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Breaking Bad: Sanctions and Illicit Economic Activity

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ABSTRACT

Sanctions are a common tool in international diplomacy used to pressure governments into compliance. Sanctioning countries hope, by restricting access to international financial markets and limiting the capacity to trade vital goods and services, to force a target government to yield to policy demands or face a popular uprising that leads to its downfall. Complementing a long list of contributions analyzing the political economy of sanctions, I develop a political economy model of sanctions, illicit finance, and selectorate size. Building on these theoretical arguments, I hypothesize that sanctions result in an increase in illicit economic activity. This argument starts from the idea that autocratic regimes, faced with the constraining effects of sanctions, seek illicit channels to import the goods and capital necessary to support their regimes. To test this hypothesis, I draw on three carefully selected present-day cases and augment them with a large-N analysis. In this analysis, I establish a causal link between the onset of sanctions and increases in capital flight to offshore financial centers. From a policy perspective, these findings underscore the urgent importance of reassessing sanctions policy in response to foreign policy crises such as Russia's 2022 invasion of Ukraine.

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Introduction

On February 24, 2022, Russia launched a full-scale invasion into Ukraine. In response, the Western world unleashed an unprecedented wave of sanctions in hopes of cutting off the Russian economy from international markets. Yet, two years into the war, Russia's economy continues to grow steadily, and Moscow continues to finance its war machine (Ribakova, 2023; Swanson, 2024).

Russia's example is not unique. Western countries, in particular the United States, have imposed sanctions on several other nations as a tool of economic statecraft. Generally, sender countries utilize sanctions to alter a target nation's policies by inflicting damage on the economy (Neuenkirch & Neumeier, 2015). However, sanctions often fail to achieve the desired effect (Oeschlin, 2014). In reality, target governments, often autocratic regimes, continue to access financing. This trend suggests that regimes turn to illicit means to overcome the constraining effects of sanctions on their economies. Thus, the question arises: is there a relationship between illicit economic activity and sanctions?

In this paper, I develop a political economy theory of sanctions, illicit finance, and regime centrality. The argument starts from the premise that regimes require both imports of goods and access to international capital to remain in power and pursue their policy aims. In turn, sanctions threaten this access by adversely affecting a country's imports as well as its ability to access this capital (Neuenkirch & Neumeier, 2015; Early & Peksen, 2019). Thus, we can predict that, blocked out of international markets, regimes will turn to illicit economic channels. To circumvent and navigate sanctions, countries will reroute trade through third countries, smuggle important resources, and employ financial mechanisms that disguise these transactions. Therefore, sanctions will trigger a growth in illicit trade and financial activity. This explains how a country such as Iran–which has endured decades of Western sanctions–continues to export its oil across the Middle East and the rest of the world.

The degree of centralization of the sanctioned regime conditions the mechanisms of this relationship. In highly centralized regimes, which consolidate power among a select few, illicit flows will cater most to the interests of the selectorate. In other words, regimes with a small selectorate size, such as North Korea, will have greater control of illicit financial flows and capture a greater share of rents from them. In a less centralized regime, we expect a greater

dispersion of illicit financial flows. This effect would occur in Russia, for example, where a complex network of oligarchs and elites vies to capture rents from such activity.

To evaluate these hypotheses, I employ a mixed-methods approach. First, I draw on a series of carefully selected case studies that illustrate the relationship between sanctions, illicit trade and financial activity, and regime centralization. By examining Russia's *Sistema* of political patronage, I reveal how the country's previously established "informal social contract" and close ties to Western adversaries allows Moscow to employ resource smuggling, trade rerouting, and Latvian-style banking to evade sanctions. Next, I focus on Iran's clergy-based selectorate and "Central Bank of Terrorism" to illustrate how a network of illicit financial institutions and extensive oil smuggling limit sanctions' constraining effects. Finally, I employ the case of North Korea to examine how its totalitarian regime utilizes the shadowy Bureau 39 to oversee all illicit financial activity and facilitate goods and dollar smuggling into the country.

I augment these studies with a large-N analysis of capital flight to offshore financial centers. In this analysis, I employ a dataset comprising 205 countries and territories between 2000 and 2018. I utilize offshore financial flows as a proxy for notoriously difficult-to-measure illicit financial activity. Yet, my theory offers the simple conjecture that, blocked from traditional financing, regimes will turn towards loosely-regulated offshore financial centers to facilitate illicit flows. To capture this capital flight, I employ data on bilateral banking ties from the Bank of International settlements. My results indicate that there a strong ($p<0.01$) relationship exists between the imposition of sanctions and capital flight to tax havens. Moreover, this link manifests most strongly among sanctions related to trade and finance.

This paper makes several contributions to the extant literature. First, this paper adds to the literature on the adverse effects, or unintended consequences, of sanctions. Most research on these consequences has focused on negative humanitarian effects, namely access to medical supplies and food (Cortright and Lopez, 2000; Weiss et al., 1997; Garfield, 2002), political instability in the targeted state (Allen, 2008; Marinov, 2005), and impacts on human rights (Peksen and Drury, 2010; Allen, 2008; Neuenkirch and Neumeier, 2015). The literature on the financial impacts of sanctions, meanwhile, describes a negative impact on financial flows (Besedeš et al., 2017) and an increased likelihood of banking crises (Hatipoglu and Peksen, 2016; Ozdamar and Shahin, 2021). However, these studies tend to focus on the formal sector. A

key innovation in this paper is that I examine the unintended consequences of sanctions on illicit economic activity.

A few studies discuss illicit economic activity in the context of sanctions. Andreas (2005) details the criminalizing effects of sanctions in Yugoslavia, while Farzenegan (2013) highlights the impact of energy sanctions on Iran's informal sector. Early and Peksen (2019), meanwhile, build on this analysis with a study of the broader activities involved with the informal sector. They also generalize their argument with a large-N analysis. In a similar manner, I extend my research beyond earlier country-specific studies to investigate how sanctions affect illicit economic activities with a large N-analysis. However, while Early and Peksen (2019) utilize macroeconomic estimates of shadow economies in single countries, this paper uses cross-border capital flight. Thus, it evaluates illicit economic activity in an international context and isolates increases in illicit finance as a measurement. Here, my research relates to the growing list of contributions analyzing the role of offshore financial sinks and illicit trade flows. Whereas these contributions focus on understanding various domestic factors driving these flows (Kern et al., 2023; Cooley et al., 2018; Le and Rishi, 2006), I concentrate on the role of sanctions in facilitating illicit activity. Moreover, my qualitative analysis sheds light on the connection between sanctions and illicit finance with the scope condition of regime centrality.

From a policy perspective, I contribute to the ongoing debate around the effectiveness of sanctions. This debate has particular relevance in the context of U.S. policy towards Russia following the invasion of Ukraine. Here, previous papers suggest that sanctions effectively reduce access to international financing (Pak and Kretzschmar, 2016; Hatipoglu and Peksen, 2018) and are most effective when multilateral or implemented by all parties involved (Ozdamar and Shahin, 2021; Peksen and Son, 2015; Elliott, 1998). Accordingly, a growing Western consensus has turned to economic sanctions as a tool to deal with major foreign policy issues (Peksen, 2019). Yet, this paper indicates that leakage through illicit channels forms an effective foundation of evasion. Moreover, it describes the frightening reality that sanctions may lead to an international evasion network of like-minded countries that oppose Western economic control.

Theoretical Considerations

Economic sanctions are now a major tool of international statecraft (Ozdamar and Shahin, 2021; Cortright & Lopez, 2000). A vast and growing literature establishes that sanctions

have a variety of adverse effects on the targeted state's economic performance (Neuenkirch & Neumeier, 2015; Kaempfer and Lowenberg, 2007; Ozdamar & Shahin, 2021). These effects occur through several channels, including a decline in exports and imports, lower bargaining power in international markets, and reduced international capital inflows (Hufbauer et al., 2009; Evenett, 2002). However, the magnitude and likelihood of facing negative impacts from sanctions vary across states and actors (Ozdamar & Shahin, 2021). Some targeted states may experience little or no effect, while some sanctions may even "strengthen" targets (Park, 2014). This variation depends both on the nature of the sanctions and those of the sender and targeted states. For example, Neuenkirch and Neumeier (2015) demonstrate empirically that comprehensive UN sanctions have a greater negative impact on GDP than general UN sanctions or unilateral measures. Caruso (2003) reveals a similar differentiation in the degree of negative effects on bilateral trade flows. Furthermore, the degree of dependence and economic disparity between the target and sender state may impact the sanctions' effectiveness (Ozdamar & Shahin, 2021). However, in certain states, sanctions may unintentionally benefit the target state through a "rally-around-the-flag" effect first noted by Galtung (1967) and observed by Amuzegar (1997) in Iran.

While variation exists in the overall economic impact of sanctions, the literature is much clearer in examining sanctions' impact on financial flows. Sanctions result in a lower level of financial flows between target and sender states and decreased access to international financing for the targeted state (Pak & Kretzschmar, 2016; Besedeš et al., 2017; Hatipoglu and Peksen, 2018).[2] An implicit assumption in these findings is that countries do not find ways to maneuver around these sanctions to maintain access to financing. However, multiple mechanisms enable a nation to circumvent sanctions. An especially relevant one is illicit economic activity.

