

Estimating the Boundaries of Economic Coercion in the US-China Relationship

By

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Abstract: States frequently outsource coercion to the market, using sanctions to deter private actors from dealing with blacklisted entities. Yet research is still ambiguous as to the effect and boundaries of such actions on market participants. To better understand the consequences of targeted sanctions, we analyze the impact of the Trump administration's actions against Chinese companies. Leveraging the event-study method and firm-level data, we find that directly targeted firms performed more than 20% worse than we would expect absent sanctions. Other categories of Chinese firms, however, regardless of their ties to the Chinese state, did not experience significant repercussions. These findings stand in contrast to the literature on political risk, which has found country-level spillovers, and behavioral and ideational scholarship that shows how market actors use heuristics and categories to assess risk. The paper highlights the need for International Relations scholarship to incorporate firm-heterogeneity into theories of economic statecraft, and indicates how equity markets could become an emerging arena of contention in the US-China rivalry.

Economic statecraft has been outsourced to the market: great powers rely on the fear of legal action and reputational risk to deter private actors from investing in rival firms or countries, curtailing the latter's growth and thereby their threat.¹ No state has greater capabilities in this arena than the United States. As the world's largest market and the central node for global financial flows, the hegemon has weaponized interdependence toward a range of foreign policy ends, from blocking the acquisition of nuclear weapons to punishing human rights abuses.²

Scholars generally focus on evaluating state-level behavior in the wake of such coercion.³ Delisting orders, export controls, and secondary sanctions, however, target firms.⁴ While the direct consequences of these targeted tools have been lauded by policymakers and academics alike, with a growing consensus emerging that they are not only economically efficient but also politically expedient, limited work considers the channels by which these efforts may ripple through markets.⁵

Clouding this enthusiasm, then, is a lingering doubt as to the potential boundaries of such coercion i.e. does it implicate the economic prospects of specific targets or cascade across groups of firms through indirect market channels.⁶ As a former US administration official explained, there is actually disagreement on this point amongst key decision-makers of the US government with Congress often promoting a more expansive view, while the State Department argues for a limited and precise

¹ Morse 2019; Early and Preble 2020a; Verdier 2019; Zarate 2013;.

² Farrell and Newman 2019.

³ Eggenberger 2018; Han 2018; Morse 2019; Early and Preble 2020a; McDowell 2020.

⁴ Vlcek 2018; Drezner 2015; Verdier 2019; Verdier 2020; Early and Preble 2020b.

⁵ For notable exceptions, see Katzenstein 2015; Zarate 2013; Early and Preble 2020a; Ahn and Ludema 2020.

⁶ Drezner 2015; Lee and Gray 2017.

application.⁷ Given that markets are seen as highly susceptible to uncertainty and reputational concerns, it is at least plausible that such political risk may spillover beyond the firm to more general categories such as the sector or the country. In this manuscript, we attempt to tease apart these various consequences of economic statecraft for market actors. We analyze (1) whether sanctions negatively impact targeted firms and (2) whether there are spillover effects for co-nationals that were not directly targeted.

To study these questions empirically, we hone in on their use within the context of the US-China rivalry. While the trade war started under President Trump has garnered the most attention, sanctions and blacklists were crucial to the Administration's attempts to reorient US economic relations with China. The goal of the approach was not only to inflict pain on particular firms engaged in human rights breaches or with connections to the Chinese military but also to more generally decouple financial interdependence. As Senator Marco Rubio argued in the wake of these financial sanctions that, "The Chinese Communist Party's exploitation of U.S. capital markets is a clear and ongoing risk to U.S. economic and national security. Today's action also lays down a clear marker for U.S. policy going forward — we can never put the interests of the Chinese Communist Party and Wall Street above American workers and mom-and-pop investors."⁸ In response, Chinese officials have warned that a "broader financial war has already begun."⁹

⁷ Author conversation with former US government official, March 9 2021, Washington DC.

⁸ Swanson, Ana. "Trump Bars Investment in Chinese Firms With Military Ties," *New York Times (Online)*, New York: New York Times Company. Nov 12, 2020.

⁹ Shen, Samuel, Winni Zhou, and Kevin Yao. "In China, fears of financial Iron Curtain as U.S. tensions rise," *Reuters*, August 13, 2020. <https://www.reuters.com/article/us-usa-china-decoupling-analysis/in-china-fears-of-financial-iron-curtain-as-u-s-tensions-rise-idUSKCN2590NJ>

The US-China case is obviously important substantively but also offers a number of valuable empirical opportunities to test our claims. Specifically, we use event studies that gauge the economic consequences of US government announcements for market participants. In particular, we examine the surprise sanctions against ByteDance and Tencent, which are two major Chinese information technology firms. Although the trade war had stepped up general animosity between the two countries, the announcement offers a unique opportunity to identify market risk as the targeting of both firms was unexpected and signaled a new level of interference in Chinese engagement in US markets.

We find that targeted firms experienced substantial negative ramifications, cumulatively performing more than 20% worse than we would expect absent sanctions. While the results corroborate much of the qualitative research on recent episodes of economic statecraft, our findings suggest the limits of these efforts for broader market-based effects. We consider a range of possible spillovers for Chinese companies listed on US markets, analyzing Chinese state-owned firms, companies formally headquartered in China, and Chinese firms that have listed in the US through offshore holding companies. For all three categories of firms, across different event windows, we find null effects, i.e., we find no spillover effects for other Chinese entities even though the US has an extremely credible legal basis to target these companies with future actions. In other words, the impact of economic coercion appears to be discrete despite the more expansive intent.

