DIW Weekly Report 21 2022

AT A GLANCE

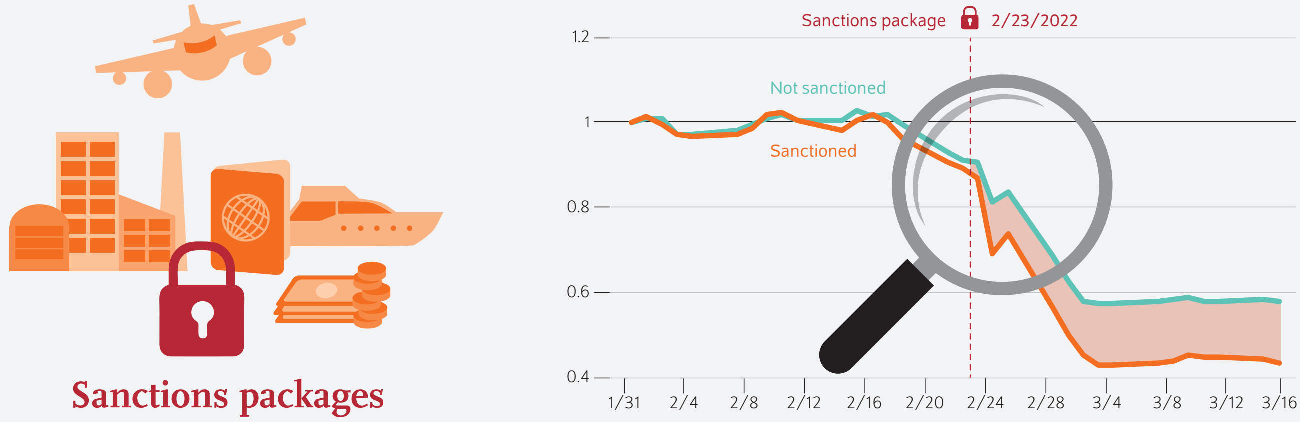
Sanctions against Russian oligarchs also affect their companies

By Franziska Bremus and Pia Hüttl

- Part of the EU's sanctions package against Russia includes sanctions against individuals, such as politicians and oligarchs
- Study examines how stock returns of companies run by sanctioned oligarchs performed in the days after the sanctions were announced
- Firms with sanctioned oligarchs experienced significantly greater stock price declines than companies with non-sanctioned oligarch executives
- Thus, sanctions against oligarchs have negative economic effects beyond the personal level
- Different lists of sanctioned oligarchs could be harmonized and expanded to exert more pressure

Firms with sanctioned oligarchs on their board experienced stronger losses in firm value than firms without sanctioned executives

Evolution of cumulated stock returns of firms with and without sanctioned management



Sources: CapitalIQ, authors' own depiction.

FROM THE AUTHORS

*"Markets react to the sanctions against oligarchs. Firms run by sanctioned oligarchs experience a significant loss in share price, more so than companies without sanctioned management. Thus, the sanctions do not only affect the oligarchs themselves, but also have broader economic consequences. The sanctions lists should be harmonized and expanded." — **Pia Hüttl** —*

MEDIA

Audio Interview with Pia Hüttl (in German)
www.diw.de/mediathek

Sanctions against Russian oligarchs also affect their companies

By Franziska Bremus and Pia Hüttl

ABSTRACT

In February 2022, the EU Commission announced economic sanctions against Russian oligarchs. The goal was to exert pressure on the Kremlin: initially to stop deploying troops to the Donetsk and Luhansk regions and ultimately to end its attack on Ukraine. The present report investigates how these sanctions affect companies headed by Russian oligarchs. The empirical findings show that after sanctions are announced, the stock returns of companies with sanctioned oligarchs on their executive board were significantly lower than the stock returns of firms without sanctioned board members. This is due to, for example, signaling effects and legal and economic uncertainties. Investors may expect negative consequences for the companies with sanctioned oligarchs and therefore withdraw. Thus, personal sanctions can exert some economic pressure via the negative economic effects on firm value.