The consequences of sanctions on illicit economic activity are less well-documented. Andreas (2005) identified potential criminalizing effects of sanctions, arguing that they lead to increased underground activity and regional sanctions-busting networks. Additionally, he explains that, as economic agents seek to circumvent sanctions, the shadow economy expands, marginalizing licit commerce and increasing public acceptance of illegal activity (Andreas, 2005;

[2] Hatipoglu and Peksen (2018) expand this argument and demonstrate that the combination of economic shock and lower financial flows increases the likelihood of banking crises in sender states. Thus, sanctions can induce financial banking crises through economic damage.

Crawford & Klotz, 1999). This illegal economy may even receive encouragement from powerful political pressure groups that seek to extract rents (Kaempfer & Lowenburg, 1999; Crawford & Klotz, 1999). A few studies have further examined this criminalizing effect. Farzanegan (2013) demonstrates that financial sanctions against Iran led to increased corruption, illegal trade, and a black market for foreign currency. Meanwhile, Early and Peksen (2019) assert that sanctions incentivize firms and individuals to enter the shadow economy and quantitatively support this claim. An illustrative example of this effect occurred in Lithuania following Russian counter-sanctions against the EU in 2014, as Lithuanian farmers fled to the underground economy. Following these measures, surveys in Lithuania revealed a massive increase in the number of Lithuanians receiving illegal work payments (17% to 47%) and working fully off-the-books (14% to 28%), in part due to sanctions-induced economic woes (Žukauskas 2013; 2015).

A specific area of informal economic activity involves illicit finance.[3] Although much less researched, the literature discussing illicit finance in regard to sanctions indicates, through several case studies, that sanctions have a first-order impact on illicit financial activity (Farzanegan, 2013; Early & Peksen, 2019; Neuenkirch & Neumeier, 2015; Lewis & Prelec, 2023). Several reasons explain why illicit financial activities increase once sanctions begin to take effect.

First, sanctioned countries continue to depend on imports for natural resources, food, technology, and a variety of goods and services. Moreover, many sanctioned nations face restrictions on military items or dual-use goods. They must find ways to continue procuring materiel, often to carry out military operations explicitly related to the imposition of the sanctions (Russia's case provides a fine example). Being unable to maintain existing trade relationships and participate in 'barrier-free' international trade, these countries are "forced" to turn to illicit means to cope with sanctions. The resulting impacts are clear in the literature; for example, it is well-documented that sanctions lead to cross-border smuggling (Farzanegan, 2013; Early & Peksen, 2019; Neuenkirch & Neumeier, 2015). The example of North Korea provides a

[3] I apply the "umbrella" definition of illicit financial flows that draws upon the illicit finance literature (Collin, 2020; Musseli and Burgi Bonanomi, 2020; Brandt, 2022; Kern et al., 2023): "cross-border transfers of money or assets connected with some unlawful activity… as the 'common denominator definition'" (Musselli and Bürgi Bonanomi, 2020). Under this definition, "unlawful" has flexible interpretations with scope for the rules and principles of international law. Thus, the circumventing of UN sanctions by rerouting trade through third countries or establishing a network of front companies to facilitate hidden transactions, while perhaps jurisdictionally legal, would constitute an illicit financial flow. However, in most cases, these flows are illicit under the "narrow" definition as well, which refer to cross-border financial transfers 'that have a clear connection with illegality' (World Bank, 2016).

case in point. Since the 1970s, North Korea has developed extensive smuggling capabilities in the face of economic necessity, an inability to access military goods, and dwindling international support (Chestnut, 2007).

Although much of the literature focuses on understanding the modalities and inner workings of smuggling networks to circumvent sanctions, few researchers have analyzed the financing of these international trade flows (Drezner, 2015; Early and Peksen, 2018). With the inability to tap international financial markets, governments need to find ways to cover expenses and fund financial outlays. This provides incentives for creating illicit financial networks that generate a corresponding increase in financial flows. A few studies have detailed the proliferation of illicit finance in nations with regimes targeted by sanctions (Newman & Zhang, 2023; Lewis & Prelec, 2023; Andreas, 2005; Donovan et al, 2023).[4] For instance, Donovan et al. (2023) examines how, in Iran, the regime has established an illicit network of shell companies, banks, and exchange houses across the globe to facilitate underground transactions. Most evidently, Persian Gulf Petrochemical Industry Commercial Co. (PGPICC) in Iran uses UAE-based exchange houses to facilitate billions of dollars in sales of Iranian petrochemicals to foreign buyers (Donovan et al., 2023). Meanwhile, Russia, has incorporated the use of illicit finance well into its foreign policy toolkit to circumvent sanctions and continue to acquire military goods (Lewis & Prelec, 2023).

Moreover, illicit economic activity–illicit trade finance and trade in particular–has important linkages to leader survival. Leaders are survival-motivated and require access to financial resources to survive (Bueno de Mesquita et al., 2003).[5] International trade and finance provide an important means of generating revenue to provide these resources (DiGiuseppe & Shea, 2016; Escribà-Folch & Wright, 2010). For example, DiGiuseppe and Shea (2016) note that

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[4] For example, Newman & Zhang (2023) identified a significant increase in lending from offshore financial centers (OFCs) to target states, indicating a realignment of capital flows to less transparent sources. Moreover, Andreas (2005) details the proliferation of sanctions-busting networks and the explosion of illicit finance in Serbia and Yugoslavia following sanctions against the Milosevic regime. The prevalence of illicit finance remained well after the regime's collapse.

[5] To stay in power, dictators must maintain the flow of resources to their selectorate. Following Bueno de Mesquita et al.'s model (2003), incumbent leaders (L) remain in power by maintaining the flow of goods to the winning coalition (W) of the selectorate (S). In this model, the winning coalition represents the number of supporters the leader requires to sustain power, and the selectorate is the pool of the population (N) from which to draw those supporters. In autocratic states, winning coalitions tend to be quite small, as do selectorates, although the sizes of each can vary (Bueno de Mesquita & Smith, 2010). As a result, authoritarian regimes cater the flow of goods and resources to a much smaller number of political actors than democratic ones.

the loss of access to international credit markets increases the difficulty of regime survival in non-democratic states. In certain authoritarian regimes, such external sources of revenue constitute critical channels to fund political patronage (Escribà-Folch & Wright, 2010). Thus, the loss of access to these revenues due to sanctions could have a detrimental impact on leader survival. Van de Walle (2001) provides a case example of such an effect, describing how the withdrawal of support from international financial institutions coincided with democratization in Benin and Zambia. In contrast, sustained international financial support promoted regime survival in Cameroon and Cote d'Ivoire. Thus, an important link exists between leader survival and access to international finance and trade. When faced with sanctions that restrict access to external trade and finance, dictators must seek ways to circumvent the sanctions' constraining effects.

It becomes clear, then, that targeted states develop underground economies in response to Western sanctions. In practice, regimes evade sanctions by shifting trade and financial flows to the underground economy. To do so, they utilize three primary mechanisms: rerouting trade, illegal smuggling, and innovations in illicit finance. Through these levers, sanctioned states continue to fund their governments and resist Western direction. This leads to my first hypothesis:

H_1: Sanctions lead to an increase in illicit trade and finance

Thus, circumventing sanctions forms an important pillar for political survival; dictators will use the economic resources at their disposal to remain in power.

Not all political regimes are dealing with this in the same manner. Most sanctions target countries with authoritarian regimes. This has important theoretical implications for the above hypothesis. First, authoritarian governments can maintain power through two main mechanisms: loyalty and political repression (Wintrobe, 1990, 2009). In response to sanctions, dictators will need to find ways to reward loyal followers but also retain sufficient resources to suppress dissent. The dictator is constrained by the price of loyalty and the price of repression. (Wintrobe, 1990, 2009).[6] In this model, the imposition of economically harmful sanctions should constrain

[6] The price of loyalty involves the cost of distributing rents as a form of political exchange, while the price of repression includes the cost of maintaining a judicial system and police force supportive of the dictator's aims. By extension, the price of loyalty depends upon the dictator's economy, and that of repression relies upon the dictator's political institutions. Importantly, the levels of loyalty and repression are not independent; an increase in repression

the dictator's resources by damaging the economy. At any level of repression or loyalty, the dictator should have a reduced ability to supply political rents or repress the opposition. This would further incentivize the dictator to circumvent restrictive measures.

Finally, the composition and size of the selectorate in autocracies drive the chosen instruments used by dictators. States with a greater degree of centralization can more effectively capture rents from sanctions to increase political loyalty. For example, Kaempfer et al. (1999) argued that sanctions enable firms or individuals to earn rents from arbitrage on illegal trade. Regimes can capture a significant share of these sanctions rents, particularly when they gain monopoly power over domestic industry and inhibit the ability of domestic opposition groups to access sanctions revenues (Kaempfer et al., 2004).[7] Thus, dictators can increase the supply of loyalty without any impact on the cost of repression. Even if domestic opposition groups can capture a share of sanctions rents, the rally-around-the-flag effect could further decrease the price of loyalty for the dictator (Kaempfer et al., 2004). Consequently, especially in regimes that highly consolidate power, dictators can abuse sanctions to increase revenues for the coalition in power. This consequence has distributive effects as well, as dictators in power will also unevenly distribute costs of sanctions away from key political elites (Kaempfer and Lowenberg 1999; Rowe 2001). These conclusions have support from Escribà-Folch and Wright (2010), who demonstrate empirically that dominant single-party regimes can increase revenues even when targeted by sanctions. Thus, they are less sensitive to the negative effects of sanctions than personalist regimes and have a greater ability to fund patronage despite sanctions (Escribà-Folch & Wright, 2010).

