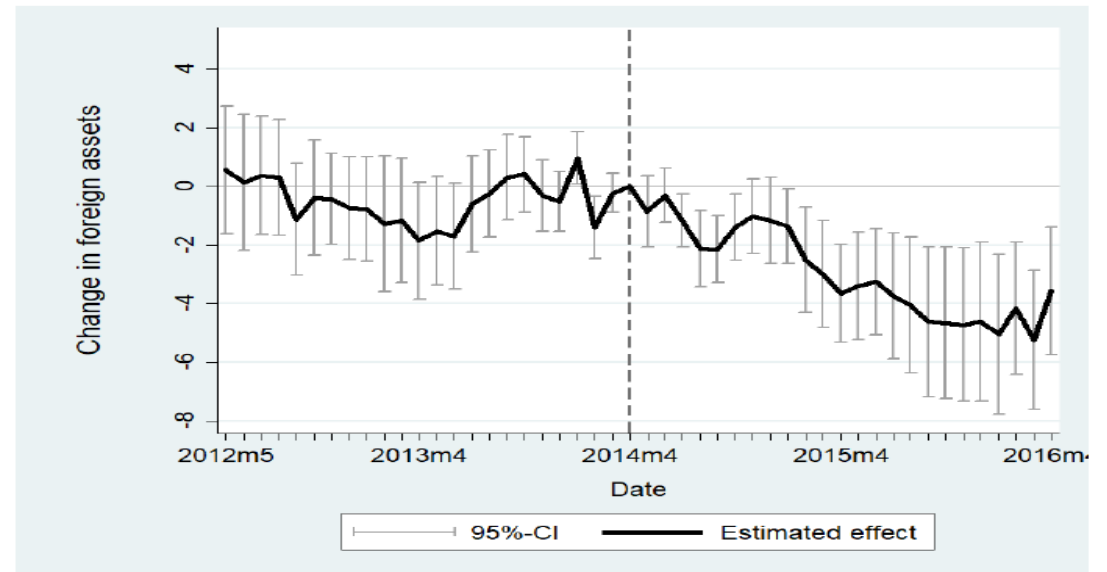
In-advance Adaptation: Foreign Asset Holdings

- **Event-study approach:**

$$Y_{b,t} = \alpha_b + \sum_{k=-24, k \neq 0}^{k=24} \beta_k \cdot \left(SANCTION_b \times \mathbf{1}_{t=k} \right) + \xi' \mathbf{X}_{b,t} + \varepsilon_{b,t}$$



(a) **Not yet debt-sanctioned banks:**
Foreign assets, % of bank total assets



(b) **Not yet asset-sanctioned banks:**
Foreign assets, % of bank total assets

Note: The figures report the event-study estimates on a time window of $[-24, 24]$ months around the sanction imposition on the bank “Rossiya” (i.e., March 2014 is $k = 0$). Sanctioned and never-sanctioned banks are matched over 2 years before $k = 0$.

Exploring Heterogeneity: Foreign Assets

Sanction bank type:	Not yet debt- sanctioned	Not yet asset- sanctioned
	(1)	(2)
<i>Panel 2: Dependent variable = Foreign assets, as % of bank total assets</i>		
SANCTION _b × POST.FIRST _t	−2.080*** (0.719)	−2.703** (1.030)
SANCTION _b × POST.FIRST _t × DISTANCE _b	−0.541 (0.619)	−0.829* (0.429)
SANCTION _b × POST.FIRST _t × DISTANCE _b × ln OIL _{r(b)}	0.029 (0.072)	0.056 (0.089)
<i>N</i> obs	2,241	3,105
<i>N</i> treated / control banks	14 / 35	16 / 59
R^2_{within}	0.637	0.261
Mean distance (km): treated / control	284/904	929/1,183
Mean oil extrac. (mln tons): treated / control	20/10	0.7/10

Note: Bank FE, Month FE, and other bank-specific controls are included but not reported. Estimation window: $[t_1 - 24, t_1 + 24]$ months, where $t_1 = 2014M3$

In-advance adaptation



Within two years after the 1st sanction announcement:

- Not yet debt-sanctioned banks

- ① raised, not reduced, their foreign borrowings: +2.1 pp
- ② decreased their foreign assets: -2.3 pp

Heterogeneity across space and oil extraction

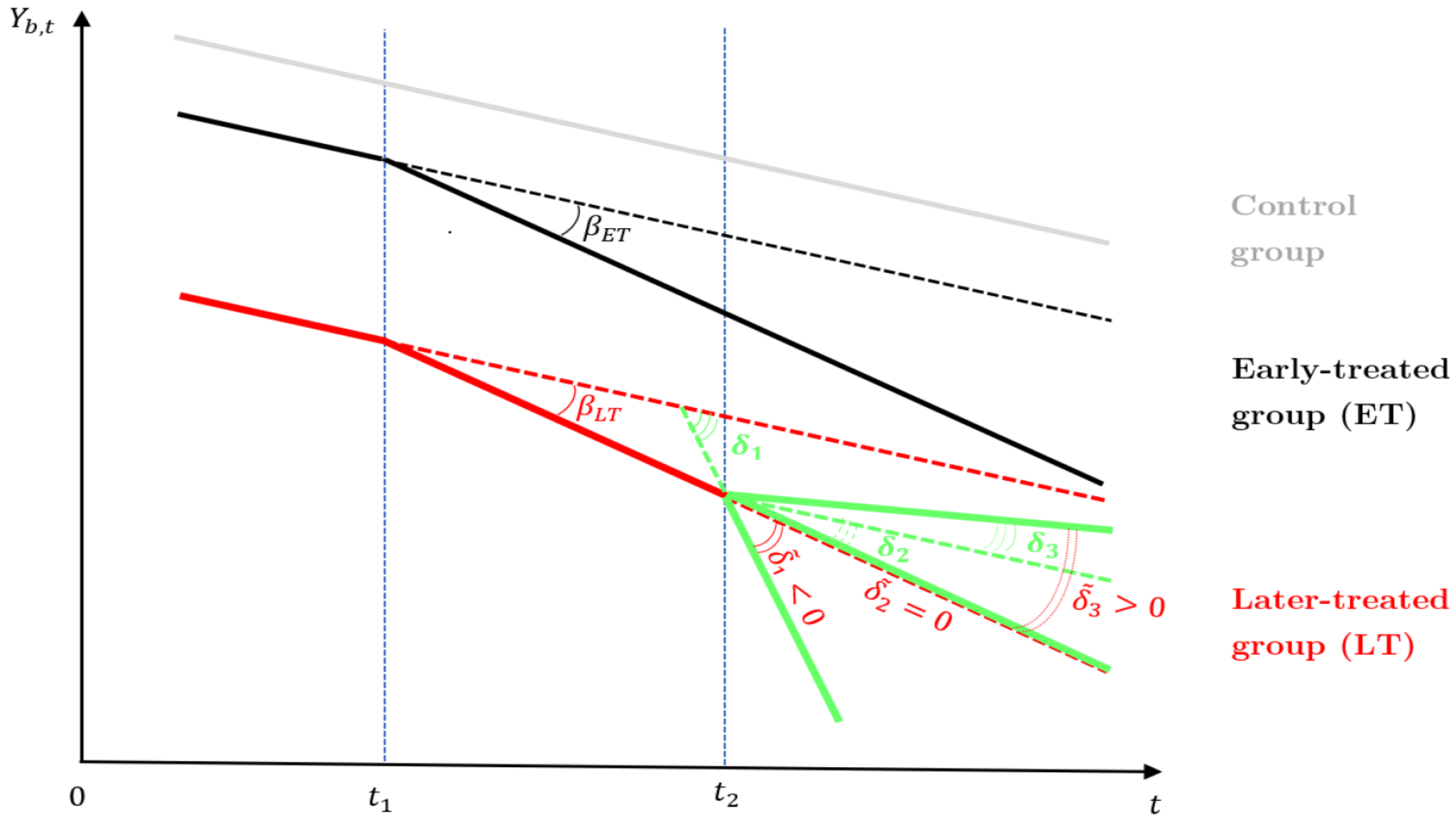
- Not yet asset-sanctioned banks

- ① reduced their foreign borrowings: -2.4 pp
- ② decreased their foreign assets: -2.4 pp