Though the primary goal of this note is to test the relationship between economic coercion, its targets and potential spillovers, in the discussion we offer anecdotal evidence of a possible explanation. We focus on the broader market environment in

which the US-China rivalry is embedded. As one of the largest markets in the world exits decades of underdevelopment, China, and its biggest firms, continue to deliver the promise of exceptional growth. As a result, the “alpha” of investing in Chinese firms continues to outweigh the possible material or reputational hits that constitute political risk. The paper suggests that macroeconomic context may serve to mute the second order consequences of economic coercion.

Our research note contributes to a number of International Relations debates. First, and most directly, it opens up a new debate on political risk. With the rise of weaponized interdependence, economic networks and financial flows have returned to being an important factor in great power politics. This alters the possible source of political risk, shifting attention from the domestic institutional environment to geopolitical drivers. At the same time, our findings suggest that political risk may still operate as a firm-level, rather than country-level, characteristic and understanding those differences is going to be crucial to identify how states choose to practice economic statecraft. From a security lens, our paper offers concrete evidence that the deterrent effect of such economic sanctions may still work largely at the target firm level rather than other more abstract categories that frequently characterize national security debates.

In a similar vein, our research reorients attention on the sources of economic statecraft from reserve politics to equity markets. The US’s control of the reserve currency is rightfully regarded as the bedrock of its coercive capabilities. But in recent years we’ve seen growing prospects of conflict in equity markets, a key source of financing and liquidity. Our paper is among a growing group of scholars to call attention to this trend, which could have multiple effects on the broader great power relationship.

In the short term, it allows Chinese companies to improve their reputation and raise record amounts of capital from American investors. This generates an additional vector of interdependence in the US-China relationship and creates a new set of financial interests pushing to maintain peaceful cooperation. At the same time, it arms the US with tools to challenge and curtail the growth of firms that are systemically important to its chief economic rival. The future net effects will depend on understanding not only the broader geo-political context but how it plays out in the markets.

I. Economic Coercion and Political Risk

Powerful states often outsource coercion to the market.¹⁰ Secondary sanctions, export controls, and blacklists manipulate political risk in order to achieve geo-political ends.¹¹ Existing work has tended to focus on issues of compliance, i.e., when third-party firms or countries face penalties and if they choose to change behavior. The scope and impact of such coercion, however, depends not only on the response to the specific demands of the state but how such demands may filter through the market to reshape the risk calculus and pricing more generally. A range of work across political economy suggests that state interventions could have broad spillovers.¹² In this section, we layout the logic of such arguments before testing them empirically in the next section.

Markets must price risk. And mounting research finds that a range of political factors such as property rights¹³, treaties¹⁴, or expropriations¹⁵ shape such calculations,

¹⁰ Morse 2019; Early and Preble 2020a; Sharman 2009; Verdier 2019; Zarate 2013.

¹¹ Drezner 2015; Vlcek 2018; Verdier 2019; Verdier 2020; Early and Preble 2020b.

¹² Drezner 2015; Lee and Gray 2017; McDowell 2020.

¹³ Jensen 2003; Arel-Bundock 2017.

¹⁴ Kerner 2009; Haftel 2010.

¹⁵ Jensen 2003; Johns and Wellhausen 2016.

impacting investor decisions. Political risk may be calculated for specific firms but is potentially influenced by both sector and state characteristics as well. Sectors with high fixed costs like resource extraction often receive a higher risk premium, owing to the chance of expropriation. Similarly, state-level factors like regime type have been associated with price differences as autocracies may more easily interfere in market behavior.¹⁶ Given the complexity of the global economy, market actors face considerable information barriers to perfect pricing. As a result, they often use heuristics and shortcuts to generate risk profiles. Categories of countries or firms may receive similar market evaluations based on these labels. As new information is revealed about political risk, it can have broad impacts on investor decisions.

Economic coercion, in particular, often relies on the cooperation of market actors and is fundamentally about altering their risk appetites. Recent studies show that, through secondary sanctions and blacklists, states can not only force targeted market actors to comply with the state's demand¹⁷ but also effectively deter third-party firms.¹⁸ High-profile enforcement actions by the state can produce a "ripple effect"¹⁹ and generate a psychological fear that affects firm managers' assessment of compliance risk²⁰.

For example, in an effort to cripple North Korea's nuclear program, the Treasury Department of the United States targeted Banco Delta Asia (BDA), a Macau-based bank that acted as North Korea's financial bridge, and announced sanctions against it in 2015. This action triggered a massive bank run. Although not required by the US, "in

¹⁶ For examples, see Li, Owen, and Mitchell 2018.

¹⁷ Sharman 2009; Vlcek 2012; Zarate 2013; Eggenberger 2018; Verdier 2020.

¹⁸ Sharman 2011; Early 2016; Vlcek 2018; Early and Preble 2020a; Verdier 2020.

¹⁹ Katzenstein 2015; Verdier 2020.

²⁰ Early and Preble 2020a.