Financial sanctions against individuals are increasingly being implemented as a political instrument in conflicts. Following Russia's illegal annexation of Crimea in July 2014, most sanctions were imposed on civil service members and pro-Russian forces in Crimea. In contrast, following Russia's invasion of Ukraine in February 2022, sanctions were added against more than 40 Russian oligarchs, nearly 600 politicians, and some military brass (Figure 1).[1] Overall, the sanctions package is unprecedented in scope and targeted against individuals, firms, and institutions.[2] The declared objective of the sanctions is to exert pressure on Russian political leaders to end the invasion of Ukraine.[3]

The financial sanctions against individuals include the freezing of accounts and assets such as real estate, yachts, and artwork. In addition, no money for goods, services, or salaries may be paid to persons on the sanctions list and their assets may not be traded or rented.[4] However, because of the lack of availability of ownership information, sanctioned individuals may be able to use loopholes to conceal or protect their assets.[5]

While other EU countries such as Italy have already frozen assets of Russian oligarchs, Germany is implementing the sanctions much more slowly. Due to the challenges surrounding implementation, the current discussion focuses on how to remove legal hurdles to asset tracing and freezing in the future.[6] Furthermore, it is important to be aware of how information on the assets and economic connections of

1 For a detailed timeline of the sanctions packages, see the website of the Council of the EU (available online; accessed May 2, 2022; this applies to all other online sources in this report unless stated otherwise).

2 For more on the specific measures, see the Council of the EU's website.

3 Cf. the website of the European Commission (available online).

4 Cf. the *Justizportal* of the state and federal governments (in German; available online).

5 Cf. Sebastian Mack, "Licht ins Dunkel bringen – Ein EU-Vermögensregister zur Bekämpfung illegaler Finanzströme," *Policy Brief*, Jacques Delors Centre, Hertie School, Berlin (2022) (in German; available online).

6 Cf. "Lücken im System: Warum die Sanktionen gegen die Oligarchen nur unzureichend greifen," *Handelsblatt*, April 10, 2022 (in German; available online); Christian Schubert, "Oligarchen-Yachten liegen Italien auf der Tasche," *FAZ*, April 28, 2022 (in German; available online).

DOI: https://doi.org/10.18723/diw_dwr:2022-21-1

sanctioned persons is collected and used.[7] Overall, it seems unclear to what extent personal sanctions are effective.

However, it has been reported that companies closely associated with, or even run by, sanctioned oligarchs have seen their business processes affected since the sanctions were announced. Due to the sanctions, it becomes more uncertain how funds can be provided. There is also mounting political pressure to not conduct business with Russian oligarchs.[8]

Against this background, this report examines how the stock returns and thus the firm values of companies with sanctioned board members have developed. Affected firms are defined as those in which at least one sanctioned oligarch is a CEO, member of the management board, or in another central management position.[9]

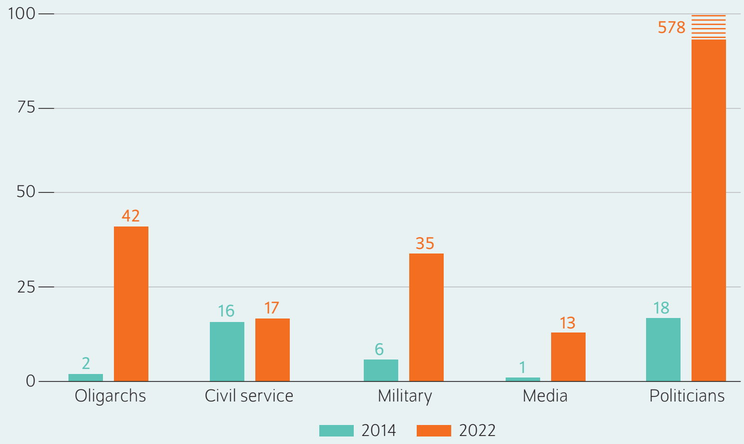
Previous studies show sanctions have little impact on countries' behavior

Relevant literature shows that in normal times, having political elites on executive boards increases firm value.[10] Due to their close connection to political decision makers, they can, for example, provide better expertise in dealing with bureaucracy, be more privy to information, and be favored when contracts are awarded. If sanctions are imposed on these individuals, the value of their political connections is reduced or even becomes negative, thus also affecting the firm value. In the current case of personal sanctions, affected board members may bring legal and economic uncertainties to their companies through stigmatization effects and negatively impact the company's stock price.

