“Can Trade Sanctions Be Enforced?”

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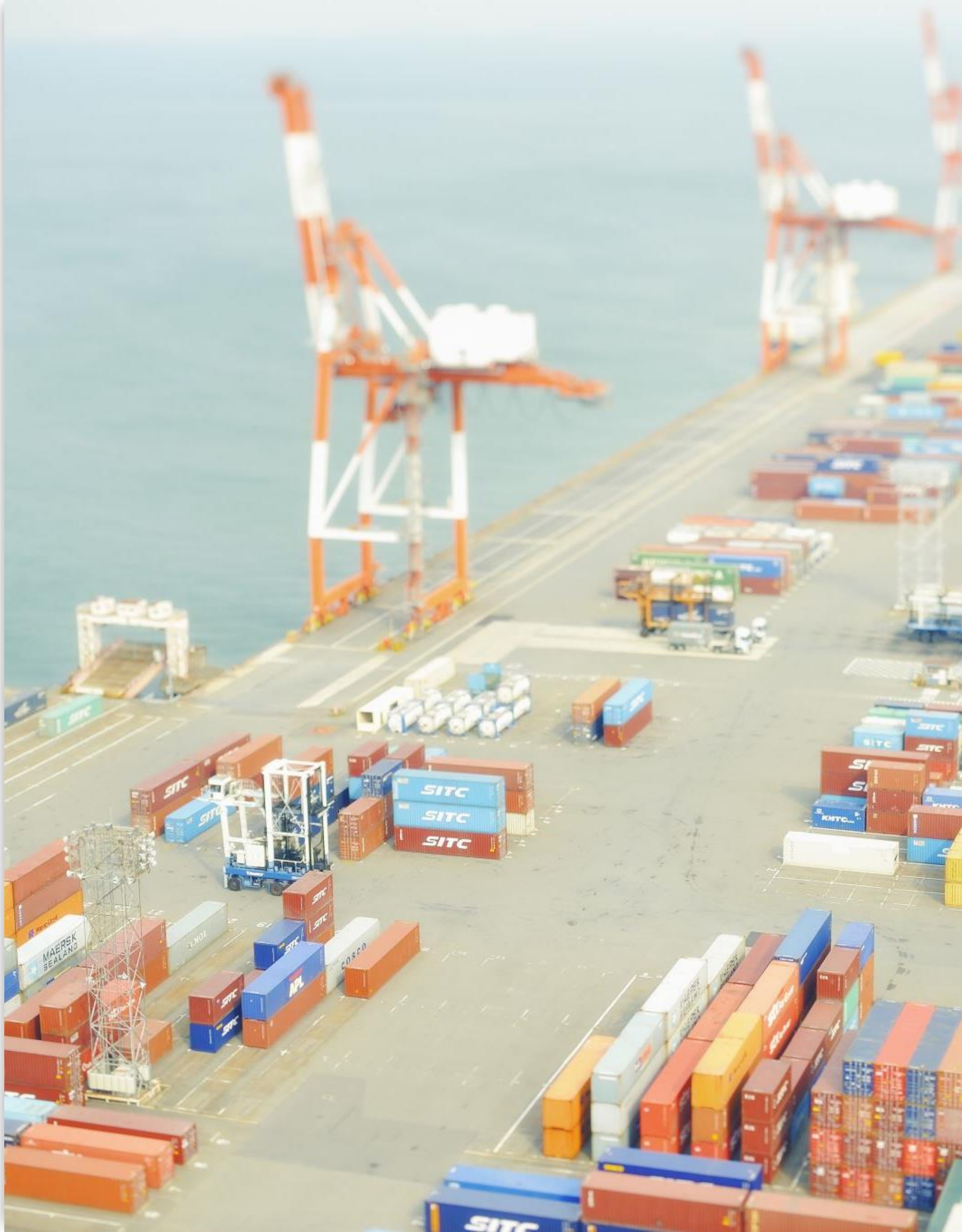
Trade Sanctions

- National governments use economic sanctions to deal with challenges such as terrorism and conflict.
- US-EU place restrictions on companies that provide services such as shipping and insurance to Russian oil exporters
- EU-G7 restrict their financial companies from dealing with “bad actor” countries including Russia and North Korea



OFAC: Primary Enforcer of Sanctions in the USA

- OFAC = Office of Foreign Assets Control
- OFAC posts on its website sanctions regulations
- OFAC announces on its website civil penalties to companies violating sanctions
- During 2003-2023 OFAC's average penalty is about $18 million
- Recalling Becker (1968), these penalties seems too small to deter companies from violating sanctions regulations

OFAC Penalties for Most Highly Penalized Companies
(millions of dollars)

Company	Average penalty: 2000-2024	Largest OFAC penalty: 2003-2023
Bank of America	266	17
JP Morgan Chase	217	88
Citi Group	184	0.22
Deustche Bank	230	0.58
Natwest Group	527	33.1
Wells Fargo	83	30
Morgan Stanley	58	0.003

Data sources: Violation and Tracker and the OFAC website

Testing for Deterrence

- Reputational losses can be an important deterrent to misconduct (Klein and Laffler, 1981; Shapiro, 1983; Karpoff, 2012, Armour et al, 2017)
- Reputation loss is the decline in market value exceeding the legal costs following the "news" that a company violated sanctions
- As will be explained soon, the way in which OFAC enforces sanctions makes it possible to credibly estimate reputation losses during a short announcement window
- However, a strong deterrent should also impose some real longer run costs on non-compliers!