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affects an individual's incentives to "invest" loyalty in a candidate. Two effects moderate this relationship: a substitution effect and an income effect. The substitution effect explains that individuals can offer loyalty to either the regime in power or to an opposition group. Therefore, as repression increases, and the number of opposition parties decreases, the supply of loyalty increases. However, the income effect describes that an increase in repression increases the likelihood of an individual incurring costs from punishment. Consequently, at higher levels of repression, the income effect begins to dominate, and the overall supply of political loyalty then decreases (Wintrobe, 1990; 2009).

[7] Kaempfer and Lowenberg (1998, 1999) develop a public choice approach to sanctions. In this approach, they propose that economic harm per se is not the most important dimension of the effect of sanctions on the target country. Moreover, they argue that sanctions which concentrate income losses on groups benefiting from the target government's policy, signal political support to opposition interest groups, or threaten future economic pain are most likely to have the desired effect of policy change. Wood (2008) builds on this approach and that of Kaempfer et al. (2004), Marinov (2005), and Olson (1979) to identify that sanctions especially threaten target regimes when they increase the power of opposition groups, contribute to social upheaval, or damage the regime's coalition of supporters by incentivizing defections.

Synthesizing this, the degree of centralization of the targeted state's government has an effect on the policy responses available to it. Governments with a small selectorate (e.g., totalitarian states) have a greater ability to command and control illicit financial flows into the country. Thus, they capture a greater share of sanctions revenue to distribute as political rents. This leads to the second hypothesis:

> ***H_2: The more centralized the regime, the more the illicit flows cater to the interests of the selectorate*** [8]

Empirical Analysis

Introduction

I utilize a mixed-method approach to test these hypotheses. First, I present three case studies: the Russian Federation (Russia), the Democratic People's Republic of North Korea (North Korea), and the Islamic Republic of Iran (Iran). These case studies demonstrate how sanctions lead to the emergence of illicit trade and financial innovation. These three countries have all been subjected to extensive rounds of sanctions over extended periods of time. Importantly, they differ on dimensions of regime centrality and selectorate structure. This allows for analysis of how greater regime centralization increases the degree to which illicit financial flows cater to the regime's selectorate. I provide more detailed arguments of the motivation for case selection below and summarize these in Table 1.

Following the case study analysis, I test the generalizability of the first hypothesis with statistical tests linking the imposition of sanctions to capital flight to offshore tax haven countries. If the hypothesis is correct, the imposition of sanctions should be followed by an increase in capital flight to offshore tax havens. This effect represents the result of governments and enterprises well-connected to the state apparatus siphoning capital to low-regulation jurisdictions to disguise its origins and evade the punitive effects of sanctions. Such capital flight clearly constitutes illicit finance under the umbrella definition and, in most cases, under the narrower one. From the outset, I note that this effect has more strength in the short-run, as immediate responses to sanctions induce capital flight.

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[8] In Bueno de Mesquita's (2003) selectorate model developed, the illicit flows would cater especially to the winning coalition (W) of the selectorate. In this paper, the distinction is unnecessary, as the effect remains the same.

Case Selection

Russia, the first case in the analysis, presents the advantage of undergoing two discrete rounds of sanctions. The country first faced sanctions in 2014 following the annexation of Crimea and faced broader, harsher measures after its full-scale invasion of Ukraine in 2022. Russia's effective response to the second round of sanctions reflects adaptation in the economy after the original wave. Additionally, Russia presents an adequate case to observe our scope conditions. Contrary to other cases, Russia has robust *de jure* democratic institutions. In practice, these institutions are undermined by an authoritarian leader, a web of oligarchs, and a political patronage system that characterizes the Russian political sphere (Ledeneva, 2013; Marten, 2015).[9] This structure provides a valuable framework for analyzing how sanctions evasion enriches Russia's politically connected elites.

Iran also offers several advantages as a case study. Iran, much like North Korea, has a history of economic isolation and a strong anti-Western ideological conviction. Since its revolutionary founding in 1979, Iran has faced varying degrees of punitive sanctions from the West, in particular the United States (Laub, 2015; Maloney & Takeyh, 2011). In part because of Western antagonism, it has resisted these sanctions and developed various measures to circumvent sanctions over time (Amuzegar, 1997; Maloney & Takeyh, 2011).[10] The most notable of these, for this analysis, is Iran's development and weaponization of an underground financial network. Importantly, Iran has a similar selectorate size to Russia and, by extension, a broader power base than that of North Korea. However, while Russia relies on a market-based, semi-democratic selectorate, Iran relies upon a clergy-based one. This political structure proves valuable to examine how Iran has utilized sanctions to siphon political rents to the religious elite, allowing it to consolidate its power base.

Finally, North Koreas provides an illustrative case to compare against the previous two. First, North Korea has faced sanctions since its very inception. Moreover, like Iran, it has a

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[9] Ledeneva (2015) describes the far-reaching role of informal institutions in Russia as the "*Sistema.*' The *Sistema* refers to a holistic system that constitutes a unique type of political economy (Lewis & Prelec, 2023). Marten (2015) adds that an "overwhelming dominance of the personal patronage system in all aspects of its political and business life" characterizes Russian society (Marten, 2015, p. 72). Thus, I examine Russia as a neopatrimonial state backsliding on *de jure* democratic laws, rather than a democratic one.

[10] Supreme Leader Ali Khamanei declared in a 2008 speech in regard to engagement with the United States: "The change of behavior they want - and which they don't always emphasize - is in fact a negation of our identity . . . Ours is a fundamental antagonism." (Maloney & Takeyh, 2011)

strong ideological philosophy of self-reliance that disincentives responding politically to punitive actions from the West (Chestnut, 2007; Young, 2021). As a result of these two factors, North Korea has developed an entire government bureaucracy focused on sanctions evasion and has developed strategies to improve these evasion mechanisms over decades. Finally, North Korea's very high concentration of power is useful to observe how degree of centrality can drive financial innovation and reinforce dictator power. Thus, as an absolutely authoritarian state, North Korea provides a valuable case for analyzing our scope conditions.

Table 1: Summary of arguments for case selection

Country	Year(s)	Degree of Centrality	Regime Type	Focus of case analysis/ mechanism of evasion
Russia	2014 2022	low-medium	democratic backsliding market-based selectorate	• *Foreign policy changes* • Realigning trade • Resource smuggling • Illicit finance
Iran	1979 - present	medium	semi-authoritarian clergy-based selectorate	• *Central Bank of Iran* • Realigning trade • Oil smuggling • Shadow banks
North Korea	1953 - present	high	one-party totalitarian family-based selectorate	• *Bureau 39* • Goods/dollar smuggling • Illicit finance

Case Study: Russia's Sistema

I. Background

Russian demonstrates the weaponization of a pre-existing patronage system to create a network of sanctions evasion. In particular, Russia's ability to utilize an illicit financial system and smuggle commodities illustrate how sanctions catered goods to the country's elite.

First, a brief overview of Russia's political and economic system contextualizes its recent policy responses to sanctions. Russia's current system developed after the collapse of the Soviet Union, first under Boris Yeltsin and more strongly under Vladimir Putin. While Soviet legacies permeated society, the modern oligarchical system emerged as Yeltsin faced re-election in 1996 (Berls, 2021). Under pressure from Communist opposition, Yeltsin instituted a loan program that offered powerful businessmen shares in natural resource enterprises in exchange for political support. These newly wealthy oligarchs would see their power increase as the system became dependent on bribery and corruption. In 1999, Putin succeeded Yeltsin and established an "informal social contract" with the public that ensured economic stability in exchange for political indifference (Berls, 2021). Under Putin, the patronage system became dominant. He cracked down on overly powerful oligarchs and siphoned off financial benefits to security and military allies. Putin's crony capitalism emphasized favoritism and bribery to enable widespread corruption. As a result, the personal financial incentives dictate state interests in the Russian political system (Lewis & Prelec, 2023).

Russia's personal patronage system, which exists in place of legal norms (Naim, 2022), now comprises an extensive network of informal political and financial institutions. Oft referred to as the *Sistema*, this network dominates all aspects of society (Ledeneva, 2013). In turn, its corrupt and underground nature normalizes and encourages the mass proliferation of illicit financial flows (Lewis & Prelec, 2023). In fact, Kar et al. (2023) demonstrate a relationship between the size of Russia's informal economy and its level of illicit capital flight. They also find a massive increase in illicit financial flows following the foundation of the Russian Federation. These flows assume a variety of mechanisms in Russian foreign policy, including capital flight to Dubai, the use of Latvian-style banking, and resource smuggling (Lewis & Prelec, 2023). Such mechanisms facilitate sanctions evasion and allow Russia to fund its war machine in the face of Western economic pressure. Moreover, as Russia resists sanctions through illicit finance, the Kremlin invests in industry and boosts the productivity of historically

inefficient SOEs, thus building its domestic capacity (Parkin, Seddon, & Ivanova, 2023; Fraioli, 2022). Consequently, the imposition of sanctions may backfire as illicit finance directs funds to the Kremlin's war chest while politically important industries receive state funding. In essence, the corrupt nature of Russia's political economy both necessitates and facilitates the development of illicit finance.