As the Iran sanctions showed, stock returns of companies partially owned by sanctioned elites respond positively to diplomatic news that increases the likelihood of sanctions being lifted.[11] Studies on the impact of sanctions on Iranian companies or industries have found that the stock prices and the profitability of politically connected companies are more strongly affected compared to non-sanctioned companies.[12] In addition, personal sanctions can imply that sanctioned oligarchs may be unable to fully commit to their board positions, as they might instead spend time and effort selling or relocating assets and generally evading sanctions.

Figure 1

Persons affected by EU sanctions



Sources: EU sanctions list, DG FISMA, authors' own depiction.

In addition to politicians and military representatives, numerous Russian oligarchs are on the EU sanctions list.

A distracted board member will likely pay less attention to the company, which, in turn, can negatively impact firm value.[13]

Generally, there is a consensus in the literature that economic sanctions have little impact on the *behavior* of sanctioned states.[14] Nevertheless, economic sanctions can still have adverse consequences: They slow down economic growth and can lead to currency crises.[15] Moreover, they mainly affect the poorer civilian population and thus widen the poverty gap.[16]

Companies with sanctioned oligarchs on their boards experience greater stock market losses

For the empirical analysis, we identify listed companies in which Russian oligarchs in general, and sanctioned Russian oligarchs in particular, serve as a board member or in an executive position. Following the definition of Guriev and Rachinsky, we refer to oligarchs as businesspersons who

7 Cf. Mack, "Licht ins Dunkel bringen."

8 Cf. "Lücken im System;" Michael O'Dwyer, Kate Beioley, and George Hammond, "Western companies in Abramovich-linked buildings fear paying rent on Moscow offices," *Financial Times*, March 28, 2022 (available online); cf. Alan Beattie, "Sanctions more than ethics have spurred corporate flight from Russia," *Financial Times*, March 9, 2022 (available online).

9 Leadership positions include positions with titles such as founder, CEO, executive officer, executive director, president, and chief officer.

10 Cf. Eitan Goldman, Jörg Rocholl, and Jongil So, "Do Politically Connected Boards Affect Firm Value?" *Review of Financial Studies* 22, no. 6 (2009): 2331-2360; Sheng-Syan Chen et al., "Board structure, director expertise, and advisory role of outside directors," *Journal of Financial Economics* 138, no. 2 (2020): 483–503.

11 Mirko Draca et al., "On target? Sanctions and the economic interests of elite policymakers in Iran," *Warwick Economic Research Papers* no. 1400 (available online).

12 Saeed Ghasseminejad and Mohammad Jahan-Parvar, "The impact of financial sanctions: The case of Iran," *Journal of Policy Modeling* 43, no. 3 (2021): 601–621.

13 Antonio Falato, Dalida Dadyrzhanova, and Ugur Lel, "Distracted directors: Does board business hurt shareholder value?" *Journal of Financial Economics* 113, no. 3 (2014): 404–426; Eliezer M. Fich and Anil Shivdasani, "The impact of stock-option compensation for outside directors on firm value," *The Journal of Business* 78, no. 6 (2005): 2229–2254; Tod Perry and Urs Peyer, "Board seat accumulation by executives: A shareholder's perspective," *The Journal of Finance* 60, no. 4 (2005): 2083–2123.

14 Robert A. Pape, "Why economic sanctions do not work," *International Security* 22, no. 2 (1997): 90–136; Peter A. van Bergeijk, "Success and failure of economic sanctions," *Kyklos* 42, no. 3 (1989): 385–404; Navin A. Bapat and Clifton T. Morgan, "Multilateral Versus Unilateral Sanctions Reconsidered: A Test Using New Data," *International Studies Quarterly* 53, no. 4 (2009): 1075–1094.