Effective Deterrents

- A violation and penalty should be public information
- A penalty should be sufficiently large in the spirit of Becker (1968)
- <u>Lessons from studies of corporate crimes: </u>a non-complier company's losses from misconduct that have direct harmful effects on its customers, suppliers, or investors are large and significant
- However, losses from misconduct affecting parties that do not suffer substantial material losses such as the public at large are small and insignificant (Karpoff and Lott, 1993; Murphy et al., 2009)
- Are responses to violations of sanctions different than to corporate crimes? "French Roast" paper in *ReStat* (2016) – US consumers buy less French-sounding brands in response to US-French dispute over the Iraq war

Hart et al (2024)

- Estimate willingness of agents to bear the cost of exiting from US firms legally operating in Russia using an online experiment
- Find that small shareholders are willing to sell shares (conditional on costs) for moral reasons;
- however, willingness of morally concerned shareholders is lower than customers or employees who are more directly affected
- => there can be reputation losses for moral reasons, even though such losses are more profound for agents who are more directly affected

Moral Sentiments versus a Direct Welfare Effect

- Moral Sentiments: Non-complier company has transactions with a ”Bad Actor”. As proposed by Early and Preble (2020), bad actors include the Taliban, Iran, North Korea, Belarus, Syria and Russia once it invaded Ukraine in 2014 and trading partners who are considered terrorists.
- Direct Negative Welfare Effect. Non-complier company had transactions with a narcotics deal or drug kingpin.

Is OFAC’s Announcement Unanticipated?

- Information misconduct and expected penalties for companies “can stretch over several years” (Karpoff, Koester, Lee, and Martin, 2014; p. 3) and so actual penalties are often anticipated.
- OFAC penalties are announced only after OFAC has completed its investigation.
- OFAC investigations are not publicly discussed; and, once a penalty is determined and announced, there is no appeal (the one exception is Exxon in 2020).
- OFAC’s procedures are similar to the now defunct procedures of the Financial Services Authority (FSA) and the London Stock Exchange (LSE) in the U.K. as described in Armour et al, 2017)

Validating Announcements are Unanticipated

- Limit sample to listed financial firms
- There are 42 companies, 12 multiple offenders and 77 penalty announcements
- SEC requires corporations operating in USA to reveal "probable and reasonably estimable" expected legal costs in quarterly and yearly filings
- Checked one 10K and three 10Q forms filed by US corporations and the 20F form filed by foreign companies operating in the USA the year preceding the penalty announcement
- Expected penalties from OFAC are rarely discussed and if so, there is no mention of expected legal costs (Exception is Airbnb in 2022)

OFAC's Timing

- There is a "benefit-period" where a company makes money from activities such as money laundering or issuing trade credits that violate OFAC sanctions
- The "benefit period" typically occurs years before the penalty announcement
- There is an "adjustment-period" where the the company has ended its illegal activities and has devoted more resources to strengthening OFAC compliance
- The adjustments occur are completed generally long before the OFAC penalty is announced

Example - Nasdaq INC

Benefit-period: December 2008– September 2014

- Nasdaq acquires Mellat Armenia which owns the Armenian stock exchange and is renamed Nasdaq OMX Armenia.
- Nasdaq OMX Armenia engaged in 151 apparent violations of OFAC Iran sanctions with a total face value of $228 million US.

Adjustment Period: October 2014– December 7, 2023

- Nasdaq divests its ownership stake in Nasdaq OMX Armenia;
- creates a dedicated sanctions working group, implements a new training program, enhances screening software, and assesses its compliance programs.

Announcement: December 8, 2023 – penalty is about 4 million

Estimating Reputation Losses

- Standard Capital Asset Pricing Model
- i, t denote a company and a date (trading days):

  t = 0 is the penalty announcement date.
- R_{it} = company i's daily return at date t
- R_t^m, R_t^f = risk free and overall stock market returns at t
- Estimate for each of the 77 i's during t ∈ [-262,-11]
- $R_{it} - R_t^f = \alpha_i + \beta_i(R_t^m - R_t^f) + \epsilon_{it}$, where
- ϵ_{it} = the stochastic error terms

Excess Returns

- Estimated during a short window: $t \in [-10,+9]$
- Let the expected excess returns without announcements be

$$\hat{E}[R_{it} - R_t^f] = \hat{\alpha}_i + \hat{\beta}_i(R_t^m - R_t^f)$$

- Then, unexpected changes in excess returns is given by

$$Y_{it} = [R_{it} - R_t^f] - \hat{E}[R_{it} - R_t^f]$$

- Now define $D_{it} = 1$ for $t \in [0,9]$, and $D_{it} = 0$ for $t \in [-10,-1]$,

1. Was there an announcement effect?
2. If so, how strong was it?
3. And, if so, were there reputation effects?

Set up

- Simplest model
- $Y_{it} = \gamma + \delta D_{it} + \varepsilon_{it}$, where H_1 is δ=0, and

  We fail to reject H_1.
- Model with penalty size
- Let $Big\_penalty_i$ = size of penalty in top quartile
- $Y_{it} = \gamma + \delta D_{it} + \zeta D_{it} Big\_penalty_i + \varepsilon_{it}$, where H_2 is δ=0, H_3 is ζ=0

  We fail to reject H_2 and reject H_3 (p-value<0.05) and $\hat{\zeta} < 0$.