Extensive research documents this phenomenon domestically, but Marten (2015) develops a framework illustrating the foreign policy implications of Russia's informal political networks. She emphasizes how interests of key network members will drive foreign policy decisions. Lewis and Prelec (2023), meanwhile, identify three ways in which illicit finance drives foreign policy: (1) foreign policy action rarely succeeds if there are no rent-seeking opportunities; (2) illicit finance compensates for Russian diplomatic weakness; and (3) illicit finance plays a critical role in maintaining the economy and the military after the imposition of sanctions. Thus, Russia's *Sistema* also enables the pursuit of foreign policy goals and sanctions evasion through underground deals and illicit activities.

II. Mechanisms of Evasion

Before examining mechanisms of evasion, I provide a short overview of sanctions against Russia under focus here. Following Russia's annexation of Crimea in 2014, the U.S., EU, and other allies imposed harsh financial penalties on Russia. The sanctions focused on three areas: restricting access to Western capital markets for Russian SOEs in banking, energy, and defense; an embargo on exports of advanced oil exploration and production equipment; and an embargo on the export of military goods to Russia (Christie, 2015). They notably omitted direct sanctions on oil and gas exports, likely due to potential economic damage to the EU (Barron, 2022). These sanctions had an immediate impact, marked by a sharp devaluation of the ruble (Christie, 2015). However, during the remainder of the decade, the Russian economy adjusted to the new economic environment. For example, Lukaszuk (2021) demonstrates that smuggling facilitated evasion for most goods facing sanction. On a firm level, sanctioned companies, particularly in the strategic sector, adopted new strategies to overcome the sanctions (Gaur et al., 2023).

Three main vehicles facilitate Russian evasion. First, Russia engages in illicit trade, both by rerouting trade through countries hostile to the West and through resource smuggling. Next, it increases illicit financial flows through shell companies that disguise asset ownership. These

codependent mechanisms integrate into Russia's foreign policy strategy and allow the Putin regime to continue acting in defiance of international law.

As to the first mechanism, Russia has avoided the worst of the impact of sanctions through realigning its trade policy. It has boosted oil and energy sales to China and Turkey, focused on closer trade relationships in Africa, and increased linkages with Dubai. For example, an opaque network of U.A.E.-registered companies purchased one-third of Russian oil between January and April 2023—90% of which never touched Emirati soil (Wilson, 2023). Moreover, Dubai and Ankara have become central nodes in the Russian gold trade network. These key hubs, along with Kazakhstan, have enabled Russia to procure dual-use technology and boost energy sales through illicit means (Lewis & Prelec, 2023). In particular, Turkey–a NATO member–has grown economically closer to Russia. Trade between the two countries increased by 93% in 2022 over 2021, and trade in electric machinery and parts increased five-fold (Lipsky & Graham, 2023). Central Asian countries, in addition to China and Turkey, act as intermediaries to reroute advanced electronics into Russia. Armenia, for example, conspicuously saw a 515% increase in the import of semiconductor chips from the U.S. in 2022 over 2021 (Sonnenfield & Wyrebkowski, 2023). Moreover, these newly strengthened trade ties pushed de-dollarization in Russian trade. In 2022, the share of Russian imports denominated in renminbi had grown to 20% from 3%, and the share denominated in USD and the Euro dropped from 80% to 67% (Javorcik et al., 2023). This trend includes not only trade with China but trade with third countries, of which the share denominated in renminbi increased from 1% to 5% after sanctions (Javorcik et al., 2023).

Second, resource smuggling of gold and diamonds, primarily carried out by the Wagner paramilitary group, has boosted Russia's import of illicit capital. The Wagner group, headed until 2023 by former Putin ally Yevgheniy Prighozin, operates outside of the market (Reynolds, 2019). Prighozin, with his high position in the Putin regime, provided the Kremlin with off-the-books revenue streams in exchange for lucrative government contracts (Reynolds, 2019). These unrecorded streams primarily originate from various operations in Africa. In the instance of the Central African Republic (CAR), the Wagner group captured key segments of the country's economy. There, a Wagner-affiliated mining company rapidly expanded gold production and, according to one report, melted down gold bars to export back to Russia (Lewis & Prelec, 2023). Moreover, diamonds worth US $12M were exported from the CAR through a company called

Diamville (EIC/AEOW/Dossier Center, 2022). This practice extends beyond the CAR. In another example, the fear that the Wagner group would access Libya's oil reserves prompted the U.S. Central Intelligence Agency to request that the Libyan government expel the group from the country (Faucon and Strobel, 2023). Russia also engages heavily in illegal gold exports in Sudan and Mali (Lewis and Prelec, 2023).

All of these activities share a common thread: they utilize the Wagner groups' underground economic network. In particular, Wagner established a corporate network of shell companies in nations across the region to facilitate untraceable commodity exports and cash transfers back to Russia (Lewis and Prelec, 2023). Their off-the-books trading empire enabled the flow of capital back to Russia, completely unharmed by Western sanctions. Moreover, Wagner's involvement in Africa has increased Russian influence and turned African nations away from the West (Reynolds, 2019).

To enable this trade, Russian businesses and oligarchs employ a vast network of shell companies to disguise transactions and foreign asset ownership. These shell companies facilitate money laundering through correspondence with "Latvian-type" banking (Stack, 2015). Latvian-type banking refers to a business model that emerged in Former Soviet Republics (FSR) following the collapse of the Soviet Union. In this model, FSR banks set up accounts with "extensive networks of correspondent accounts for dollar clearing" that move funds from Russia to the international financial system (Stack, 2015). Banks and companies frequently misinvoice transactions to avoid scrutiny from regulators and law enforcement (Stack, 2015). This system, which preexisted sanctions regimes, enables Russian oligarchs to hide their assets and continue to earn rents. Moreover, in response to sanctions, oligarchs and high-ranking officials moved or transferred ownership of assets and trusts and altered financial flows to property or companies based in the US to evade penalty (FinCEN, 2022). To offer a recent example, directly following Russia's 2022 invasion of Ukraine, the Cyprus branch of accounting giant PwC "scrambled to help rich Russian clients under imminent threat of sanctions shift hundreds of millions of dollars between secretive shell companies" (Woodman & Weinberg, 2023). The same off-the-books mechanisms that underpin Russia's patronage system domestically expanded to create a global underground economy.

III. Impact of Sanctions Responses

Russia's resistance to sanctions spurs its domestic economy and, consequently, improves

its foreign policy position relative to the West. While Russia continues to import capital illegally, it can invest in SOEs and improve productive capacity. This response has precedent. Amuzegar (1997) outlined, through the case of Iran, how sanctions may have the unintended consequence of boosting domestic capability through mobilizing the populace ("siege morality"). In Russia, the country's patronage system compounded this effect. Following the Crimea-related sanctions in 2014, the Russian government directed state funds to state-owned banks and large-scale infrastructure projects (Dirsk, 2021). Large SOEs and connected businessmen (who also fell under the sanctions) became even richer and more powerful. Likewise, the Russian agricultural sector experienced significant gains, followed by the defense manufacturing industry, whose gains were touted by Putin himself in 2019: "*Russia never had helicopter engine-manufacturing. Now we do…. We did not have engines for sea-going ships. Now we do…. Our economy…has adapted to external shocks*" (Dirsk, 2021). In the case of Ukraine, history appears to be repeating itself. In a recent interview, Oleg Deripaska, one of Russia's richest oligarchs, credited sanctions with ramping up domestic investment and forcing inefficient state enterprises to increase capacity (Parkin, Seddon, & Ivanova, 2023). As a result, the Russian economy has grown more resilient, first in 2014, and now in response to economic isolation post-Ukraine.

Moreover, following the 2014 Crimea-related sanctions, Russia developed extensive sanctions-busting capabilities, stockpiling gold, developing a bank transfer system independent of SWIFT, and investing heavily in SOEs (Fraioli, 2022). This enriched the very businessmen the sanctions initially targeted (Berls, 2021). Thus, when Russia invaded Ukraine in February of 2022, its economy remained well-positioned for the incoming response, which targeted nearly every aspect of the Russian economy. Roughly 1800 entities and individuals have been hit with sanctions, and companies in the military, defense, and aviation sectors face targeted measures. Russia was removed from the SWIFT system, and $300B of the Russian Central Bank's accumulated foreign assets were frozen. As was the case in 2014, immediate impacts wrought economic damage. The ruble plunged, capital flight increased, and the value of Russian companies crashed (Berner et al., 2022). However, two years later, the Russian economy has bounced back, and its war machine was still humming (Bloomberg News, 2023)

Case Study: Iran's Central Bank of Terrorism

I. Background

The second case of a country capitalizing on state power to evade sanctions involves Iran and its extensive international financial network. Since the 1979 revolution, Iran has endured decades of sanctions. To counter these measures, the nation has established an international financial network to facilitate the illicit trade of foreign currencies and proliferate illicit finance. Iran's extraordinary capacity to evade sanctions through trade, smuggling, and illicit finance illustrates how a centralized government can leverage its power to reap benefits from sanctions. Moreover, Iran's illicit networks facilitate an underground economy with other targeted nations, backfiring on the foreign policy goals of sender nations. Iran's anti-Western identity and strong ideological foundation mitigate the political impacts of sanctions and encourage this resistance (Maloney & Takeyh, 2011). In fact, Iran's financial innovations have created a black market that facilitates sanctions evasion and oil smuggling across the entire Middle East.