15 Dursun Peksen and Byunghawan Son, "Economic coercion and currency crises in target countries," *Journal of Peace Research* 52, no. 4 (2015): 448-462; Matthias Neuenkirch and Florian Neumeier, "The impact of UN and US economic sanctions on GDP growth," *European Journal of Political Economy* 40 (2015): 110–125.

16 Sylvanus K. Afesorgbor and Reuka Mahadevan, "The impact of economic sanctions on income inequality of target states," *World Development* 83 (2016): 1–11; Neuenkirch and Neumeier, "The impact of UN and US economic sanctions on GDP growth," 110–119.

Table

Characteristics of the companies analyzed

In percent

	Not sanctioned	Sanctioned
Oligarch in a senior position	57	72
Oligarch on executive board	43	17
Oligarch as founder	0	11
Change in stock price (Jan 31 - Feb 25)	−18.7	−30.9
No. of firms in sample	7	18
No. of sanctioned persons (average)	0	1.1

Sources: CapitalIQ, authors' own depiction.

Note: The sample analyzed contains 25 firms listed outside of Russia that have an oligarch as an executive board member, senior manager, or founder.

control sufficient resources to influence national politics.[17] While the EU sanctions list provides information on sanctioned oligarchs, the comparison group of non-sanctioned oligarchs is defined as Russian businesspersons included in Forbes' billionaires list between 2012 and 2022. In addition, we extracted market data of the associated companies.[18] This results in a dataset that includes companies with and without sanctioned oligarchs on their board. Since the Moscow Exchange temporarily ceased its activity on February 25, 2022, the focus of this study is on the data of companies listed outside of Russia.[19] The observation period covers the four days after the EU sanctions list was published.

The present sample includes information on 18 companies with sanctioned oligarchs on their board and seven companies with connections to unsanctioned oligarchs. In 80 percent of the companies led by sanctioned oligarchs, only one person on the executive board is subject to the sanctions; in the remaining 20 percent, up to three senior executives are sanctioned. In non-sanctioned companies, 43 percent of the oligarchs are executive board members and 57 percent hold executive positions (Table). Among companies with sanctioned executives, nearly three-quarters of oligarchs serve in corporate management, 17 percent serve as board members, and 11 percent are company founders. A look at the change in the firms' share value shows that companies with sanctioned oligarchs on their boards suffered significantly higher share price losses (minus 31 percent) after the sanctions were announced compared to companies without sanctioned board members (minus 19 percent). The development of the share prices thus already provides initial indications that the sanctions against oligarchs may affect the market value of the companies they manage.

Box 1

Event study with cumulative abnormal returns

To calculate abnormal returns, we use the market model.[1] The model parameter is estimated based on returns over 170 business days that end 20 days before the announcement of the sanctions. The respective market indices are used as a proxy for the market portfolio return. Thus, a normal return during the days covered by the event window is estimated—in this case, the period from the day of the announcement of EU sanctions on February 22 to the fourth day thereafter.

To determine the impact of sanctions in the event study, we compare actual realized returns to estimated returns at the time of the event. The difference is the abnormal return for company c on day t (AR_{ct}).

To test the persistence of the effects of the event during a given period (T_1 to T_2), the abnormal return can be added up. This results in the *cumulative* abnormal returns (CAR_c) for each individual company.

$$CAR(T_1,T_2)_c = \sum_{t=T_1}^{T_2} AR_{ct}$$

$CAR(+1,+2)_c$ are thus the cumulative abnormal returns from T_1 and T_2, the first and second day after the announcement of the EU sanctions against oligarchs, i.e. February 23 and 24, 2022.

1 The market model assumes a linear relationship between the return on any security and the return on the market portfolio. Charles J. Corrado, "Event studies: A methodology review," *Accounting and Finance* 51 (2011): 207-234.