Singapore, Hong Kong, and other banking hubs around the world, regulators and compliance officers began to close or freeze North Korean bank accounts and transactions, subjecting North Korean individuals and entities to intense financial scrutiny”.²¹

In a complimentary vein, reputational concerns are a major reason firms preemptively comply with sanctions and blacklists, affecting actors well beyond the target.²² In a study of the banking industry, Early and Preble argue that the Treasury Department pursued a ‘whale hunting’ strategy whereby they targeted a few large firms to generate publicity and compliance cascades.²³ When Standard Chartered was accused of money laundering by the New York Department of Financial Service (NYDFS), it even considered suing NYDFS for reputational damage. However, worrying that “continued public showdown would only make matters worse”, the bank eventually gave up fighting and agreed to pay an enormous \$1.1 billion fine.²⁴ Returning to the North Korea example, Bank of China, which maintained a close relationship with North Korea, voluntarily ceased its relationship with BDA, and more generally, froze all North Korean accounts.²⁵ Two years later when the US lifted the sanction and agreed to return BDA’s frozen assets to North Korea, no banks were willing to process the transaction because of the risk and reputational concerns.²⁶ Given the variety of qualitative work pointing toward the effectiveness of firm-level sanctions we expect the following:

²¹ Zarate 2013.

²² Early and Preble 2020b; Early and Preble 2020a; van Erp 2011; Morse 2019; Verdier 2020.

²³ Early and Preble 2020a.

²⁴ Verdier 2020, pp346.

H1: Targeted Effect: As the US government imposes sanctions/blacklists on a Chinese firm, that firm will face a risk premium.

These reputational and deterrence effects not only implicate targeted firms but may also generalize to broader categories such as the state or firms that share similar risk profiles. Banks and firms may limit financial interactions with targeted states as a means to shield themselves from the spillovers of political risk. Morse's work on the use of blacklists by international organization in the context of anti-money laundering concludes, "No firm wants the reputational damage of having been used as a vehicle for criminal activity, or worse, as a channel for financing terrorism."²⁷ Sharman goes even a step further, arguing that policy-makers in states facing blacklists adjust behavior even if no direct material damages result as they seek to avoid future perceptions of risk by association.²⁸ This is in line with work on environmental regulation, which demonstrates that penalties on a specific firm produce changes in behavior by other potential polluters in a sector.²⁹

In short, government sanctions may offer new information and heuristics to market actors, implicating firms beyond those specifically targeted. Given the complexity of global economic interactions, market participants often rely on categories or groupings to simplify risk analysis. These heuristics frequently have immediate, tangible outcomes. As Brooks et al. find, the region that a country belongs to can have substantial (negative) consequences for how international creditors determine the value of their debt

²⁷ Morse 2019.

²⁸ Sharman 2009.

²⁹ Shimshack and Ward 2008.

instruments.³⁰ In a similar vein, Gray comprehensively documents how the economic allies of a country send signals to market actors, leading to substantially different risk premia in bond markets.³¹ A host of recent work highlights how states recognize the importance of categories and indicators, with governments regularly attempting to manipulate how investors group them.³² The research agenda broadly takes inspiration from classics in the sociology of finance that illustrate the importance of categories for company valuations.³³

Moreover, a variety of different investing strategies pay close attention to different country and firm-level categories. Sector investing strategies form a core part of factor-based approaches, making categories a central heuristic for a variety of funds. “Emerging markets” is frequently treated as a distinct category, and concentrated investment in a single jurisdiction is frequently discouraged. Balancing exposure to asset classes with different, but potentially correlated, risk premia lies at the core of effective portfolio construction.

This leads us to the following set of hypotheses as to the effect of US economic coercions on the market prices of Chinese firms:

H2: National Spillover Effect: As the US government imposes sanctions/blacklists on a Chinese firm, non-targeted Chinese firms will face a risk premium.

H3: Categorical Spillover Effect: As the US government imposes sanctions/blacklists on Chinese firms due to their connection with the Chinese government, non-targeted Chinese State-Owned Enterprises will face a risk

³⁰ Brooks, Cunha, and Mosley 2015.

³¹ Gray 2013.

³² Kelley and Simmons 2019.

³³ Zuckerman 1999.

premium.

II. Research Design and Analysis

Most quantitative studies on the effectiveness of sanctions focus on country-level international flows, which are subject to omitted variable bias and rely on lagged and inconsistent macroeconomic data. Taking advantage of the event-study method pioneered in corporate finance, we move to the firm level to address these issues. Assuming that a stock market price incorporates all available information about a company, any new event, such as the announcement of sanctions by the US, should abnormally impact a firm's value. More empirically, we can measure the impact of new information by analyzing the difference between how the stock price moved in reaction to the event compared to how we might expect a firm's stock price to move in the absence of the new information. Over 500 published studies in corporate finance rely on some variant of the event-study method and it is becoming increasingly popular within International Relations, with scholars using event studies to analyze the financial consequences of soft-law, the spill-over effects of WTO rulings, the effectiveness of Bilateral Investment Treaties, and the importance of international bureaucrats.³⁴

Our analysis relies on a "market model" where we initially estimate the relationship between a firm's stock price and a reference rate for the broader market prior to the event.³⁵ In our studies, we estimate how the stock prices of Chinese companies listed on US exchanges correlate with the S&P 500 index during the "estimation window" before the event. We then use this estimate to calculate how we

³⁴ Wilf 2016; Kucik and Pelc 2016.

³⁵ Rumsey 1996.

would expect the stock price of a Chinese company to “normally” behave in the absence of any new economic coercion by the US. The difference between the estimated normal behavior and the observed stock price, the abnormal return, gives us a measure of the effects of economic coercion on a specific day. Examining returns across our “event window”, the time we would expect the market to fully absorb the new information, gives us the cumulative abnormal returns. We assess the hypotheses by examining the cumulative average abnormal returns (CAAR) for three sets of firms – those targeted directly, those that are considered Chinese firms, and Chinese State-Owned Enterprises. All Chinese firms should suffer from spillovers if political risk purely operates at the national level – the literature would expect these firms to have statistically significant, negative CAAR. Similarly, Chinese State-Owned Enterprises should suffer from spillovers if political risk operates at the categorical level as the sanctions were justified on corporate links to the Chinese state. In both cases, Chinese firms should lose value after the imposition of sanctions because of the added reputational risks of doing business with them or the fear that more sanctions or decoupling are expected.