A brief overview of Iran's political economy history sheds light on the mechanisms it leverages for sanctions evasion. Since its founding in 1979, Iran's government has existed somewhere between a democracy and a theocracy. It has its base in a constitutional Islamic republic in which the ruling clerical elite hold most of the formal and informal power (Buchta, 2000). Democratic institutions, including a parliament and a judiciary branch, exist, but the ultimate authority rests with the Supreme Leader (CFR Editors, 2022). Moreover, following the original 1979 revolutionary founding, changes occurred in response to economic and political isolation from the West (Dudlak, 2018). Iran's government began to implement an anti-growth populist economic policy in the 1980s to ensure the loyalty of the masses (Isfahani, 2019). The government also later assumed control of large strategic sectors of the economy, including hydrocarbons and minerals (Isfahani, 2019; Abghari, 2007). Despite pro-market shifts in subsequent administrations, the state has maintained its grip over the private sector (Isfahani, 2019). As a result, Iran has a mostly authoritarian system with significant state control over the economy (Isfahani, 2019).

While transitions in political positions occur, there have been only two Supreme Leaders, who hold the highest position in the government. The power of the Supreme Leader (Ali Khamanei) has formal and informal checks, but his authority has never been fully challenged

(CFR Editors, 2022). In practice, the Supreme Leader receives support from the ruling clerical Islamic elite, which maintains its power through patronage and control of the media (CFR Editors, 2022). It has maintained its ability to use economic power to buy loyalty by distributing political rents while repressing the opposition (Abghari, 2007). This elite has support from the Iranian Revolutionary Guard Corps, a multi-service branch of the Iranian Army that serves as an important pillar of the regime's power base (Buchta, 2000). The IRGC has a privileged political position and powerful role in the economy. Importantly, an IRGC subsidiary, Khatam al Anbiya, monopolized the oil and gas sector in the absence of foreign companies (Dudlak, 2018).

Consequently, despite the presence of democratic institutions, Iran's political economy largely functions on "petro-populism"; that is, the state utilizes revenues from rich oil endowments to maintain political support (Matsen et al., 2012). The Iranian state has also used its democratic connections to the populace and long-standing economic isolation to legitimize the government while it builds up state power (Dudlak, 2018). This build-up includes control of over 80 percent of the economy, making the government Iran's largest employer and contractor (Abghari, 2007). Although privatization has occurred in some cases, Iran's elites maintain control over industry through beneficial ownership in important companies. Subsequent revenues frequently pay out rent-seekers to ensure loyalty to the regime (Abghari, 2007). The existence of this crony capitalist system contributes to a large informal economy that pervades an estimated 30% of the Iranian economy (Pilehvar, 2022). Moreover, in the presence of continued economic isolation, Tehran has established a shadow banking network to ensure its oil revenues flow through the global financial system (Karnitschnig, 2022).

Iran's state-dominated political economy has significant implications on its response to sanctions in three key areas: (1) illicit international financial networks; (2) smuggling throughout the Middle East; and (3) illicit trade and collaboration with China and Russia. First, the Iranian government has positioned the Iranian Central Bank as the central node of its international shadow banking network (Donovan et al., 2023). In this system, Iranian-based clearinghouses operate front companies in friendly countries such as China, the UAE, and Turkey under the close supervision of the regime (Karnitschnig, 2022). Second, Tehran has established an extensive network of oil smuggling in the Middle East that heavily involves neighboring countries Türkiye and the UAE (Sudetic & Shokri, 2021). Finally, Iran's ability to establish these

networks has created closer ties with China and collaboration on sanctions evasion with Russia (Karnitschnig, 2022).

II. Mechanisms of Evasion

Since 1979, the U.S. has imposed gradually increasing political and economic sanctions on Iran (Department of State, 2023). Significant increases in the magnitude of sanctions occurred over various administrations. These include cutting off Iranian weapons development (1992), imposing an embargo on trade and investment (1995), freezing Iranian assets (2001), curtailing Iranian oil revenue, and, ultimately, by 2011, cutting off Iranian access to the international financial system and the US dollar (Laub, 2015). While certain measures paused under the JCPOA in 2015, most returned in 2018 under Trump's "maximum pressure" campaign (Karnitschnig, 2022). Meanwhile, on the widespread international scale, sanctions against Iran began in 2005. At this time, the UN and EU imposed sanctions targeting Iran's nuclear proliferation activities in response to the IAEA's declaration that Iran was non-compliant with its nuclear safeguards (Laub, 2015). Subsequent rounds of EU and UN sanctions have since aligned international sanctions closely with U.S. policy. This has isolated the Iranian banking sector and cut off international access to Iranian oil (Laub, 2015).

Iran's wide-ranging and sophisticated methods of sanctions evasion enable the government to continue financing itself in the presence of this economic pressure. The Central Bank of Iran (CBI) provides the key to Iran's innovative methods, handling "tens of billions of dollars" annually in trade banned by U.S. sanctions (Dubowitz & Zweig, 2022). The CBI, through its extensive capabilities, infects the country's entire financial system (Dubowitz & Zweig, 2022). Its evasion methods can be analyzed through the categories of illicit trade (rerouting and smuggling) and illicit financial activity.

Iran relies on extensive trade networks with like-minded countries to continue exporting oil. This illicit trade, which generates billions annually in government revenue (Sudetic & Shokri, 2021), is a monopoly of the government and a source of political rent (Abghari, 2007). On one hand, Tehran capitalizes on the complex oil market in the Gulf, exploiting crowded shipping lanes and ports to sell crude to the UAE and Syria (Sudetic & Shokri, 2021). In addition, Iran has moved its oil trade to Asian markets since losing the U.S. and EU as partners (Dudlak, 2018). Iran has particularly increased indirect oil exports to China, who now buys a significant portion of Iranian oil (Bloomberg, 2023; Sudetic & Shokri, 2021). For example,

during the first 10 months of 2023, China imported an estimated 1.05 billion barrels of oil from Iran, the most in a decade and 60% above pre-sanctions peaks (Xu, 2023). Iran provides China both an economic boon through lower oil prices and geopolitical leverage against the U.S. (Sudetic & Shokri, 2021). Russia provides another important trade partner of Iran. Following U.S. sanctions on Russia, trade links between the two nations have tightened, highlighted by proposals for a new economic trade corridor (Chazan, 2023). The two countries, along with Azerbaijan, target 30 million tons of cargo transit through the corridor by 2030 (Hajiyeva, 2022). Iran has also served as an import market for the Russian arms trade (Maloney & Takeyh, 2011).

Smuggling presents another significant means of sanctions evasion for Iran. Commodity smuggling constitutes a considerable portion of consumption patterns in Iran; estimates in 2013 put the total amount of Iranian smuggling at $3B USD annually—60% of government revenue (Mozayani, 2021; Farzanegan, 2013). Iran engages in extensive oil smuggling to neighboring countries, mainly the UAE and Turkey (Mozayani, 2021; Dudlak, 2018). This smuggling receives funding from significant government subsidies, which enable its profitability in countries with high domestic oil prices (Dudlak, 2018). To facilitate smuggling operations, Iranian companies employ a variety of mechanisms that obfuscate the origin of their oil (Karnitschnig, 2022). These tactics include flying ships under false flags, ship-to-ship (STS) transfers in the Persian Gulf, and disabling AIS systems (OFAC, 2020). Smuggling further benefits from corruption at port inspections and the Iranian government's network of proxies loyal to the regime in the Iraqi government (Sudetic & Shokri, 2021). Another contributing factor is the emergence of a black-market premium (BMP) for foreign currencies (Farzanegan, 2013; Pesaran, 2009). Due to CBI policies of a fixed exchange rate, a significant BMP exists for the USD and the Euro (Farzanegan, 2013). The BMP provides for more attractive rents to export smugglers, as dollars received illicitly fetch the higher black market exchange rate (Farzanegan, 2009). Moreover, the Iranian government provides subsidized foreign exchange to certain importers who "overinvoice" the real value of imports and sell the corresponding surplus currency at the black-market exchange rate (Farzanegan, 2013). This creates an illegal profit for politically connected elites, increasing the government's ability to curry political loyalty.

Iran's network of shadow banks underpins its sanctions evasion activities and enables the proliferation of illicit finance. The CBI has created a complex network to facilitate international transactions that involves shell companies, banks, and exchange houses (Donovan et al., 2023).

Clearinghouses in Iran transact with foreign exchange houses and front and shell companies in foreign jurisdictions to move funds into the international banking system. Through this network, transacted funds eventually become entirely obfuscated and move through major international banks without their knowledge (Karnitschnig, 2022). This system allows Iran to sell and trade its oil indirectly and secretly. One company, Gibraltar-listed holding company ASB Group, supported Iran's illicit oil trade by routing payments through a network of shell companies and banks in India, Russia and the UAE. As payments denominated in foreign currency, mainly USD, they inevitably ended up settled, unknowingly, by major international banks such as Commerzbank and J.P. Morgan (Keatinge, 2023). Notably, the owner of ASB was a Turkish businessman and close contact of Turkish President Recep Tayyip Erdoğan (Keatinge, 2023).

Currently, a significant number of the exchange houses that transact with Iran have UAE registration, and the FATF has since accused the country of money laundering (Donovan et al., 2023). The Persian Gulf Petrochemical Industry Commercial Co. (PGPICC) example is informative. PGPICC processes its payments through Dubai-based front companies to sell oil to foreign buyers. The company clears billions of dollars of oil sales annually while hiding its involvement in the transactions (Donovan et al., 2023). As oil revenues continue to flow into Iran against the imposition of sanctions, the government maintains the loyalty of elites (Karnitschnig, 2022). Moreover, it can engage in further illicit financial activities, such as the proliferation of terrorist financing and weapons trade (Donovan et al., 2023).