Stock returns of companies with sanctioned executives decrease significantly

To examine the economic effects of the sanctions against Russian oligarchs in closer detail, an event study is conducted for the first wave of EU sanctions beginning on February 23, 2022.[20] The evolution of firm value in the days following the event is determined using market-adjusted cumulative abnormal returns (CAR) for each firm and different time windows (Box 1). To measure the influence of the announced sanctions on the returns, the hypothetical returns that would have been expected without the sanctions for the days following the event are first predicted. The difference between these predicted returns and the observed values is the abnormal return, which is used to estimate the influence of the EU sanctions on the market value of a firm.

17 Sergei Guriev and Andrei Rachinsky, "The Role of Oligarchs in Russian Capitalism," *Journal of Economic Perspectives* 19, no. 1 (2005): 131-150. The definition used here is simplified due to data reasons.

18 The Forbes billionaires list includes all persons who have assets worth over a billion in a certain year. See the Forbes website.

19 The companies are listed on, for example, the London Stock Exchange (LSE), New York Stock Exchange (NYSE), and the NASDAQ.

20 On February 22, 2022, Ursula von der Leyen, President of the European Commission, announced in a live conference all confirmed sanctions in response to Russia's policy toward the Donetsk and Luhansk regions. While no individuals were named specifically during the announcement, the list with the names and positions was published a day later in the Official Journal of the European Union. Following the invasion of Ukraine by Russian troops on February 24, 2022, further sanctions followed, also against individuals.

Box 2

Cross-sectional analysis

We set up the following least squares regression equation to better understand the differences in the cumulative abnormal returns after the announcement of sanctions across all firms with sanctioned and non-sanctioned oligarchs:

$$CAR(T_1,T_2)_c = \beta_1\, sanction(0/1)_c + X_c + \varepsilon_c$$

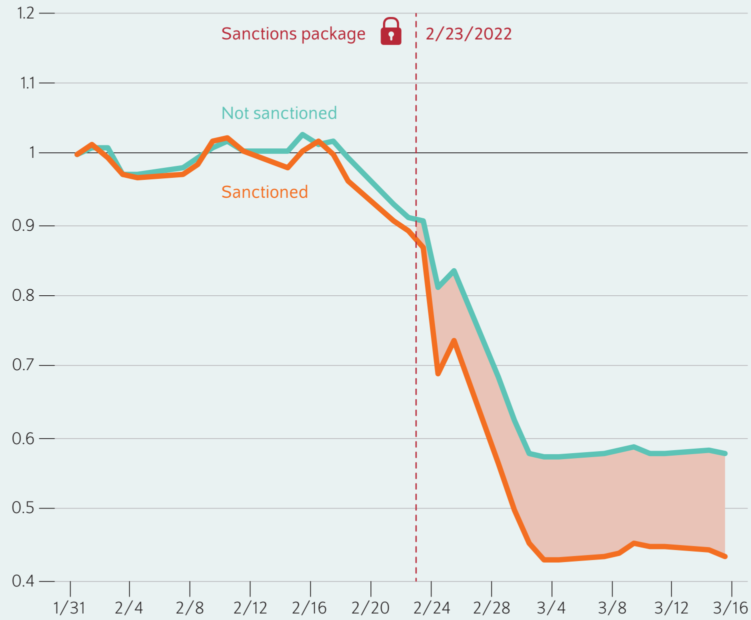
with c as the company. The dependent variable $CAR(T_1,T_2)_c$ is the abnormal return for each company with a connection to Russian oligarchs accumulated over the days T_1 and T_2 after the sanctions.

The independent variable $sanction(0/1)_c$ is a binary variable that takes the value 1 if at least one oligarch in management was sanctioned and the value 0 if no one in management was sanctioned. X_c is a control variable, such as the logarithm of market capitalization, and ε_c is the error term. The model is estimated for 25 companies with and without sanctioned oligarchs in executive positions for different time windows: day 1, days 1-2, days 1-3, and days 1-4 after the announcement of the sanctions on February 22, 2022.