Heterogeneity across space and oil extraction

Part I.B

Added Value of Further Sanction Announcements



Sanction type:		Debt	Assets
		(1)	(2)
Panel 1: Dependent variable = Foreign liabilities, as % of bank total liabilities			
β	$\text{SANCTION}_b \times \text{POST.FIRST}_t$	3.959** (1.579)	0.409 (1.005)
δ	$\text{SANCTION}_b \times \text{POST.NEXT}_{b,t}$	0.155 (1.222)	-4.519*** (1.283)
<i>Added value of next sanction announcements:</i>			
	$\tilde{\delta} = \delta - \beta$	-3.804** (1.549)	-4.927*** (1.642)
N obs		4,549	6,040
R^2_{within}		0.330	0.249
Panel 2: Dependent variable = Foreign assets, as % of bank total assets			
β	$\text{SANCTION}_b \times \text{POST.FIRST}_t$	-0.846 (1.451)	-2.411*** (0.869)
δ	$\text{SANCTION}_b \times \text{POST.NEXT}_{b,t}$	0.958 (1.224)	-0.085 (0.833)
<i>Added value of next sanction announcements:</i>			
	$\tilde{\delta} = \delta - \beta$	1.804 (1.911)	2.325** (1.001)
N obs		4,549	6,040
R^2_{within}		0.214	0.146

Sanction type:		Debt	Assets
		(1)	(2)
Panel 1: Dependent variable = Foreign liabilities, as % of bank total liabilities			
β	$\text{SANCTION}_b \times \text{POST.FIRST}_t$	3.959** (1.579)	0.409 (1.005)
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N obs		4,549	6,040
R^2_{within}		0.214	0.146

In-advance Adaptation



- **Generically, three outcomes possible:**

- ① accelerated deterioration (*Added value* > 0)
- ② no change (*Added value* = 0)
- ③ partial rebound (*Added value* < 0)

- **Debt sanctions on foreign borrowings**

- ▶ were able to only offset the effect of 1st announcement (*Added value* > 0)

- **Asset sanctions on foreign assets**

- ▶ led to a partial rebound in asset purchases (*Added value* < 0)

- ① overselling before (fear motive)?
- ② evading sanctions after?

— consistent with the sanctions evasion by German banks. [Efing et al., 2019](#))