III. Impacts of Sanctions Responses

Iran's highly sophisticated and expansive tool chest of sanctions evasion mechanisms furthers self-subsistence and creates an international shadow financial market. This market facilitates increased trade and the illicit flow of dollars between U.S. adversaries. First, as with North Korea, Iran's political system favors self-reliance, thus diminishing the incentive to respond politically to sanctions. Its identity of Western antagonism encourages the mobilization of domestic production in response to external economic pressure (Maloney & Takeyh, 2011; Amuzegar, 1997). This directly contradicts the sanctions' mission of crippling the Iranian economy to induce policy change.

Iran's methods to evade sanctions also have serious negative consequences for weapons proliferation and terrorist financing. Despite decades of harmful financial penalties, Iran has bolstered and solidified its ability to fund terrorist organizations (Maloney & Takeyh, 2011).

Tehran has provided an estimated $700M annually to terrorist organizations, including the militant Lebanese group Hezbollah, Hamas, and other Palestinian terror groups (Donovan et al., 2023). Perhaps of equal or greater concern, it has transferred artillery rockets and other arms to these groups (Donovan et al., 2023). It has similarly served as a market for Russian arms (Maloney & Takeyh, 2011). Despite its designation as a state sponsor of terrorism, Iran has advanced both Hamas's goals in Israel and Russia's in Ukraine (Donovan et al., 2023). As Iran continues to develop its capacity to conduct illicit finance to ensure subsistence against sanctions, its capacity to engage in these activities will likely increase. This will continue to destabilize the region and hurt U.S. foreign policy aims vis-à-vis Russia.

The strategy of sanctions towards Iran has harmed, rather than helped, U.S. foreign policy goals in Iran and elsewhere. Although sanctions may effectively injure Iran's formal economy (Laub, 2015), they have done little to alter Iran's behavior. In fact, they have enabled Iran to strike closer ties with China and Russia, fund terrorist groups in the Middle East, and develop illicit financial innovations.

Case Study: North Korea's Juche

I. Background

The unique case of North Korea demonstrates how a highly centralized political regime can extend vast resources to facilitate sanctions evasion and drive financial innovation. In particular, North Korea's ability to develop extensive underground trade networks, both foreign and domestic, sheds light on how comprehensive sanctions backfire on the sender country's foreign policy intentions. North Korea's one-party familial political system, now run by autocrat Kim Jong Un, holds extensive control over economic activity in the country.

Sanctioned since its inception, North Korea established a secret government department, Bureau 39, to maintain the generation of hard currency (Chestnut, 2007). The Bureau functions explicitly to maintain hard currency holdings for its Supreme Leader and funds its nuclear weapons program. Bureau 39's extraordinary capacity to finance the regime through illicit means upholds the regime's steadfast insistence on self-reliance (*juche*) (Chestnut, 2007). Most importantly, its access to and control over a domestic and international shadow economy renders punitive sanctions ineffective in altering the regime's behavior.

A short history of North Korea's political economy contextualizes this resistance. North Korea has both operated a command economy and faced sanctions since its founding in 1948

(Nodutdol, 2021). The government, controlled by Kim Il Sung until the 1990s, reportedly established Bureau 39 in the 1970s, around the time it began developing an extensive transnational smuggling network (Chestnut, 2007). Bureau 39 was created with the dual purpose of generating hard currency and financing Kim Jong-il's rise to power (Chestnut, 2007). In 1994, Kim Jong-il assumed control of the regime after his father's death in a time of economic catastrophe. Following the collapse of the Soviet Union, North Korea experienced a devastating famine (Haggard & Noland, 2010). Consequently, the public distribution system (PDS) that sustained many North Koreans broke down, leading to a boom in the "second economy" of private commercial activities (Lankov & Seok-Hyang, 2008). A network of *jangmadang* markets grew out of private barter trade, mostly for groceries and household goods (Choe, 2015). Two important consequences followed: the bottom-up "marketization" of the informal North Korean economy and the creation of cross-border trade networks with China (Haggard & Noland, 2010). In response, the regime could do little to stymie the development of these networks, but it has since reasserted state control over much of the informal economy (Haggard & Noland, 2010). The result is a country with two economies–one state-sponsored command system and one semi-illicit market system–under the purview of one centralized government (Noland, 2009).

Thus, a "palace economy" dominates North Korea's current political economy, a form of semi-capitalist aristocracy designed to enrich the Supreme Leader (Gierstorfer & Weis, 2022). On the command side, Pyongyang still utilizes centralized structures and state-owned firms and assets to control economic activity, while private property remains illegal (Hastings, 2022). However, the evolution of North Korea's political economy has created a system where "essentially all enterprise within North Korea, and between North Korea and the rest of the world, occupies a gray zone where it is de jure illegal, but de facto allowed with the proper bribes, and connections with state officials" (Hastings, 2022). For example, Pyongyang officials (*donju*) profiteer from black markets to smuggle commodities and sell luxury goods with the knowing approval of the state (Gierstorfer & Weis, 2022). This system generates an economic hierarchy in which Kim Jong Un, the current leader, presides over all legal and extra-legal economic activity (Hastings, 2022).

Kim Jong-un's regime has used its dual control of economic activity to develop the extensive illicit networks necessary to finance itself in the presence of continued sanctions. In fact, Enos (2017) argues that sanctions evasion provides the primary motivation behind the

regime's acceptance of the informal economy. The regime employs three primary channels to facilitate its financing: (1) trade (local cross-border and global); (2) underground transnational smuggling networks; and (3) innovations in illicit finance. Trade has relied especially on black markets with China; smuggling operations have involved transnational criminal organizations (TCOs) in China and governments across Africa; and illicit finance mechanisms have created a network of shell companies centered in China but extending across the globe (Haggard & Noland, 2010; Chestnut, 2007; Young, 2021).

II. Mechanisms of Evasion

For this analysis, I focus especially on the U.N. sanctions regimes first implemented in 2006 in response to North Korea's first nuclear test. These sanctions were intended to halt North Korea's program by banning trade in military equipment, freezing the assets of individuals involved in the program, and restricting funding for the nuclear program (CFR, 2022). North Korea responded with continued nuclear tests and the development of nuclear weapons. In response, further sanctions have progressively placed restrictions on every major sector of North Korea's economy (CFR, 2022). These measures have extended from military technology to oil, tobacco, and seafood (Mallory, 2021). Moreover, the U.S. has imposed rounds of sanctions that exceed the actions of the UN and EU in an attempt to completely remove the dollar from the North Korean economy (CFR, 2022). As a result, North Korea has been almost entirely excluded from legal use of the global financial system.

North Korea's methods of sanctions evasion all run through the key node of Bureau 39. Bureau 39 operates to generate hard currency through whatever illicit means necessary. It uses this currency for two main goals: procuriung military weapons and technology and obtaining luxury items for party and military elites (Chestnut, 2007). The means through which it generates currency revenues include commodity sales, mining services, property rental, operation of hotels, and the construction of monuments, among others (Mallory, 2022; Gierstorfer & Weis, 2022). While innumerable techniques facilitate these activities, four core ones emerge: diplomatic cover, non-official cover, front and shell companies, and third-country intermediaries (Mallory, 2022). These techniques operate through the aforementioned channels of rerouting trade, smuggling, and illicit financial activity.

First, North Korea relies on extensive trade networks to import consumer products and commodities. Its volume of trade has steadily increased since the marketization of the economy

during the 1990s, when barter trade opened along the Chinese border (Lanvok & Seok-Hyang, 2008). The trend has increased the country's historical current account deficit to an estimated $500M to $1B by 2008 (Einbinder, 2017; Mallory, 2022). China facilitates much of this trade and accounts for 98% of North Korean direct exports (Gierstorfer & Weis, 2022). For example, one Chinese company, registered in Hong-Kong, imported 200,000 tonnes of sanctioned North Korean coal in 2020 (Davies, 2022). North Korea maintains this trade through a variety of tactics. These mainly involve obfuscating the nature of trade and the actors involved utilizing state resources (Hastings, 2022). Globally, central firms with access to the resources of the state can trade sanctioned items across the world. To facilitate the movement of the goods themselves, state-owned companies will falsify export and customs data for ships that fly under false flags (Hastings, 2022; Mallory, 2022). Moreover, on the local scale, private traders that deal in North Korean *won* buy the favor of state officials to trade in goods from outside North Korea and bring in currency (Hastings, 2022).

Outside of China, North Korea has found trade partners in the Middle East and Africa that pay little mind to UN sanctions. (Haggard and Noland, 2010; Young, 2021). In particular, many African countries possess a sense of historical solidarity with North Korea that, combined with lax enforcement, rampant corruption, and Western antagonism, make them ideal markets for sanctions evasion (Young, 2021). Consequently, North Korea has become active in the African arms trade, construction and mining projects, and illicit trafficking of rhino horns and ivory (Young, 2021). Therefore, North Korea restructures what it lacks in legal avenues of currency generation through these illicit channels.