Identifying Chinese Firms

The first step is identifying Chinese firms trading on the major US exchanges. This is not as straightforward a task as it initially sounds because the majority of de facto Chinese entities list on American equity markets through offshore holding companies. For example, 2 well-known Chinese firms, Alibaba and JD.com, are formally registered on the New York Stock Exchange and the NASDAQ as companies domiciled in the Cayman Islands. Using data collected from Compustat on all firms trading on any US exchange, we searched through every firm registered in Bermuda, Bahamas, Cayman

Islands, British Virgin Islands, Hong Kong, and Singapore, the popular tax havens and foreign jurisdictions where Chinese firms may be registered. We then code a firm as Chinese if it meets one of the following conditions:

- 1) It is headquartered in mainland China.
- 2) Its primary assets are located in mainland China, or its revenue comes primarily from its business in mainland China.
- 3) Its controlling shareholder is a Chinese firm.

We further code whether or not these firms are owned by the central government of China. This includes firms supervised by the State-owned Assets Supervision and Administration Commission (SASAC) and firms managed by other ministries. The list changes slightly every year due to mergers and acquisitions.³⁶

The TikTok and WeChat Sanctions

On August 6th 2020, the Trump Administration announced two executive orders targeting TikTok and WeChat to take effect 45 days from the announcement.³⁷ After the period of 45 days, the orders barred any transactions by any person subject to U.S. jurisdiction with the two social media giants, citing national security concerns.³⁸ The executive orders target the holding companies ByteDance and Tencent but were unclear about how far-reaching the ban extends potentially affecting other companies tied to

³⁶ We subdivided SOEs into firms owned by provincial or state governments and Town and Village-owned enterprises, as well as SOEs that have now been privatized. But we do not include these in our analysis as the number of them listed on major exchanges is minimal.

³⁷ ‘Executive Order on Addressing the Threat Posed by TikTok,’ *White House*, August 6, 2020. <https://www.whitehouse.gov/presidential-actions/executive-order-addressing-threat-posed-tiktok/>; See Also, ‘Executive Order on Addressing the Threat Posed by WeChat,’ *White House*, August 6, 2020. <https://www.whitehouse.gov/presidential-actions/executive-order-addressing-threat-posed-wechat/>

³⁸ Swanson, Ana., Isaac, Mike., Mozur, Paul., ‘Trump Targets WeChat and TikTok, in Sharp Escalation with China,’ *The New York Times*, August 6, 2020. <https://www.nytimes.com/2020/08/06/technology/trump-wechat-tiktok-china.html>

Tencent, like Tesla, Snapchat, Activision Blizzard, and Epic Games.³⁹ Mike Murphy writing for *MarketWatch* said that the ban “could prove to have much farther-reaching effects than Trump may have anticipated” and rhetorically asked whether Donald Trump just blew up the video game industry given Tencent’s ownership stakes in a wide range of popular video game companies.⁴⁰ A number of analysts saw this as the broadening of the US-China competition, with the US trying to deter future engagement with key actors from its rival:

The move will also make foreign capitalists think twice about partnering with companies from the People’s Republic. Beijing has invested a lot of political and economic capital incubating global tech champions, but Washington is now leveraging its regulatory advantages over internet infrastructure and operating systems to contain those ambitions.

Similarly, the *New York Times* reported that, given the economic importance of the targeted firms and the vagueness of the executive order, the sanctions could have broader implications for Chinese firms doing business abroad.⁴¹