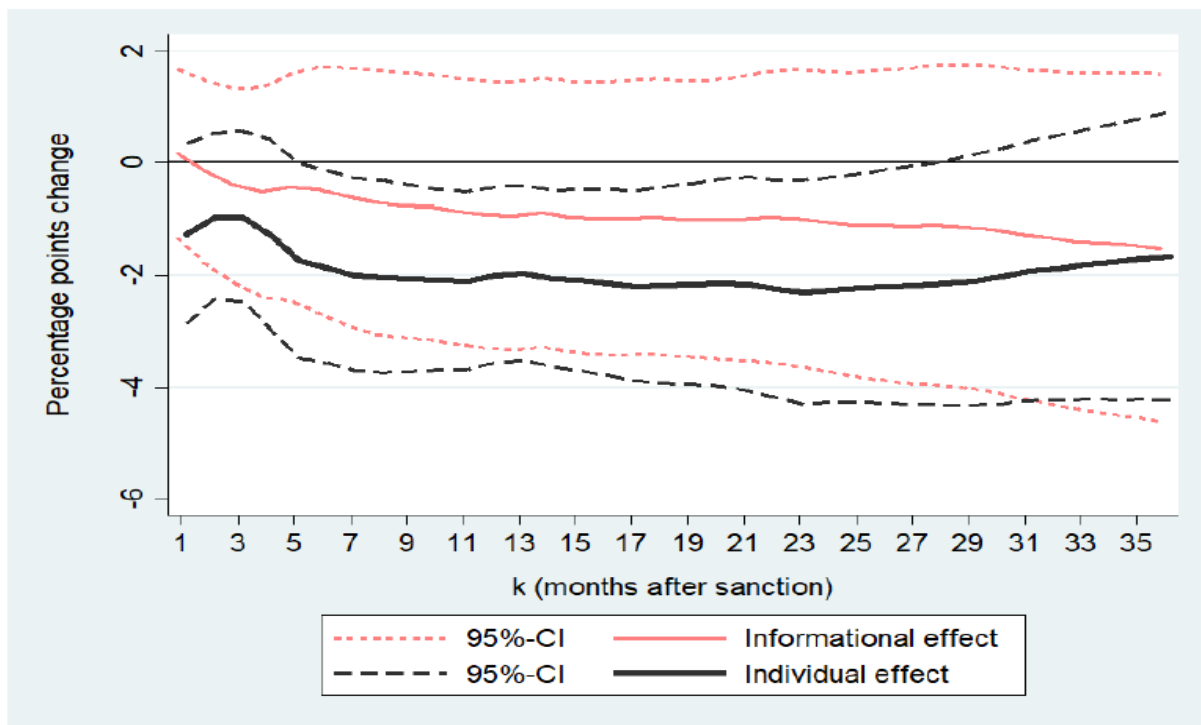
— ... and with evidence from media

Part I.C

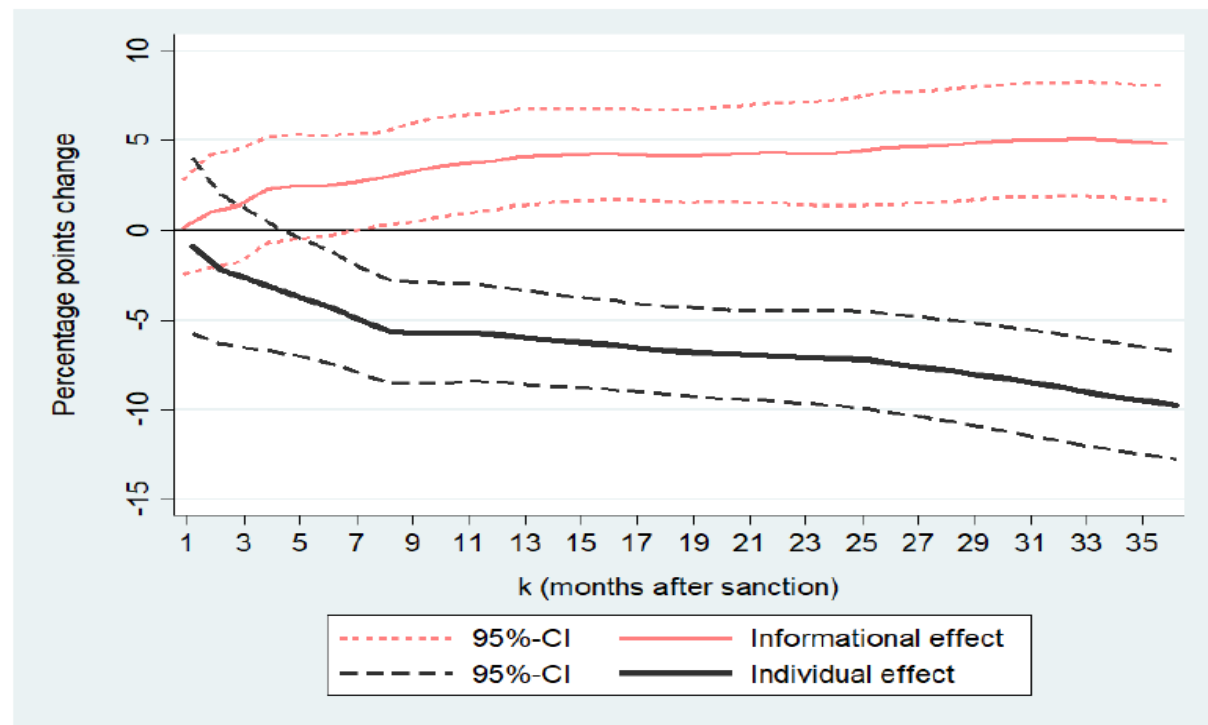
Credit Re-allocation

Secondary Effects: DID Estimates

(1) Domestic Private Depositors



(a) Private deposits, *type = debt*

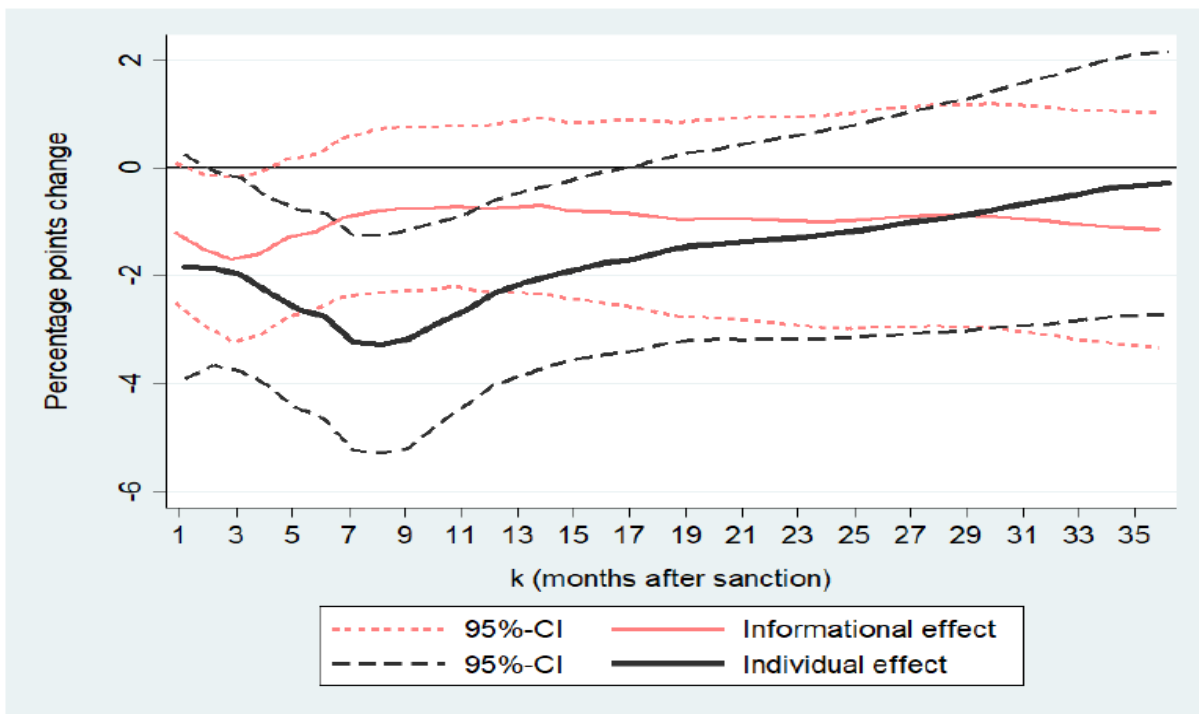


(b) Private deposits, *type = assets*

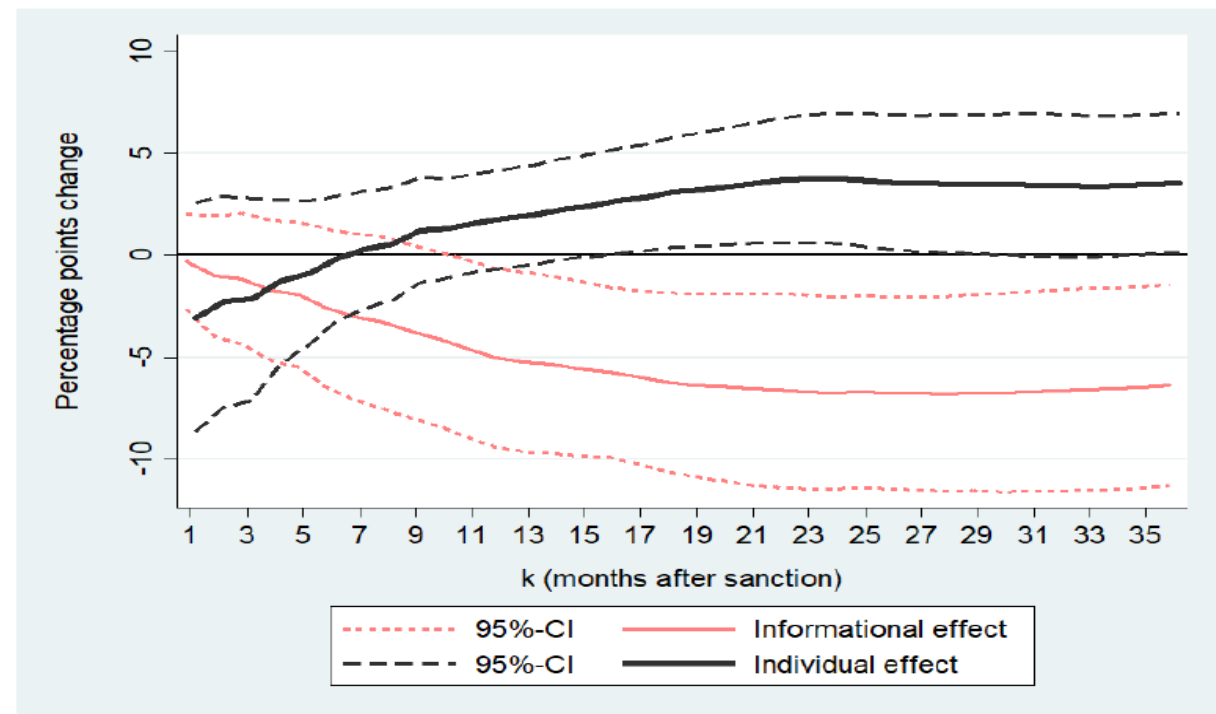
Note: The figures report the difference-in-differences estimates of the coefficients on $TREAT_i \times \mathbf{1}_{\{t \geq 2014M3\}}$ and $TREAT_i \times \mathbf{1}_{\{t \geq t_i\}}$. The estimates are obtained by running DiD on expanding window $[-k, k]$, where $k = 1, 2, \dots, 36$ months after either bank-specific sanction date (individual effects, black lines) or the date of sanctions against the bank "Rossiya" (informational effects, pale red lines).