Figure 2

Comparison of cumulative stock returns of companies with and without sanctioned executives

Index (1 = January 31, 2022)



Sources: CapitalIQ, authors' own depiction.

Note: Only business days are shown.

Following the announcement of sanctions, the stock returns of companies with sanctioned board members or founders decline faster than the stock returns of companies run by non-sanctioned oligarchs.

The calculations indicate that firms are negatively affected by sanctions against oligarchs in their management. Although firms led by unsanctioned oligarchs also experienced negative returns following February 22, 2022, the returns of the firms led by sanctioned oligarchs sank significantly more in the days following the announcement (Figure 2). The cumulative abnormal returns of the firms with sanctioned executives added up to minus 21 percent until the second day following the publication of the EU sanctions list (Figure 3). In the following days, the cumulative abnormal returns of the companies with sanctioned board members were also significantly below the expected values before the sanctions were announced.

In the second step, we perform a cross-sectional analysis in which the effects of the sanctions on the firm value for companies with sanctioned management compared to those without sanctioned management are estimated (Box 2). In this model, it is possible to examine the effects of sanctions in more detail by determining the effect difference between companies with and without sanctioned executives and by including company-specific variables. In the present case, the market capitalization for each company is considered so that differences in this variable are not impacting the estimated stock market response. The common event is the publication of the EU sanctions list on February 23, 2022, assuming that markets price this information directly to companies run by Russian oligarchs.[21]

The estimation results of the cross-sectional analysis emphasize the negative effect of sanctions on the stock returns of the affected companies (Figure 4): Even when the estimation takes company characteristics such as market capitalization into account, there is a statistically significant negative impact on the sample companies listed outside Russia. For companies with sanctioned management, the cumulative abnormal returns in the days following the announcement of the sanctions were up to 11 percentage points lower than for the other companies considered here.

The estimation shows that markets clearly reacted to the announcement of sanctions, putting pressure on companies with sanctioned board members in particular. However, how long this negative economic impact lasts can only be investigated once more information, such as company balance sheet data, is available.

Conclusion: sanctions against oligarchs can also have economic effects

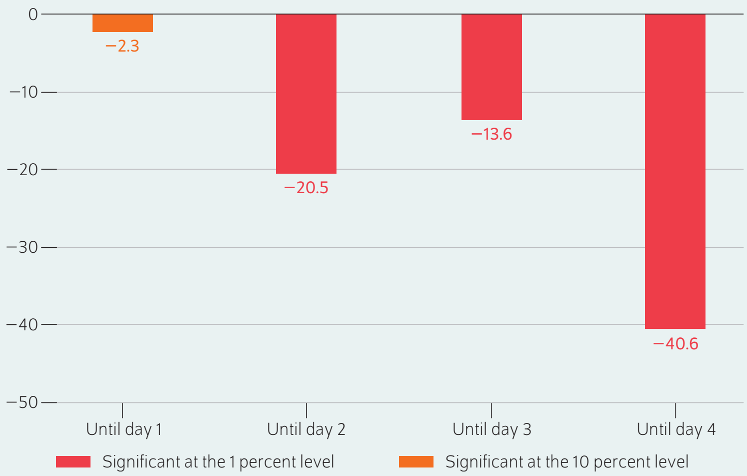
The empirical analysis suggests that sanctions against Russian oligarchs can have economic effects beyond the personal assets of the sanctioned individuals. The stock

21 Some of the oligarchs included here were added to the EU sanctions list after February 23, 2022. In this regard, the results of the cross-sectional analysis represent a lower bound for the estimated effect.

Figure 3

Decline in value of companies with sanctioned oligarchs on the executive board

In percent



Sources: CapitalIQ, authors' own depiction.