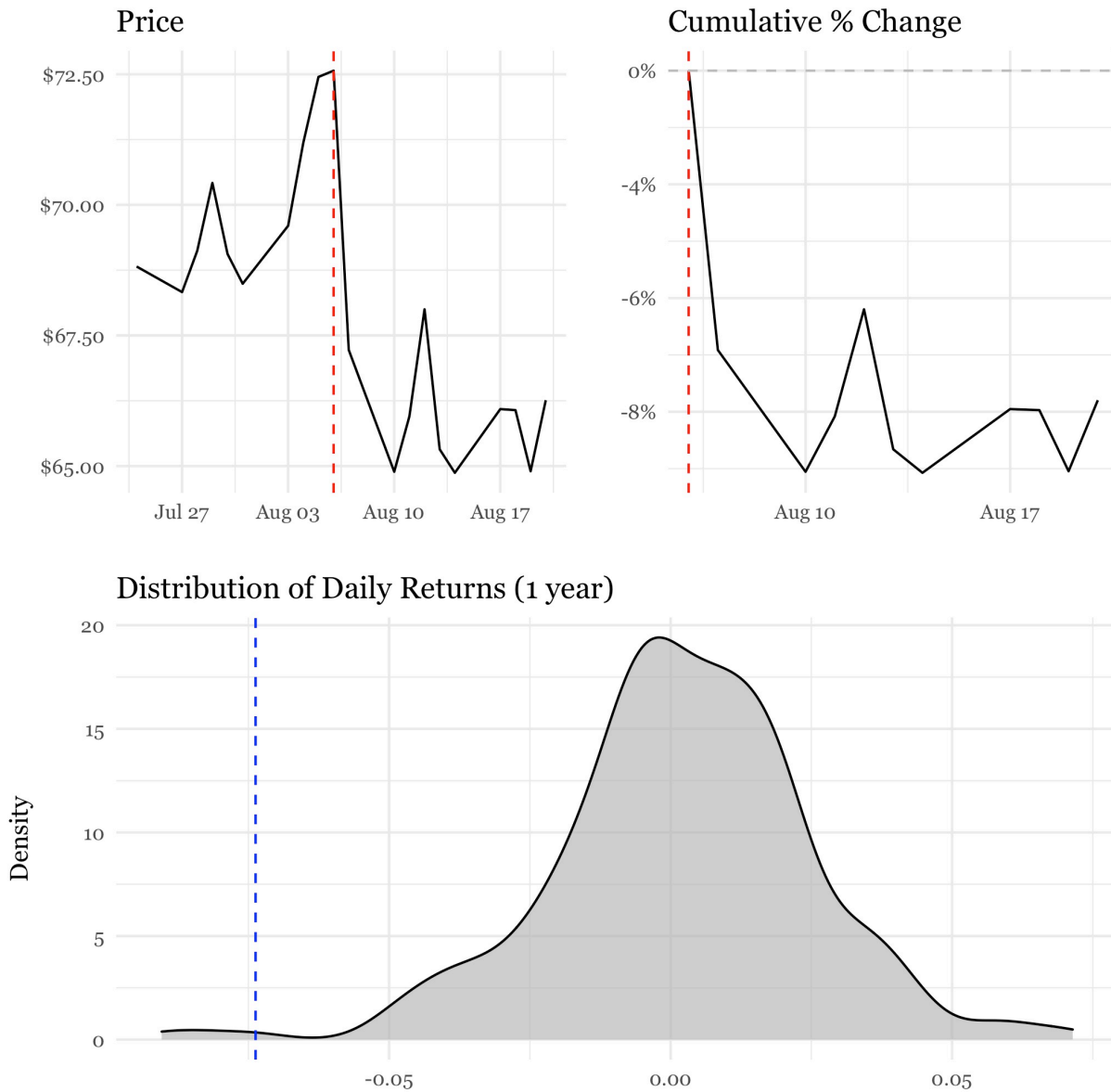
³⁹ Swanson, Ana., “Trump’s Orders on WeChat and TikTok Are Uncertain. That May Be the Point,” *The New York Times*, August 7, 2020. <https://www.nytimes.com/2020/08/07/business/economy/trump-executive-order-tiktok-wechat.html>

⁴⁰ Murphy, Mike., “Trump’s ban against WeChat owner Tencent could have huge implications for U.S. companies,” *MarketWatch*, August 8, 2020. https://www.marketwatch.com/story/trumps-order-against-wechat-owner-tencent-could-have-huge-implications-for-us-companies-2020-08-06?mod=article_inline

⁴¹ Swanson, Ana., 2020.

Targeted Firms Immediately Lost Value...

Figure 1: The Effect of Sanctions on Tencent's Stock Price



Note: The red line represents announcement of the sanctions. The blue line represents the change in Tencent's stock price the day after the announcement.

The sudden announcement of the executive order appeared to have an immediate negative impact on financial markets the following day. As Figure 1 illustrates, Tencent's shares on the US Over-the-Counter markets dropped roughly 7.5% the day after the

announcement, indicating the markets had not priced in the action against Tencent's core technology, WeChat. In the previous calendar year, Tencent's stock only performed worse during the heights of the Covid-19 induced market crash.

Table 1 shows the results of an event study focused on the Chinese firm, illustrating that the markets were caught off-guard. We start the estimation window 90 days before the sanctions announcement and stop 5 days before the event. We test the abnormal returns across multiple event windows: 1 day after, 5 days after, and between 2 days before and after.⁴² We find that 5 days after the event, Tencent had performed 12% worse than we would have expected in the absence of the sanctions. The statistically significant findings suggest, in the wake of the announcement, that the market expected Tencent's economic opportunities/future earnings to reduce, validating the effectiveness of targeted sanctions. Importantly for our research design purposes, it provides further evidence that the market had not fully priced in the episode of economic coercion.

While we cannot assess the credibility of the impact on TikTok directly, as its holding company ByteDance is not publicly traded, we look at how American company Fastly (FSLY) was impacted immediately after the announcement. Business from TikTok accounted for a substantial share of the cloud computing company's revenues (~12%) at the time, which sanctions would eat away. As we present in Table 1, the market quickly factored that in, with Fastly's stock performing roughly 40% worse than we would expect in the absence of the event. These results are statistically significant at the 1% level, further affirming the credibility of the sanctions.⁴³ Collectively, we find that

⁴² We include an event window starting 2 days before the sanctions announcement to factor in the potential that the news of the sanctions leaked.

⁴³ In the Appendix we analyze the CAAR for Tencent and Fastly together and they consistently have negatively, statistically significant outcomes.

the firms had more than 20% negative CAAR as a result of the sanctions announcement. The latter suggests that targeted sanctions can effectively deter investors dealing with firms directly subject to US economic coercion.

Table 1: Average Abnormal Returns for Tencent and Fastly following the sanctions against WeChat and TikTok on August 6th 2020

Note: * $p < 0.10\%$; ** $p < 0.05\%$; *** $p < 0.01\%$.