Secondary Effects: DID Estimates

(3) Credit to Non-financial Firms



(a) Loans to firms, *type = debt*

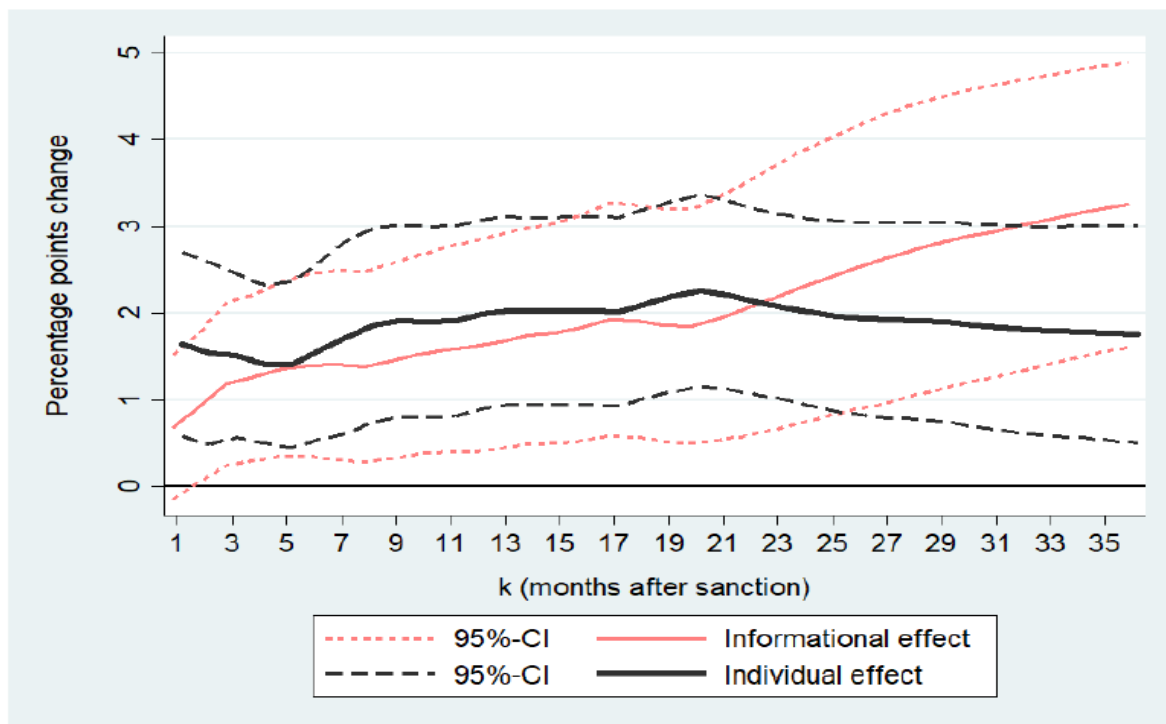


(b) Loans to firms, *type = assets*

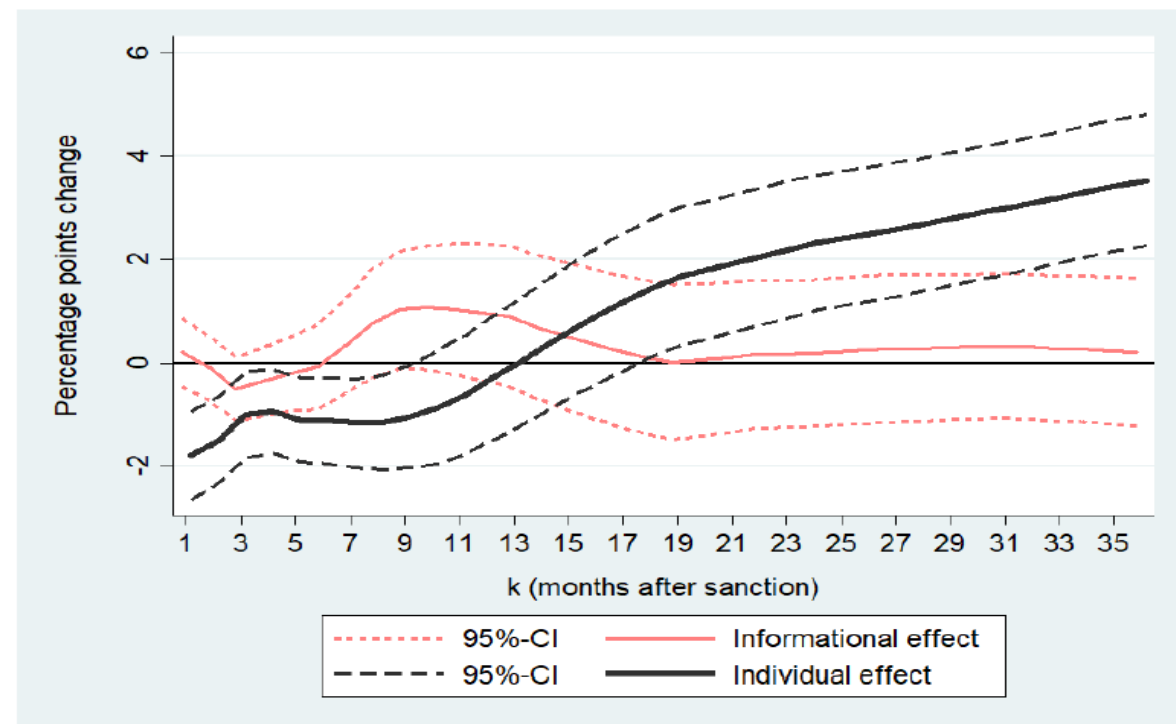
Note: The figures report the difference-in-differences estimates of the coefficients on $TREAT_i \times \mathbf{1}_{\{t \geq 2014M3\}}$ and $TREAT_i \times \mathbf{1}_{\{t \geq t_i\}}$. The estimates are obtained by running DiD on expanding window $[-k, k]$, where $k = 1, 2, \dots, 36$ months after either bank-specific sanction date (individual effects, black lines) or the date of sanctions against the bank "Rossiya" (informational effects, pale red lines).

Secondary Effects: DID Estimates

(4) Credit to Households



(a) Credit to households, *type = debt*



(b) Credit to households, *type = assets*

Note: The figures report the difference-in-differences estimates of the coefficients on $TREAT_i \times \mathbf{1}_{\{t \geq 2014M3\}}$ and $TREAT_i \times \mathbf{1}_{\{t \geq t_i\}}$. The estimates are obtained by running DiD on expanding window $[-k, k]$, where $k = 1, 2, \dots, 36$ months after either bank-specific sanction date (individual effects, black lines) or the date of sanctions against the bank “Rossiya“ (informational effects, pale red lines).

Estimated Effects on the Domestic Operations



- Regression results #1 **Private depositors:**
 - 1 No runs in advance
 - 2 Large runs after (-2 to -10%)
- Regression results #2 **Government:** Provided enough funds in advance
- Regression results #3 **Credit to non-financial firms:** -4.0% GDP
- Regression results #4 **Credit to households:** +4.1% GDP

- ▶ Credit re-shuffling from firms to households
- ▶ Government support channel matters

Part II

Treatment Diffusion to Private Banks

At Least 35 State-connected Banks Not Treated

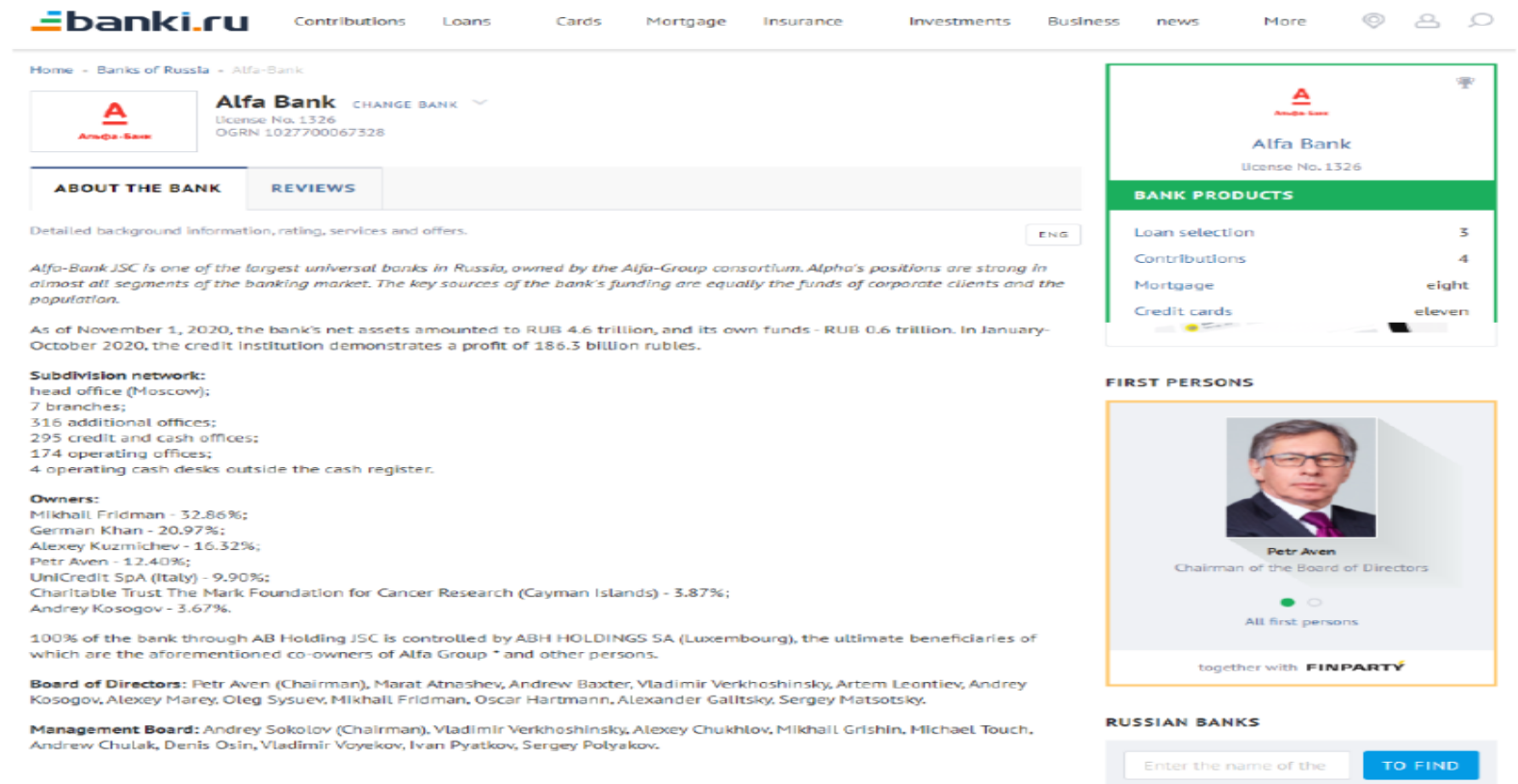
	Treated & Not state (N=17)			Treated & State (N=16)			Not treated & State (N=35)		
	$t \leq t_1$	$t > t_1$	Diff	$t \leq t_1$	$t > t_1$	Diff	$t \leq t_1$	$t > t_1$	Diff
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total assets (<i>TA</i>)	36	154	118	1,313	2,924	1,611	77	256	179
Foreign liabilities, % <i>TA</i>	2.6	2.7	0.1	9.6	7.2	-2.4	4	3.5	-0.5
Foreign assets, % <i>TA</i>	6.5	3.5	-3	12.5	8.1	-4.4	5	4.2	-0.8

Note: $t_1 = \text{March 2014}$, the date of the first sanction announcement. *TA* is measured in billion of Rubles. “Treated” stands for actually sanctioned banks. “Not treated” denotes potentially diffused banks. “State” implies a bank is in the [Karas & Vernikov \(2019\)](#) list of state-owned or -controlled banks.

Treatment Diffusion: How To Capture?