$\Rightarrow$ market responds to big penalties in the range of \$0.15 ~ \$619 million and ignores the smaller ones.

$\Rightarrow$ results are robust to control for violations with bad actors (moral sentiments) and violations with narcotics dealers (more direct welfare effects).

Reputation Losses

- Compute the cumulative abnormal return, CAR_i, for companies subjected to big penalties:
- $CAR_i = 10\zeta * Big\_penalty_i < 0$ and
- $Big\_penalty_i > 0$
- $Reputation\ loss_i = CAR_i * Market\ value_i + Big\_penalty_i$
- Test H_3: $Reputation\ loss_i = 0$
- Reject H_3 in 18/19 cases.

Reputation Losses, continued

- Average is 2.3% of market value.
- J.P. Morgan Chase in 2011: Market value plunges by over $4.5 billion and reputation loss is 2.8% of market value
- Fined $88.3 million for trade loans and wire transfers to Cuba, Iran, Liberia and Sudan and for
- facilitating the illegal proliferation of weapons of mass destruction.
- ING has the largest reputation loss (17.8% of market value).

Does the Reputation Loss Persist?
Match Penalized Companies with Peers

Penalized Company	Penalty Date	Clean peers	Dirty peers	Total Peers
AMERICAN EXPRESS CO	2017-11-17	3	5	8
AMERICAN EXPRESS CO	2022-07-15	5	9	14
AMERICAN INTERNATIONAL GROUP	2014-05-08	12	3	15
BANK OF AMERICA CORP	2003-11-07	0	0	0
BANK OF AMERICA CORP	2014-07-24	1	1	2
CITIGROUP INC	2014-09-03	1	1	2
DEUTSCHE BANK AG	2020-09-09	0	0	0
HSBC HLDGS PLC	2012-12-11	0	0	0
ING GROEP NV	2012-06-12	5	0	5
JPMORGAN CHASE & CO	2011-08-25	2	2	4
JPMORGAN CHASE & CO	2018-10-05	1	1	2
KEYCORP	2008-02-01	6	0	6
LLOYDS BANKING GROUP PLC	2009-01-09	0	1	1
NASDAQ INC	2023-12-08	9	2	11
NATWEST GROUP PLC	2013-12-11	0	0	0
POPULAR INC	2022-05-27	14	0	14
TORONTO DOMINION BANK	2017-01-13	1	0	1
WELLS FARGO & CO	2023-03-30	1	1	2
WESTERN UNION CO	2019-06-07	7	3	10

Model	(1)	(2)
Dependent Variable	EIBT/Sales	EIBT/Sales
Sample	Clean Peers	All Peers
Post-penalty periods:		
Short term (1 year post penalty)	-0.070***	-0.075***
	(0.018)	(0.019)
Medium term (2-4 years post)	-0.060***	-0.058***
	(0.013)	(0.013)
Long term (5 or more years post)	-0.013	0.005
	(0.010)	(0.010)
Controls:		
Quarter fixed effects	Yes	Yes
Group fixed effects	Yes	Yes
Pre-cheating period	Reference	Reference
Cheating period	Yes	Yes
Adjustment period	Yes	Yes
Groups	14	15
Clusters (quarters and groups)	1,376	1,443
Observations	7,680	10,004
R-squared	0.283	0.227

Interpretations

Sanctions have a persistent effect for a period of four years after the announcement.

Quantitative effects are substantial: about 31% and 27% of a sample standard deviation in EBIT/sales in the short and medium run compared to clean peers.

Results are similar when the comparison companies include clean and dirty peers

Moral Sentiments versus Welfare Losses

- Morality: Split the groups by penalized companies that have transactions with and without bad partners. Results are similar.
- Direct Welfare Losses: Split the groups by penalized companies that have transactions with and without narcotic dealers. Both sets of groups exhibit losses in EBIT/sales in the short and medium run. However, only the narcotics groups exhibit losses five and more years after the penalty announcement
- The long run quantitative losses are substantial: roughly 24% of a sample standard deviation

Conclusions: OFAC Penalties are Deterrents

- They impose substantial short run reputation losses when they are big enough
- This is surprising because about half the big penalties are less than a million dollars
- Penalties inflict financial costs persisting four years after the announcement for violations with bad partners and narcotics dealers
- Companies penalized for working with narcotics dealers suffer financial losses persisting for at least five years