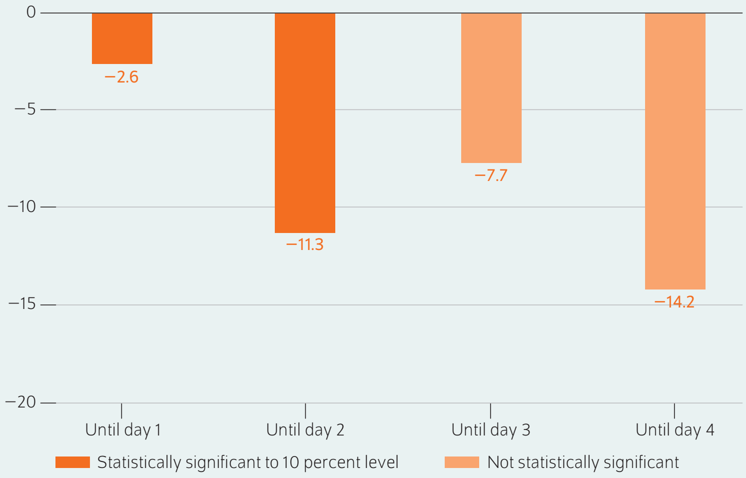
Note: Cumulative abnormal returns (CAR), univariate model. Cumulative abnormal returns are the difference between predicted normal returns and the observed values after appearance on the EU sanctions list. Values have been market adjusted.

The value of companies run by sanctioned oligarchs fell significantly after the sanctions were announced.

Figure 4

Decline in firm value of companies with and without sanctioned oligarchs on the executive board

In percentage points



Sources: CapitalIQ, authors' own depiction.

Note: Cross-sectional analysis of cumulative abnormal returns. Multivariate model adjusting for firms' market capitalization. The estimated coefficients reflect the difference in the trend of abnormal cumulative stock returns after the announcement of sanctions between firms with and firms without sanctioned board members.

Following the announcement of sanctions, the stock returns of firms headed by sanctioned oligarchs declined more than the stock returns of firms headed by non-sanctioned oligarchs.

markets respond visibly to the announcement of the EU sanctions against Russian oligarchs: Stock returns of companies with sanctioned oligarchs on their executive board decreased much more strongly than the returns of comparable companies without sanctioned board members. However, more data and research are needed to assess how long lasting and how large the economic effects of sanctions against oligarchs are.

Even if the implementation of the sanctions in the EU proves to be difficult and progresses rather slowly, there is also likely to be some pressure due to the documented negative effects on the stock market value of the companies concerned. Thus, it may make sense to expand the list of sanctioned businesspersons in leadership positions. Such an expansion could begin with harmonizing the UK, US, and EU sanctions lists, which would reduce uncertainties regarding the legal and economic treatment of sanctioned individuals and close gaps in individual sanction regimes.[22] So far, different economic regions have sanctioned different oligarchs, which undermines the logic and credibility of person-specific sanctions.[23]

22 Cf. Martin Arnold and Sam Fleming, "Banks push Brussels for clarity to avoid 'overcompliance' with sanctions on Russia," *Financial Times*, April 7, 2022 (available online).

23 Cf. Courtney Weaver and James Politi, "Why the US has hit some Russian oligarchs with sanctions but not others," *Financial Times*, April 14, 2022 (available online).

Franziska Bremus is a research associate in the Macroeconomics Department at DIW Berlin | fbremus@diw.de

Pia Hüttl is a research associate in the Macroeconomics Department at DIW Berlin | phuettl@diw.de

JEL: G14, G34, P16

Keywords: sanctions, stock market reaction, event study, Ukraine, Russia, war

LEGAL AND EDITORIAL DETAILS

DIW BERLIN

DIW Berlin — Deutsches Institut für Wirtschaftsforschung e. V.
Mohrenstraße 58, 10117 Berlin
www.diw.de
Phone: +49 30 897 89–0 Fax: –200
Volume 12 June 1, 2022

Layout
Roman Wilhelm, Stefanie Reeg, Eva Kretschmer, DIW Berlin

Cover design
© imageBROKER / Steffen Diemer

Composition
Satz-Rechen-Zentrum Hartmann + Heenemann GmbH & Co. KG, Berlin

ISSN 2568-7697