Person-level Data: Political Connections

- Bank profiles at <https://www.banki.ru> and the banks' annual reports:
 - Structure of the board of directors/owners



The screenshot shows the Alfa Bank profile on the website banki.ru. The page is titled "Alfa Bank" and includes a navigation menu with options like Contributions, Loans, Cards, Mortgage, Insurance, Investments, Business, news, and More. The main content area is divided into sections: "ABOUT THE BANK" and "REVIEWS". The "ABOUT THE BANK" section provides detailed background information, including the bank's license number (1326) and OGRN (1027700067328). It also mentions that Alfa-Bank JSC is one of the largest universal banks in Russia, owned by the Alfa-Group consortium. A table lists the bank's products: Loan selection (3), Contributions (4), Mortgage (eight), and Credit cards (eleven). The "FIRST PERSONS" section features a portrait of Petr Aven, Chairman of the Board of Directors, and a link to "All first persons". The "RUSSIAN BANKS" section includes a search bar for finding other banks.

Alfa Bank CHANGE BANK
License No. 1326
OGRN 1027700067328

ABOUT THE BANK **REVIEWS**

Detailed background information, rating, services and offers. ENG

Alfa-Bank JSC is one of the largest universal banks in Russia, owned by the Alfa-Group consortium. Alpha's positions are strong in almost all segments of the banking market. The key sources of the bank's funding are equally the funds of corporate clients and the population.

As of November 1, 2020, the bank's net assets amounted to RUB 4.6 trillion, and its own funds - RUB 0.6 trillion. In January-October 2020, the credit institution demonstrates a profit of 186.3 billion rubles.

Subdivision network:
head office (Moscow);
7 branches;
316 additional offices;
295 credit and cash offices;
174 operating offices;
4 operating cash desks outside the cash register.

Owners:
Mikhail Fridman - 32.86%;
German Khan - 20.97%;
Alexey Kuzmichev - 16.32%;
Petr Aven - 12.40%;
UniCredit SpA (Italy) - 9.90%;
Charitable Trust The Mark Foundation for Cancer Research (Cayman Islands) - 3.87%;
Andrey Kosogov - 3.67%.

100% of the bank through AB Holding JSC is controlled by ABH HOLDINGS SA (Luxembourg), the ultimate beneficiaries of which are the aforementioned co-owners of Alfa Group * and other persons.

Board of Directors: Petr Aven (Chairman), Marat Atnashev, Andrew Baxter, Vladimir Verkhoshinsky, Artem Leontiev, Andrey Kosogov, Alexey Marey, Oleg Sysuev, Mikhail Fridman, Oscar Hartmann, Alexander Gallitsky, Sergey Matsotsky.

Management Board: Andrey Sokolov (Chairman), Vladimir Verkhoshinsky, Alexey Chukhtov, Mikhail Grishin, Michael Touch, Andrew Chulak, Denis Osin, Vladimir Voyekov, Ivan Pyatkov, Sergey Polyakov.

Alfa Bank
License No. 1326

BANK PRODUCTS

Loan selection	3
Contributions	4
Mortgage	eight
Credit cards	eleven

FIRST PERSONS

Petr Aven
Chairman of the Board of Directors

All first persons

together with **FINPARTY**

RUSSIAN BANKS

Enter the name of the TO FIND

Person-level Data: Political Connections



- **Google search** on whether a person is connected with the government:
 1. the person is a federal or municipal minister
 2. or a senator, city mayor, regional governor from the ruling political party “Edinaya Rossiya” (literally, “United Russia”)
 3. or a governor of other already recognized state-controlled entity (e.g., Sberbank, Gazprom, VTB, Rosneft)
 4. Or belongs to oligarch families with ties to the Kremlin (e.g., Kovalchiuk, Rotenberg, etc.)

For each bank i at year t consider the composition of the board of directors and compute:¹

$$GovShare_{it} = \begin{cases} 0, & \text{by default} \\ \left(\frac{\text{Government-connected persons}}{\text{Total number of persons}} \right)_{it} \in (0, 1], & \text{if either:} \end{cases}$$

	Banks*	Mean	SD	Min	Max
	(1)	(2)	(3)	(4)	(5)
Asset-sanctioned: Treated & Not state	8 / 17	26.4	9.7	17	50
Debt-sanctioned: Treated & State	15 / 16	83.5	15.4	25	100
Diffused: Not treated & State	27 / 35	53.9	25.7	8	100

Note: "Treated" stands for actually sanctioned banks. "Not treated" denotes potentially diffused banks. "State" implies a bank is in the [Karas & Vernikov \(2019\)](#) list of state-controlled banks.

* In the "Obs" column we report for how many banks from a given subgroup we were successful in constructing the $GovShare_{it}$ variable.

Treatment Diffusion: How To Capture?

- **1st stage: time-varying logit models**

- ① Run a loop over $t = Apr.2014, May.2014, \dots, Jun.2019$:

$$\begin{aligned} Pr\{Sanctioned_{it} = 1 \mid X_{it}\} \\ = \Lambda\left(\beta_1 GovShare_{it} + \beta_2 DistToMoscow_i \right. \\ \left. + \beta_3 (GovShare_{it} \times DistToMoscow_i) + \gamma BankControls_{it}\right) \end{aligned}$$

Choice of bank controls

Hypotheses

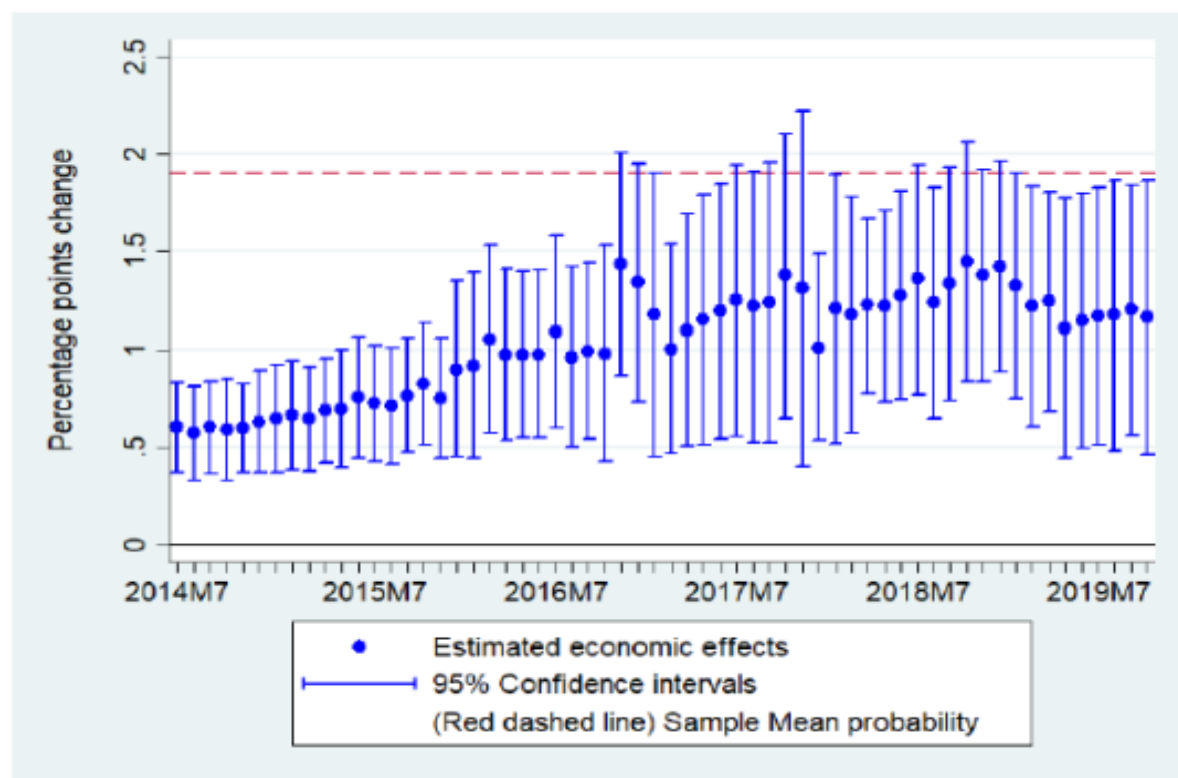
- ② For each bank i and each t predict the probability of being sanctioned,