<u>Sample of Firms</u>	Event window	AAR	Normal test (p-value)
<u>TCEHY</u>	1 day after	-0.08***	0.01
	2 days before and after	-0.09*	0.05
	5 days after	-0.12**	0.02
<u>FSLY</u>	1 day after	-0.34***	0.00
	2 days before and after	-0.44***	0.01
	5 days after	-0.41***	0.02
<u>TCEHY & FSLY</u>	1 day after	-0.21***	0.00
	2 days before and after	-0.26***	0.00
	5 days after	-0.27***	0.01

But there was a lack of national or categorical spillovers

Critics of the order argued that the administration’s unpredictability “threaten to compromise the secure business environment the United States is known for.”⁴⁴ Samm Sacks, a fellow in China’s Digital Economy at New America is quoted saying that the orders have “definitely a chilling effect” in relation to Chinese companies doing business in the U.S.⁴⁵ The episode of economic coercion should be one of the more likely instances to observe spillover effects. While actions against TikTok had been subject to

⁴⁴ Swanson, 2020.

⁴⁵ Ibid.

rumors in the press, market observers had not expected WeChat/Tencent to be included in any actions. At the same time, the process generally undercut the traditional sanction development processes, with the executive rather than the treasury taking the lead, potentially ushering a more dangerous and uncertain economic environment. Contra some of these expectations, we find no clear spillover effects for Chinese firms on US markets

To econometrically assess the national and categorical logics, we focus on firms trading on the 2 major US stock exchanges – the NASDAQ and the NYSE.⁴⁶ We further exclude firms that have listed on these exchanges within 1 year prior to the event as they are generally far more volatile than the broader market, which we measure by using the S&P500 index. These restrictions leave us with 11 companies formally domiciled in China, 168 Chinese firms (regardless of formal registration status), and 13 State-Owned Enterprises.

We start the estimation window at 90 days before the release of the sanctions and stop the estimation 5 days prior following standard procedures in the corporate finance literature. Given the strong effects across the event windows analyzed for the targeted firms, we again use the same event windows: 1 day and 5 days after the event, and 2 days prior and 2 days after the event.

To test the significance of the results, most studies usually rely on a standard t-test. Because we have multiple firms affected on the same event date, that approach

⁴⁶ Data was collected through Compstat. For the analysis, we exclude firms on smaller exchanges and on over the counter markets.

would risk rejecting the null hypothesis without factoring in potential cross-correlation.

Therefore, we use the Adjusted Patell Test developed by Kolari and Pynnönen⁴⁷.

Table 3: Cumulative Average Abnormal Returns for Chinese Companies Following the sanctions against TikTok and WeChat on August 6th 2020

Note: * p < 0.10%; ** p < 0.05%; *** p < 0.01%.

<u>Sample of Firms</u>	Event window	CAAR	Adjusted Patell test (p-value)
<u>Chinese Nationals</u>	1 day after	-0.03	0.32
	2 days before and after	0.01	0.75
	5 days after	-0.02	0.88
<u>All Chinese Firms</u>	1 day after	-0.03	0.12
	2 days before and after	-0.03	0.69
	5 days after	-0.04	0.42
<u>Chinese State-Owned Entities</u>	1 day after	-0.02	0.30
	2 days before and after	0.02	0.67
	5 days after	0.03	0.36

The results do not find evidence supporting spillover effects. While the CAAR values generally move in a negative direction, none of these results are statistically significant at the 10%, 5% or 1% levels. Rather we see that there are limited consequences for other co-nationals, regardless of how we define them. Most interestingly, this is a likely case to see negative economic consequences for State-Owned Enterprises but we still see null effects for the categorical hypothesis.

We ran numerous robustness checks where we find similar results for the targeted and non-targeted firms. We use an alternate significance test that also accounts for potential cross-correlation of abnormal returns and event induced volatility. We vary the start of the estimation window, using 120 days prior to the event and 60 days prior

⁴⁷ Kolari and Pynnönen 2010.

to the event, and we also alter the end of the estimation window stopping it 30 days before the event. The models are also run using a number of alternate samples. In some, we exclude firms that may have had other news events that could have impacted the stock price the week of the event. We also examine only Chinese communications and technology companies, excluding those with financial ties to Tencent. We then expand the sample to analyze all the firms in the three categories that were trading on the US markets at the start of the estimation window (rather than those trading on the exchanges at least a year in advance). Furthermore, we use an alternate method to calculate abnormal returns – the portfolio approach which treats all the firms collectively as if they are a single security. The sanctions appeared to have almost no statistically significant economic consequences for major Chinese firms that could be caught in the crosshairs of the geopolitical rivalry.

III. Discussion

While our results confirm that US coercion impacted the targeted companies, we find limited spillover effects for other Chinese firms. Judging by the statements coming from Trump Administration officials, these were clear attempts to push for greater financial decoupling between the two countries. What explains the market's narrower response? More broadly, why has growing tension between the US and Chinese governments been followed by increasing integration of these nominally rival private sectors? To understand these contradictions, we look more closely at private sector incentive structures, particularly at a time when Chinese corporations offer Western investors considerable opportunity for growth.