North Korea has developed considerable smuggling capabilities to supplement its trade relationships. These operations began after its default on international debt in 1975 (Chestnut, 2007). They first relied upon diplomats transporting drugs through the protection of diplomatic immunity (Chestnut, 2007). Since then, the regime has developed a diverse array of smuggling networks in pharmaceuticals, cigarettes, and commodities run through official diplomatic cover, intelligence personnel, and ordinary citizens (Chestnut, 2007). As operations increased, particularly since the mid-1990s, Pyongyang has increasingly contracted out distribution to transnational criminal organizations (TCOs) (Chestnut, 2007). In addition to outsourcing, North Korea utilizes its maritime networks to export sanctioned goods such as oil, coal, and military equipment (Byrne, 2021). Of particular importance, the country continues to illegally acquire oil

vessels and send and receive oil through ship-to-ship transfers (Byrne, 2021; Mallory, 2022). Other mechanisms Pyongyang employs include chartering private flights carrying contraband and hijacking the international shipping system by infiltrating containers (Mallory, 2022). Finally, cross-border smuggling with China continues in the informal economy as a response to state dysfunction, increasing the flow of goods into North Korea (Hastings, 2022).

North Korea's trade deficit, once funded by socialist patrons such as the Soviet Union (Haggard and Noland, 2010), implies the generation of the corresponding amount of hard foreign currency to finance it. This funding runs through Bureau 39's extensive networks of illicit finance that underpin the Pyongyang regime's illicit financial activity. Shell and front companies compose the key nodes of these networks (Mallory, 2022; Davies, 2022). For example, a litany of companies registered in China act as third-party middlemen to enable the flow of goods and capital into and out of the North Korean economy (Einbinder, 2017; Hastings, 2022). These front companies enable not only the purchase and sale of commodities, oil vessels, and weapons but also function as money laundering operations (Mallory, 2022; Young, 2021). Foreign-registered companies act as financial intermediaries, assuming the role of banks in controlling and balancing cash outflows and inflows. When cash surpluses arise, diplomats will smuggle the surplus back into North Korea in hard currency or precious jewels (Mallory, 2022). Moreover, embassies not only smuggle cash but act as front companies to form critical nodes in this network (Hastings, 2022; Herskovitz, 2023). In addition to the proliferation of illicit financial flows through front companies, Bureau 39 also runs counterfeiting operations to put US dollars into the regime's hands (Chestnut, 2007; Gierstorfer & Weis, 2022). North Korean diplomats can pass highly deceptive counterfeit "Supernotes" under the cover of diplomatic immunity (Merritt, 2006).

Next to these types of criminal activities, to mobilize much needed capital to feed its elites' pockets, North Korea has expanded operations in cyber piracy. Bureau 39 has increasingly improved its cybercriminal capabilities, reflected in a steep increase in hacking activities across various jurisdictions (Davies, 2022; UNSC, 2022). For instance, from 2020 to 2021, cyber actors from North Korea stole over $50 million from three different crypto exchanges in a clear step to diversify its revenue sources through cryptocurrency (UNSC, 2022). Moreover, in 2022, North Korea stole $600m in a difficult-to-track hack of online video game Axie Infinity (Fraioli, 2022). The UNSC reported overall cybertheft of $1.7 billion in that year (UNSC, 2023). As digital

exchange and payment platforms rapidly grow, North Korea will likely continue to rapidly expand these operations.

III. Impacts of Sanctions Responses

North Korea's far-reaching and innovative tactics to evade sanctions enable further self-sustainability and closer relationships with U.S. adversaries. First, sanctions alter the incentive structure of illegal transactions by increasing the cost of legal avenues to obtain hard currency. Thus, North Korea finds reason to engage in illicit activities as a means of revenue generation (Frank, 2006). Sanctions also encourage improved trade linkages and underground relations with the United States' chief adversary, China, who deals with the country against UN restrictions. As North Korea's biggest trading partner (CFR, 2022), China benefits extraordinarily from facilitating smuggling and trade for North Korea. For example, following the round of sanctions in 2006, trade data showed increased demand for Chinese imports (Noland, 2009).

The imposition of sanctions has another significant foreign policy consequence: increased ties between North Korea and countries in Africa and the Middle East. Again, cut off from the international financial system, North Korea turned to African countries willing to skirt U.N. sanctions. Following the 2006 round of sanctions, trade with Algeria, Saudi Arabia, and Lebanon increased twice as fast as in other regions of the world (Haggard & Noland, 2010). This has particular significance given the fact that neighboring countries, namely chief American adversaries Iran and Syria, report no trade at all with North Korea. Yet, documented arms trade indicates that North Korea sells illegal weapons to these countries (Haggard & Noland, 2010). Such a conclusion raises the alarm that North Korea has likely developed the capabilities to smuggle its nuclear technology to its allies and possibly terrorist organizations (Chestnut, 2007).

The political strategy of sanctions on North Korea is an unequivocal failure for both North Korea's economy and U.S. foreign policy goals. The sanctions have proved wholly ineffective in altering North Korea's behavior and wrought economic damage on innocent North Koreans (Nodutdol, 2021).

Large-N Analysis

The next step of the empirical analysis involves a longitudinal cross-country analysis. Illicit economic activity is, by nature, difficult to track (Kar et al., 2013). Therefore, no perfect proxy exists to measure it. However, focusing on illicit trade and finance can isolate certain illicit

economic activity. First, illicit trade requires financial services to settle transactions and corresponding financial flows. Thus, I focus on offshore financial accounts, which capture international capital flows, to proxy for illicit trade. I employ the measure of the share of capital flows sent to tax haven countries divided by all capital flows sent to offshore financial accounts. Note, additionally, that the proportion of illicit flows measured is likely *understated* due to difficulties capturing illicit flows relative to licit ones (Kar et al., 2013).

Tax-haven countries generally possess institutional characteristics, such as rules on bank secrecy and legal arrangements that facilitate asset protection, that make them ideal locations to disguise and launder funds (Andersen et al., 2022). Thus, tax havens capture capital flight connected to firms and individuals seeking to hide funds in "safe haven" locations, as opposed to "real" economic activity (Zucman, 2015). Therefore, by focusing on the (logged) share of deposits in tax haven countries, I can isolate illicit financial activity that does not relate to any actual economic activity. By isolating this variable, I can observe the consolidation, over time, of financial activity into offshore financial centers. This offers a proxy for an increase in illicit trade and, thus, illicit economic activity.

To conduct the analysis, I construct a dataset comprising up to 205 countries and territories that faced sanctions between 2000 and 2018. The data originate from Locational Banking Statistics from the Bank of International Settlements (BIS, 2020), with capital flows measured in the form of private bilateral bank liabilities (deposits). The BIS data is compiled in cooperation with central banks and monetary authorities from around the world (BIS, 2024) and has recently been cited extensively across the cross-border capital flows literature (Kern et al., 2023; Pogliani and Wooldridge, 2022; Broner et al., 2020). Moreover, it offers bank liabilities on a bilateral basis, enabling the isolation of capital flows sent to tax haven countries versus all other capital flows. Finally, its country-year specified data allows the identification of countries under sanction.

In my analysis, I utilize the GSQ Database developed by Kern et al. (2023), which contains both the BIS data and numerous control variables. Given this data source, I employ aggregated data on 18 countries commonly selected as "tax havens" (Kern et al., 2023; Garcia-Bernardo et al., 2017; Damgaard et al., 2019; Coppola et al., 2021). These countries, selected and coded by Kern et al. (2023), include the Bahamas, Bahrain, Bermuda, Cayman Islands, Chile,

Chinese Taipeh, Curacao, Cyprus, Guernsey, Hong Kong, Isle of Man, Jersey, Luxembourg, Macao, Ireland, Panama, Singapore, and Switzerland.

The primary predictor variable I operationalize captures the timing of the imposition of sanctions. I code the variable from the Global Sanctions Database (GSDB) (Syropoulos et al., 2023) which includes cases from 1950-2022 of sanctions imposed by a target country on a sender country. In this model, I order sanctions by target country-year and recode sanctions as a binary variable, so that years in which a target country is under sanction are coded as "1," and those in which no sanctions are imposed are coded as "0". Thus, by combining the datasets, I link capital flight to offshore tax havens from a certain jurisdiction in a specified year to the onset of punitive sanctions in that country and year. Moreover, the GSDB dataset also provides for the distribution of applied sanctions by type (financial, trade, military, etc). I also repeat the recoding process by type of sanction, providing for an evaluation of the impact of different sanctions on the share of capital flows into tax havens.

To eliminate bias in the results, I apply three sets of controls to the analysis. The first set of controls focuses on macroeconomic fundamentals and includes (logged) population, (logged) GDP per capita, and services as a percentage of total output as variables. The data originate from the World Development Indicators (World Bank, 2024) and are included in the GSQ dataset. These variables account for potential confounding factors in relation to economic size. Moreover, GDP per capita and services as a percentage of GDP control for the tendency of lower-income, less-developed countries to have higher levels of capital flight (Nosrati et al., 2023). Next, I apply the logged version of natural resource rents as a control variable. This control accounts for the fact that, in countries with a greater abundance of natural resources, elites have more opportunities to redirect capital flows (Kern et al., 2023). Therefore, I would expect to see a strong relationship between capital flight to offshore tax havens and the natural resource rents of a given country. Finally, I apply a country's Polity IV score as a control variable. Given my analysis, I would expect countries with a lower score (greater degree of authoritarianism) to have a higher degree of capital flight to tax havens.