$$\widehat{Pr}\{Sanctioned_{it} = 1 \mid X_{it}\}$$

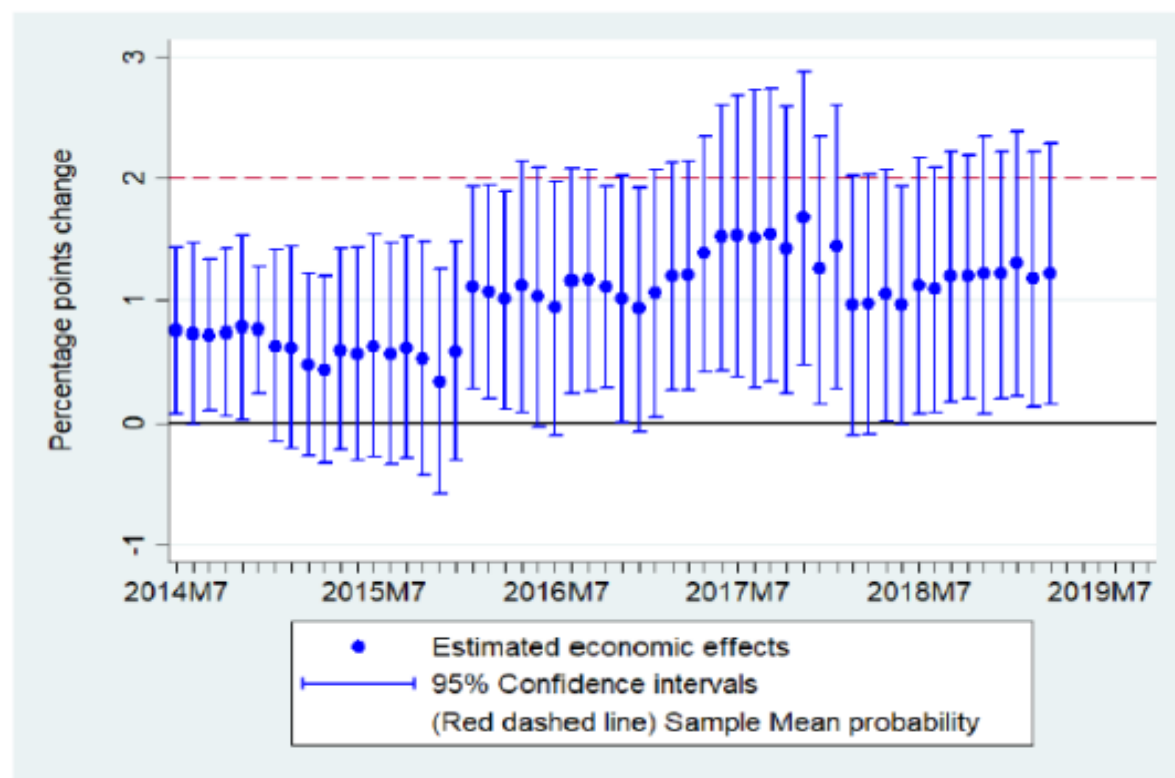
- ③ Find an appropriate threshold: “large” vs. “small” probability,

$$\overline{Pr} = \frac{\sum SanctionedBanks}{\sum SanctionedBanks + \sum NonSanctionedBanks}$$

Economic Significance of Political Connections



(a) Economic effects of $GovShare_{it}$ on $Pr\{DebtSanctioned_{it} = 1 \mid X_{it}\}$



(b) Economic effects of $GovShare_{it}$ on $Pr\{AssetSanctioned_{it} = 1 \mid X_{it}\}$

Note: Economic effect is computed as the product of the marginal effect of the $GovShare_{it}$ on $Pr\{Sanctioned_{it} = 1 \mid X_{it}\}$ and a one standard deviation of the $GovShare_{it}$ variable.

$DistanceToMoscow_j$ is set at zero (i.e., consider banks with headquarters in Moscow).

* $GovShare_{it} = 0$ or $GovShare_{it} \in (0, 1]$

DID with Treatment Diffusion

- **2nd stage: Diff-in-Diff equation with extended treatment group:**

$$\begin{aligned} FDY_{it} = & \beta_1 \left(TREAT.DIFFUSION_{it} \times \mathbf{1}_{\{t \geq 2014M3\}} \right) \\ & + \beta_2 \left(TREAT.DIFFUSION_{it} \times \mathbf{1}_{\{t \geq 2014M3\}} \times DISTANCE_i \right) \\ & + [ProductComponents_{it}] + \sum_{r=1}^R \xi_r BSF_{it}^{(r)} + \alpha_i + \gamma_t + \varepsilon_{it}, \\ & \text{if } t \in [t_1 - k, t_1 + k] \end{aligned}$$

where:

- ▶ t_1 is March 2014
- ▶ i is either actual sanctioned (S), diffused (D) or control (C) bank
- ▶ $i \in D$ at t if $\widehat{Pr}\{Sanctioned_{it} = 1 \mid X_{it}\} \geq \overline{Pr}$
- ▶ Treatment intensity:

$$TREAT.DIFFUSION_{it} = \begin{cases} \widehat{Pr}\{Sanctioned_{it} = 1 \mid X_{it}\}, & \text{if } i \in \langle S, D \rangle \text{ at } t \\ 0, & \text{if } i \in C \text{ at } t \end{cases}$$

Sanction type:	Debt sanctions			Assets sanctions		
	Treatment:	Diffused	Actual	Actual + Diffused	Diffused	Actual
	(1)	(2)	(3)	(4)	(5)	(6)

Panel 1: Dependent variable = *Foreign liabilities*, as % of bank total liabilities

SANCTION.DIFFUS _b × POST.FIRST _t	1.960** (0.545)	2.138*** (0.649)	1.270** (0.890)	0.315 (0.336)	-2.354*** (0.634)	-0.473 (0.390)
<i>N</i> obs	2,707	2,241	4,400	2,569	3,148	4,863
<i>N</i> treated / control banks	13 / 54	14 / 35	27 / 100	13 / 53	16 / 59	29 / 99
<i>R</i> ² _{within}	0.547	0.620	0.457	0.305	0.457	0.261

Panel 2: Dependent variable = *Foreign assets*, as % of bank total assets

SANCTION.DIFFUSE _b × POST.FIRST _t	-0.721 (0.682)	-2.306*** (0.516)	-0.911* (0.554)	-1.444** (0.646)	-2.384*** (0.786)	-2.366*** (0.580)
<i>N</i> obs	2,707	2,241	4,400	2,540	3,105	4,767
<i>N</i> treated / control banks	13 / 54	14 / 35	27 / 100	13 / 53	16 / 59	29 / 99
<i>R</i> ² _{within}	0.382	0.636	0.426	0.273	0.249	0.229

Note: Estimation window is [*t*₁ - *k*, *t*₁ + *k*], where *t*₁ = 2014M3 and *k* = 24 months.

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	Treatment:	Diffused	Actual	Actual + Diffused	Diffused	Actual	Actual + Diffused
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Note: Estimation window is [t₁ - k, t₁ + k], where t₁ = 2014M3 and k = 24 months.

Treatment Diffusion

A graphic with the words "TAKE AWAY" in a stylized font. "TAKE" is in white on a black background, and "AWAY" is in red on a white background. The graphic is set against a textured orange background.

- **35 private banks with political connections revealed.**
Never faced sanctions but...
- **... for 26 of them we have bank-level data, and we find:**
 - ① **13** were anticipating **debt sanctions**:
they were raising foreign borrowings after the 1st sanction announcement
 - ② and another **13** were anticipating **asset sanctions**:
they were selling foreign assets in advance
 - ③ quantitatively, diffusion effects \leq the baseline effects (but still significant!)

Part III

Transmission of Sanctions from Banks to Firms: Evidence from Syndicated Loan Data

Two Questions

1. Reduction of loan supply to corporate borrowers?
2. If so, how it affects the borrowers' performance?

Dependent variable: $\ln(\text{Loan}_{b(s),f,t})$	US + EU sanctions		Ukrainian sanctions	
	(1)	(2)	(4)	(5)
$\text{SANCTION}_b \times \text{POST.FIRST}_t$	-0.227**	-0.235**	-0.019	-0.017
$\text{SANCTION}_b \times \text{POST.NEXT}_{b,t}$	-0.015	-0.011	-0.221	-0.242
$\text{SANCTION}_f \times \text{POST.FIRST}_t$	-2.062***	-2.065**	-0.207	-0.205
$\text{SANCTION}_f \times \text{POST.NEXT}_{b,t}$	<i>n/a</i>	<i>n/a</i>	0.230	0.286*
$\text{SANCTION}_b \times \text{POST.FIRST}_t \times \text{SANCTION}_f$	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
$\text{SANCTION}_b \times \text{POST.NEXT}_{b,t} \times \text{SANCTION}_f$	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
Bank control variables		Yes		Yes
log of loan maturity $_{b(s),f,t}$	2.028***	2.031***	2.028***	2.030***
Industry \times Month FE	Yes	Yes	Yes	Yes
Bank group FE	Yes	Yes	Yes	Yes
<i>N</i> obs	335	330	335	330
R^2	0.832	0.831	0.832	0.831

$$\begin{aligned} \ln(Y_{f,t}) = & \alpha_f + \gamma_t + \beta_1 \cdot \left(SANCTION_{b(f)} \times POST.FIRST_t \right) \\ & + \beta_2 \cdot \left(POST.FIRST_t \times SANCTION_f \right) \\ & + \beta_3 \cdot \left(SANCTION_{b(f)} \times POST.FIRST_t \times SANCTION_f \right) \\ & + Controls_{f,t-1} + \varepsilon_{f,t} \end{aligned}$$