During the Trump Presidency, we've seen more than 102 Chinese companies list on US exchanges.⁴⁸ That number is just under the total number of Chinese corporates that came to the US during the 8 years of the Obama administration, when the great power relationship was undoubtedly less hostile. In the third quarter of 2020, the total number of listed Chinese firms ballooned to almost 220, with the total market capitalization of these companies almost doubling in that time period to roughly \$2.2 trillion. Cross-listed Chinese shares are beginning to resemble the size of the entire mainland equity markets. As Nicholas Borst of Seafarer Capital Partners put it: "Instead of decoupling financially, the US and China now have one of the largest and fastest-growing bilateral investment relationships in the world... Despite a concerted effort by the Trump administration to reduce investment in China, holdings of Chinese securities by US investors have skyrocketed over the past several years."⁴⁹

Growing tensions, and the prospects for sanctions, were unlikely to deter Chinese companies because of the substantial material and reputational benefits from listing in the US⁵⁰. As Jason Elder of Mayer Brown put it, "The market performance, the fact that valuations are positive for the sectors that are listing right now, that naturally would lead these [Chinese] companies to the US because you'll get better trading volumes and better pricing."⁵¹ As George Calhoun has argued, the Chinese government is well aware of these features of US markets and is unlikely to want to prevent its companies from

⁴⁸ Hudson Lockett and Richard Henderson. China stock listings on Wall Street accelerate under Trump. *Financial Times*, October 11, 2020. <https://www.ft.com/content/1acd60ed-f549-430e-822c-8155baf125a8>

⁴⁹ James Kynge. US-China investment flows belie geopolitical tensions. *Financial Times*, February 3, 2021. <https://www.ft.com/content/b3dcc262-a153-4624-bc1d-156179d6e914>

⁵⁰ On the broader politics of financial access, see Bauerle Danzman 2019.

⁵¹ Hudson Lockett and Richard Henderson, 2020.

such substantial financial gains.⁵² Some Chinese fund managers think the prospects for more tensions could have actually spurred greater interdependence:

China wants to pre-empt possible US financial sanctions in the context of worsening relations... That is why you see a flurry of opening up right now. If you integrate into global financial markets and accelerate coupling by opening to foreign players, then you reduce US leverage.⁵³

American monetary policy has also laid the foundation for the growing economic integration. The federal funds rate is rooted at the zero-lower bound and looks set to remain there for the foreseeable future. The stasis has left the yield of US treasuries, which are generally regarded as the safest asset and the measure of risk-free return in stock market valuations, at historic lows. The shift in the past decade alone cannot be overstated. Spreads have compressed to such a dramatic degree that conventionally defined junk bonds are now yielding at rates that we normally associate with triple-A corporates.⁵⁴

The main point is that by lowering the risk-free rate, we see the risk appetite of investors increase, forcing them to look past political forces. With so much money in the stock market as a function of greater liquidity and the reduced risk threshold created by treasury yields, companies that can still promise outsized returns will continue to garner greater investments. The logic echoes the findings from Ballard-Rosa et al. who show that the traditional democratic advantage in sovereign credit ratings has declined with

⁵² George Calhoun. Why Do Chinese Companies List Their Shares In New York? Forbes, August 14, 2020. <https://www.forbes.com/sites/georgecalhoun/2020/08/14/why-do-chinese-companies-list-their-shares-in-new-york/?sh=152127cf1f1b>

⁵³ Tom Mitchell, Thomas Hale, and Hudson Lockett. Beijing and Wall Street deepen ties despite geopolitical rivalry. October 26, 2020. <https://www.ft.com/content/8cf19144-b493-4a3e-9308-183bbcc6e76e>

⁵⁴ Joe Rennison. The dangers of today's low-yielding, high-yield market. February 20, 2021, Financial Times. <https://www.ft.com/content/74c4c6d1-3901-4f7d-994c-e6939075abef>

increasing global liquidity.⁵⁵ China, and its corporations, appear to be some of the biggest beneficiaries. As Eswar Prasad noted, these brute economic forces are driving greater private sector engagement with China:

Economic imperatives are certainly overriding political concerns...Ultimately, private capital and private financial institutions are going to respond more to economic incentives irrespective of what political masters say.⁵⁶

Of course, not all companies are drawing in funds. Equity investors are forward looking – growth in earnings is the key to increasing stock valuations, which is frequently dictated by country-level macroeconomic factors. China’s growth rate has outstripped the US and Europe for multiple decades, a trend that looks set to continue. At the time of the sanctions, the country was already beginning its post-COVID recovery while most OECD countries struggled to contain the pandemic. As Hayden Briscoe, head of fixed income for Asia Pacific at UBS Asset Management, summarized:

Money is starting to pour into China because they’re looking for that income...It’s a really interesting point in history – the Chinese have opened up and you’ve got the rest of the world in dire straits.⁵⁷

And the broader potential for gains in an otherwise saturated market is going to make investors continue the shrugging off. In the words of Andrew McCabe of Aberdeen Standard Investments:

If you’re looking at a large market like China that’s opening up, you don’t want to wait until everyone else has invested into it – you want to be the first man...Let’s be honest, even if Trump were to be re-elected . . . these are institutional flows of capital that have a longer time horizon. They’re looking beyond near-term uncertainty.⁵⁸

⁵⁵ Ballard-Rosa, Mosley, and Wellhausen 2021.

⁵⁶ Tom Mitchell, Thomas Hale, and Hudson Lockett, 2020.

⁵⁷ Ibid.

⁵⁸ Ibid.