Dependent variable: $\ln Y_{f,t} =$		$\ln(\text{Total Assets})$	$\ln(\text{Invest})$	$\ln(\text{Employ})$	$\ln(\text{Revenue})$
		(1)	(2)	(3)	(4)
β_1	$SANCTION_{b(f)} \times POST.FIRST_t$	-0.059 (0.143)	0.217 (0.153)	-0.132 (0.264)	-0.092 (0.159)
β_2	$POST.FIRST_t \times SANCTION_f$	0.142** (0.065)	0.398* (0.208)	0.463** (0.233)	-0.184* (0.104)
β_3	$SANCTION_{b(f)} \times POST.FIRST_t \times SANCTION_f$	-0.428** (0.204)	-0.540** (0.264)	-0.741** (0.352)	-0.672*** (0.193)
N obs		433	389	328	408
R^2_{within}		0.480	0.056	0.519	0.460

From Banks to Firms?



- *Not yet* sanctioned banks reduce the loan supply by 20% **after the first announcement**
- Non-trivial transmission to the balance sheets of firms:
 - *sanctioned bank – sanctioned firm*: Employment, Investment and Revenues decrease by more than 40%
 - *unsanctioned bank – sanctioned firm*: Employment, Investment increase by more than 50% while Revenues contract by almost 20%

Tentative conclusions

Ia. Staggered implementation of a reform: In-advance adaptation matters

- Unintended effect: *Not yet debt-sanctioned banks* were raising (!) their foreign debts
- Intended effect: *Not yet asset-sanctioned banks* were (over-)selling their foreign assets
- Geographical location of banks & oil extraction affect in-advance adaptation

Ib. Staggered implementation of a reform: Limited value added of further policy Announcements

Ic. Credit re-shuffling: from firms (-4% GDP) to individuals (+4.1% GDP)

II. **Treatment diffusion:** private banks with *unrecognized* political connections also adapted their operations as though they were anticipating **debt** / **asset** sanctions

III. **Negative real effects at the firm level:** “when sanctioned meets sanctioned”

Two Extras

-- *Based on Two Other Papers* --

- **Was the Russian banking sector hardened purposefully to weather sanctions?**

- Maybe? In 2013, the Central Bank of Russia (Nabiullina) started revoking licenses from fraudulent banks. By 2020, two thirds of all operating banks had been shuttered.
 - Leads to an increase in corporate borrower performance (shown with CBR credit register data).

Goncharenko, Roman, Mikhail Mamonov, Steven Ongena, Svetlana Popova, and Natalia Turdyeva, 2022, Quo Vadis? Evidence on new firm-bank matching and firm performance following “sin” bank closures, February, CEPR DP 17015

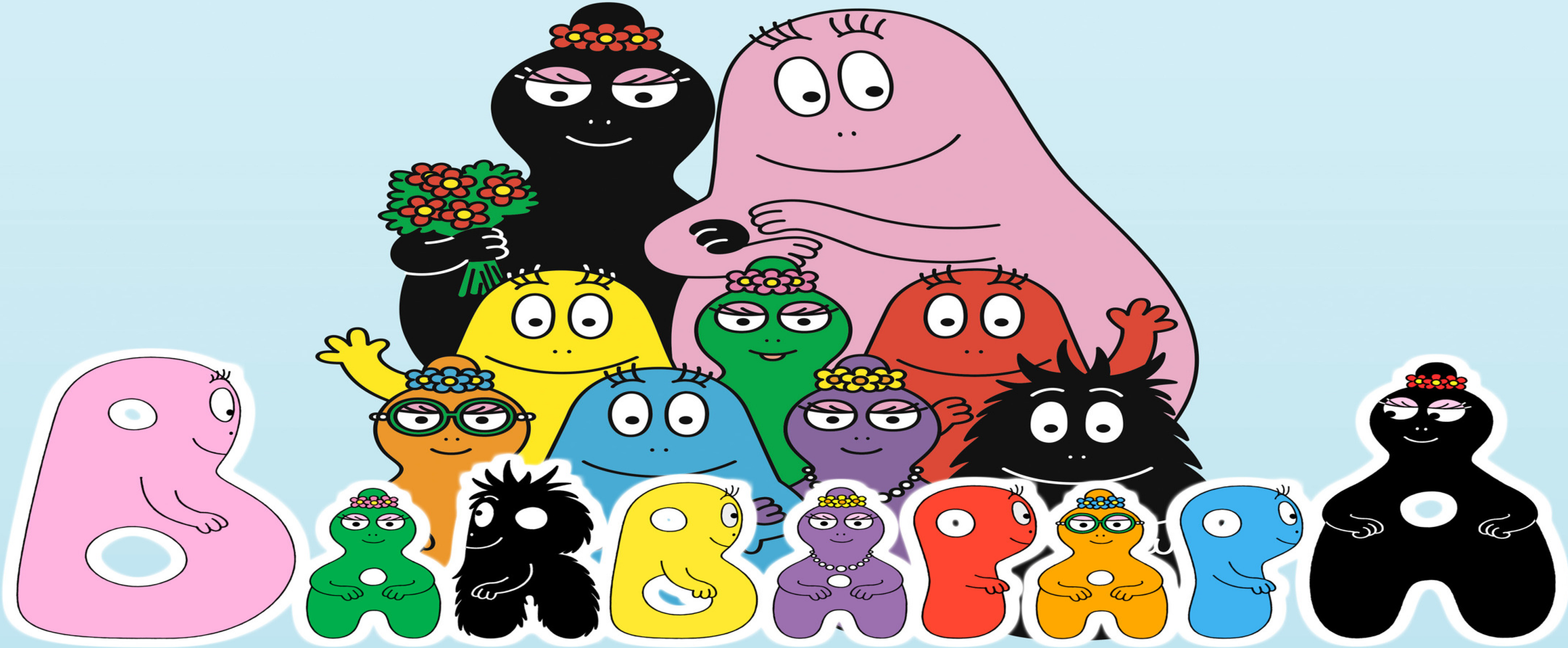
- **Energy and Kremlin-connected oligarch firms were unaffected by two decades of sanctions, and Russian firms were seemingly were prepared for the Crimea event and the Ukraine war.**

Huynh, Toan L.D., Khanh Hoang, and Steven Ongena, 2023, The impact of foreign sanctions on firm performance in Russia, February, CEPR DP 17415

Epilogue

-- Admittedly a Bit Regressive --

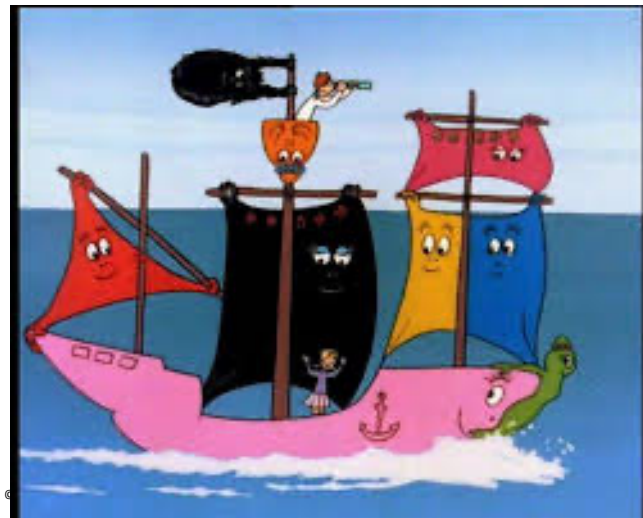
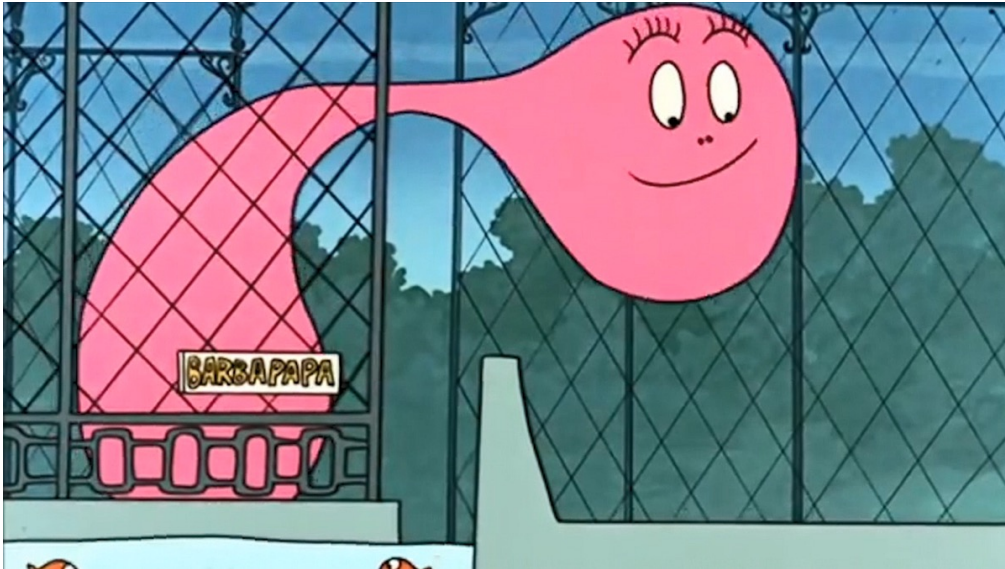
Banks Are Like Barbapapas ...



AND FAMILY!

SEASON #01

Impose Sanctions And They Show Their Agility in Avoidance, Anticipation, and in Flight

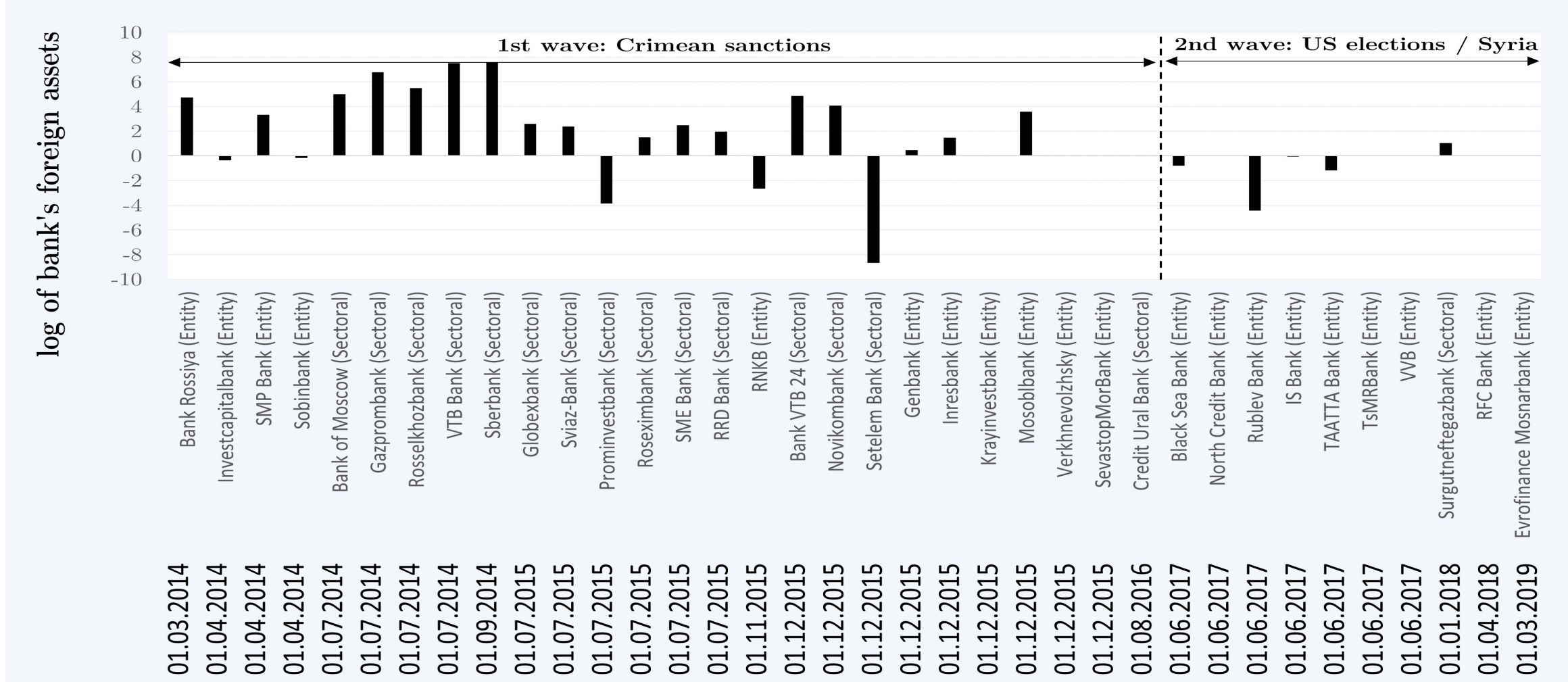


Hence the Risk is Always There That Imposing Sanctions on Banks
Becomes a Circus

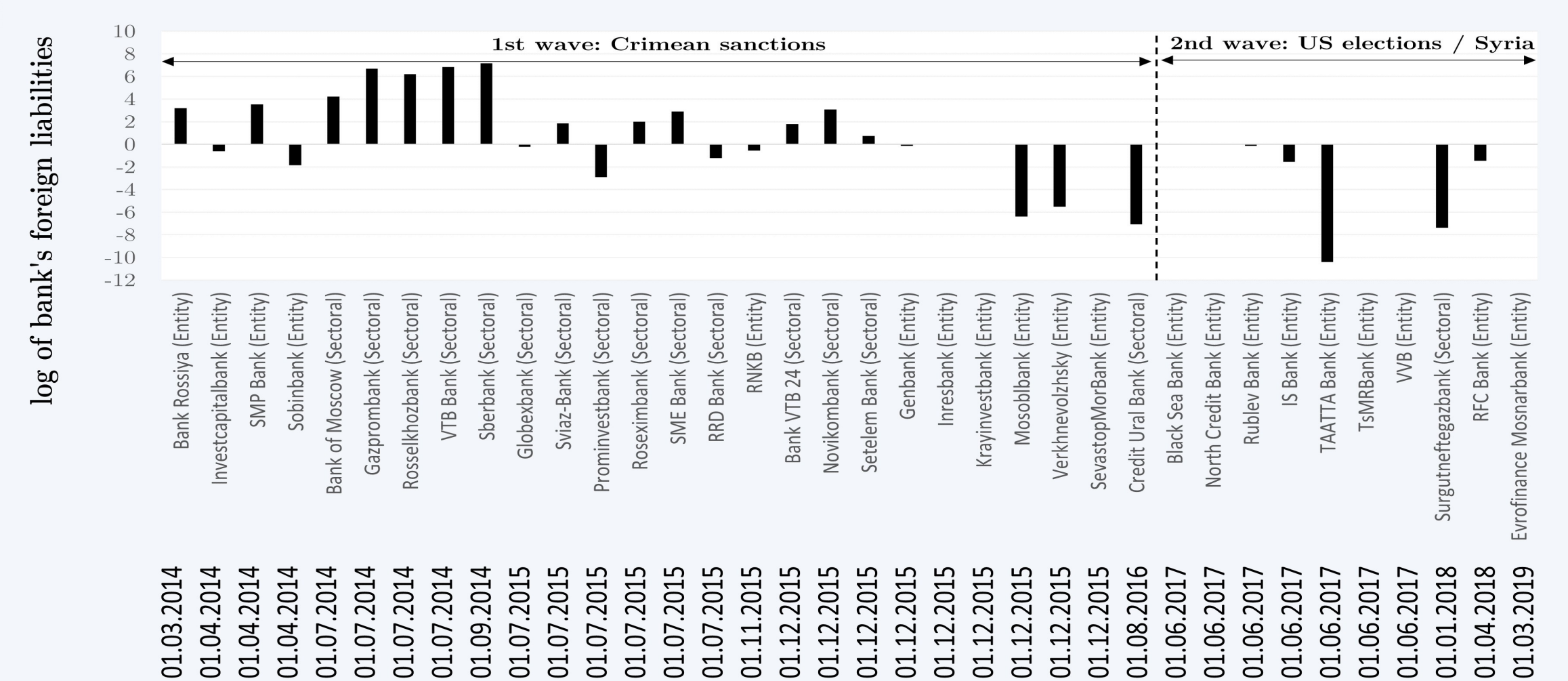


Appendix

Predictability of the Sanctions: Foreign Assets



Predictability of the Sanctions: Foreign Liabilities



Predictability of the Sanctions: Political Connectedness