Moreover, investing in Chinese companies during heightened political tensions still provides important diversification. If global growth rates lag, China is likely to still have its own cycle given the size of its economy and the state's ability to control domestic financial conditions. At the same time, unlike in geopolitical battles past, the US's rival has steadily been opening itself up. It has taken the past year's volatility as an opportunity to further its integration into global markets, raising a record amount of money from foreign investors, including in bonds denominated in USD. As the words of Karen Karnoil of Bridgewater Associates, the world's largest hedge fund, imply, it would be a mistake for investors *not* to look past recent sanctions and play both sides of the political risk:

In five to 10 years, unlike during the Cold War with the Soviet Union, investors can have a stake in both sides. You can say, "I'm sure the U.S. is going to come out on top no matter what, and U.S. technology will be better, and that's where the growth is," or you can say, "Why would I take that risk? I would much rather be diversified." It's a fundamentally different economy that runs on its own clock because it has its own monetary and fiscal policy.⁵⁹

To summarize, anecdotal evidence suggests that possible spillovers of economic coercion may be mediated by the broader market environment in which the US-China rivalry is embedded. US equity markets continue to provide huge potential gains to Chinese firms, while investors are ready to invest in them because of their own high returns and, generally uncorrelated with the US market, growth prospects. With the risk-free rate of returns negligible, investors need to keep searching for opportunities that go beyond the risk-baseline that much of our IPE theorizing is implicitly based on. But the fact that China and its corporations continue to grow at above average rates, and

⁵⁹ Reshma Kapadia. The Biggest Investment Opportunity for Americans Is China, Bridgewater's Karen Karniol-Tambour Says. December 4, 2020, *Barron's*. <https://www.barrons.com/articles/the-biggest-investment-opportunity-for-americans-is-china-bridgewater-karen-karniol-tambour-says-51607134085>

still have substantial potential for future growth, the stock market is likely to continue shaking off geopolitical tensions when given a choice. In short, growing earnings are greater than growing great power tensions.

IV. Conclusions

As governments turn to economic statecraft as a tool to shape interstate dynamics, a key question remains as to the extent to which market actors interpret these signals and price emerging forms of political risk. At a minimum, sanctions and blacklists shape market behavior towards explicitly targeted firms. But these actions are inevitably part of broader country-level struggles for power. Therefore, it is central to evaluate the maximal position as well, whereby coercion spills over to broader categories of firms.

The paper's findings suggest that in the context of the US-China relationship such coercion has had more targeted effects. In line with prior work, we find strong negative effects for firms that the US targets, but there appears to be limited consequences for co-nationals. The latter stands in contradiction to several mainstream theoretical intuitions. Empirically, it forces policymakers to reconsider whether these actions could have larger consequences for economic decoupling. It also elevates the negative costs that such sanctions may generate politically, if they are not having broader market effects.

Theoretically, IPE has made substantial strides differentiating between the time horizons of equity, bond, and foreign direct investors⁶⁰, but the nuances have yet to fully travel into power politics debates. Here we tested one important finding from this

⁶⁰ Mosley and Singer 2008.

literature by examining whether the heuristics frequently used by more short-term investors impact economic coercion. Supporting recent work that places international economic decisions in their macro context, we find that heuristics may be filtered by the broader market environment. Shareholders are inevitably forward looking – the value of their shares primarily increase if a company is able to consistently grow earnings. Chinese companies, particularly the bigger players that have been able to migrate on to US exchanges, are in a prime position to continue to do so, given the prospects of continued Chinese economic growth. Market actors, then, may expect a ‘China alpha’ that is undercutting the potential of geopolitical risk.

The lack of a geopolitical risk premium is unlikely to benefit every US adversary, most notably countries with lower growth prospects like Iran or Russia. At the same time, the generalizability of the findings is limited by our focus on a major event carried out by an administration that could be seen as lacking resolve. Given the strong negative impact on targeted firms, we are skeptical that a lack of credibility explains the muted market reaction, but we hope the paper spurs future work on spillovers across geographic and temporal contexts. Moreover, as the models examining the impact on American tech company Fastly suggest, further research is needed to understand how financial linkages across targeted and non-targeted firms can amplify the impact of economic coercion.

More generally, the paper draws attention to the growing importance of financial interdependence in the US-China relationship. Financial interdependencies have received relatively limited academic and policy attention especially in contrast to concern over reserve currencies, technology, or supply chain disputes. Chinese firms across sectors have gained an advantage, and continue to solidify their positions, by

improving their reputations and raising money on American markets. The number of such firms now sits at over 200. Not only are they able to garner economic gains from listing abroad, but their engagement with US markets is likely to shape the political economy of US-China interactions. As their investor base becomes both more American and international, it increases the political costs to the US government of eventually sanctioning them and further creates the grounds for a more dovish China financial interest group. The latter has already been building substantially in recent years as China opens up its market to American investors and asset managers who clearly view this as an incredible business opportunity, even as the great power competition heats up. This suggests that IPE and security scholars should add equity and fixed-income market interactions to their studies as they think about forms of interdependence in the US-China relationship.

Finally, the paper builds on work stressing the role that macro-economic conditions play in global politics. How countries respond to economic crisis, the ability of states to borrow in order to expand domestic and military spending, the risk premium states face for sovereign debt have all been shown to be conditioned on the macroeconomic conditions of the time. Simultaneously, the foundation for any investment decision, the risk-free rate of return, is at historic lows. This minimal level increases the incentives for private actors to make riskier bets as the search for yield is heightened, likely instigating the limited geopolitical risk premium that we document. In short, domestic economic policy may be unintentionally blunting US economic statecraft, undercutting US sanctions and building market support for growing financial interdependence with China. The question then becomes how US-China tensions may shift if inflation once again picks up in the US with a corresponding tightening of the interest rate

environment. Most broadly, the paper suggests that the structural implications of interdependence for great power competition may themselves be mediated by macro-economic conditions.

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