To implement the analysis, I construct a series of fixed-effects OLS models using the following equation:

$$\text{Offshore}_{(i,t)} = \alpha_i + \gamma_t + \beta(\text{Sanction})_{(i,t)} + \lambda' \mathbf{X}_{(i,t)} + \varepsilon_{(i,t)}$$

Subscripts *i* and *t* denote, respectively, country and year. $Offshore_{(i,t)}$ refers to, for a given *i* and *t*, the logged value of capital flows to tax haven countries divided by capital flows to all reporting countries. $Sanction_{(i,t)}$, represents whether a sanction is imposed for a given country and year. Country-specific fixed effects are indicated by α_i, while γ_t denotes year-fixed effects. Finally, $\lambda X_{(i,t)}$ represents the vector of control variables and $\varepsilon_{(i,t}$ is the idiosyncratic error term.

Results

The results in Table 1 indicate that the imposition of a global sanction[11] has a strong association with the share of capital flows deposited in tax havens. This relationship is significant on the 1% level. Moreover, in the analysis, I account for serial autocorrelation by including the (logged) lagged value of the dependent variable (Share, log = L). The association continues to be significant at the 1% level, and maintains this level when controls for population, GDP per capita, services as a percentage of GDP, natural resource rents, and Polity IV score enter the model.

[11] A "Global Sanction" describes a binary variable coded "1" for the onset of any sanction imposed on a targeted country *i* in given year *t*.

Table 1: Baseline Regression

VARIABLES	(1) Tax Haven (%)	(2) Tax Haven (%)	(3) Tax Haven (%)	(4) Tax Haven (%)
Global Sanction	0.0274***	0.0154***	0.0138***	0.0140***
	(0.00817)	(0.00543)	(0.00485)	(0.00484)
Log(Population)			0.0355	0.0333
			(0.0306)	(0.0304)
Log(GDP per capita)			0.0154	0.0159
			(0.0222)	(0.0222)
Services (% GDP)			0.00114**	0.00112**
			(0.000450)	(0.000454)
Nat. Resources, log			-0.00737	-0.00757
			(0.00612)	(0.00617)
Polity IV (2018 imputed)				0.000713
				(0.000885)
Share, log = L,		0.568***	0.573***	0.573***
		(0.0799)	(0.0446)	(0.0446)
Constant	0.184***	0.0974***	-0.626	-0.597
	(0.00944)	(0.0165)	(0.518)	(0.517)
Observations	3,840	3,635	1,985	1,982
R-squared		0.356	0.373	0.374
Number of ccode	205	205	140	140
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

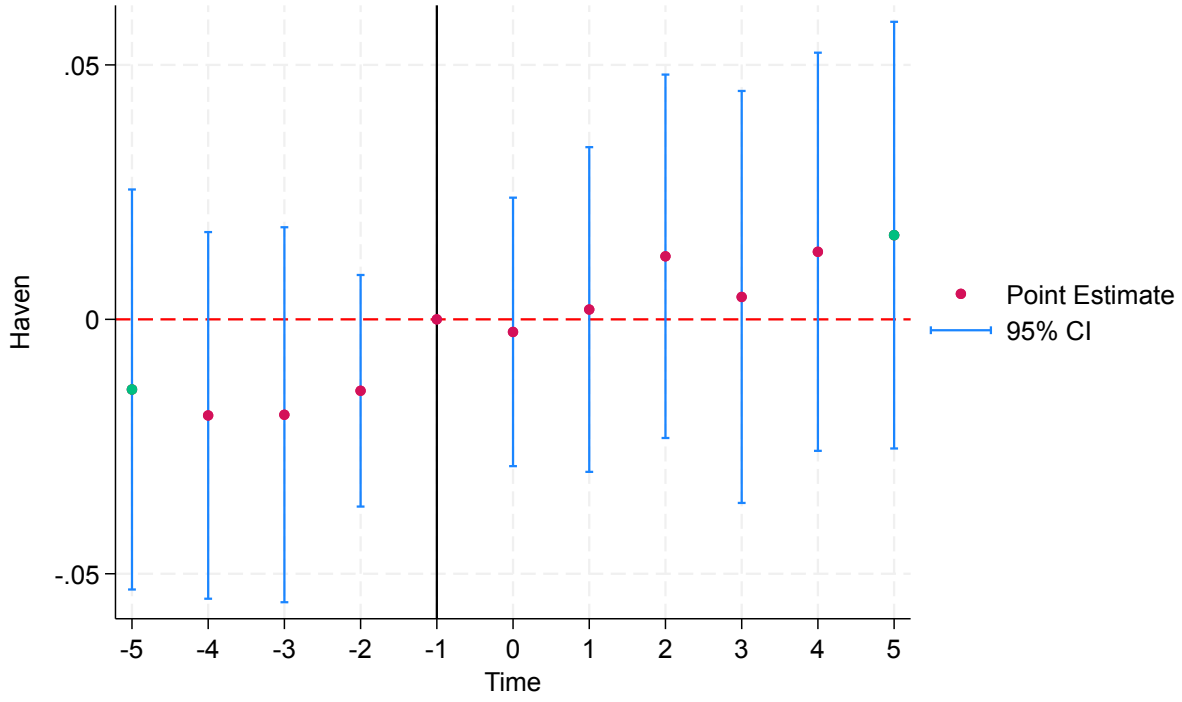
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

A main concern is that the model is not well specified. To this end, I ran a first difference fixed-effects (FE) model (Appendix, Table 1a) and a dynamic OLS model (Appendix, Table 1b). In the first difference FE model, we observe the short-term and long-term impacts of the onset of sanctions. This model demonstrates that both the first difference of Global Sanction and its lagged value are significantly and positively correlated to the share of capital flows deposited in tax havens. However, with the addition of macroeconomic controls, the significance of the lagged value drops below the 10% level, indicating that the short-term effects of sanctions dominate in predicting an increase in the share of capital flows to havens. This dynamic OLS model further supports this analysis. Here, the first difference of Global Sanction remains

significant at the 1% level across all subsets. Thus, we can conclude that the imposition of sanctions has strong links to capital flight, particularly in the short-run.

To further illustrate this effect, I implemented an event study design to estimate increases in the share of deposits in tax havens after the sanctions' onset (see *Figure 1*).

Figure 1



Another concern might arise in regard to measurement error of the dependent variable. To mitigate this concern, I account for different types of outflows, taking the non-logged version of the outcome variable (columns 3 and 4) and substituting "Andersen" tax havens[12] (columns 5 and 6) as the outcome variable (See *Table 2*).

The results remain unaffected and intact, even when adjusting the measurement on the outcome variable. Global Sanction stays significant across all subsets, at minimum, at the 5% level. This result offers additional confidence about the robustness of the previous findings.

[12] "Andersen" tax havens represent a different classification of tax havens selected from the BIS Locational Banking Statistics. They are similarly jurisdictions with institutions favorable to the hiding and laundering of funds, and include 17 jurisdictions, among which are Switzerland, the Cayman Islands, the Bahamas, Hong Kong, and Singapore (Andersen et al., 2022).

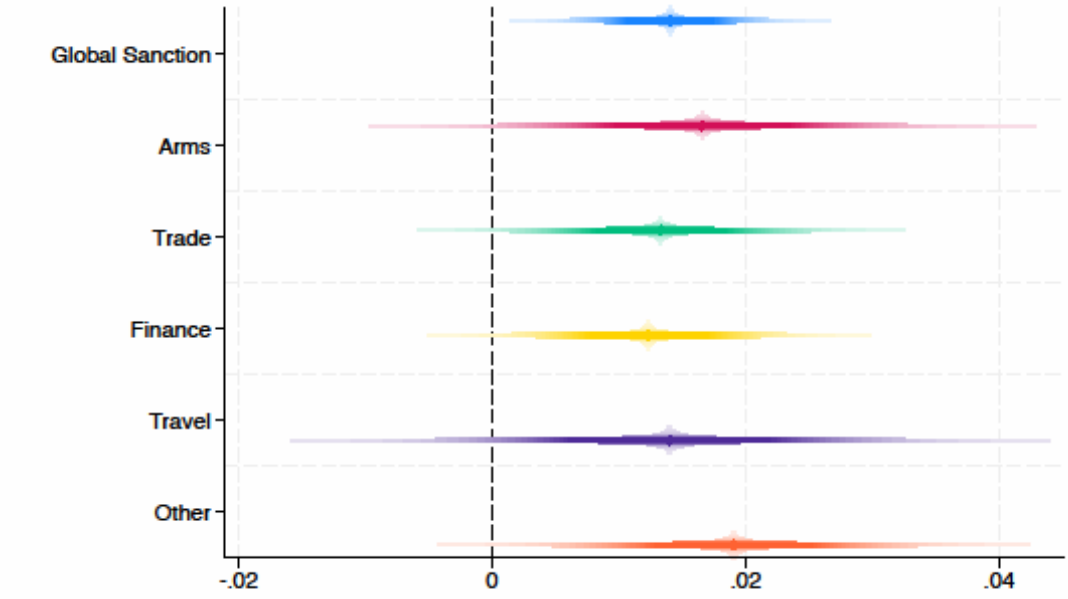
Table 2: Types of Outflows

VARIABLES	(1) Tax Haven (%)	(2) Tax Haven (%)	(3) Tax Haven (%)	(4) Tax Haven (%)	(5) Tax Haven (%)	(6) Tax Haven (%)
Global Sanction	0.0154***	0.0140***	0.0213***	0.0180***	0.0185**	0.0133**
	(0.00543)	(0.00484)	(0.00761)	(0.00652)	(0.00748)	(0.00605)
Log(Population)		0.0333		0.0504		-0.0785**
		(0.0304)		(0.0413)		(0.0374)
Log(GDP per capita)		0.0159		0.0224		0.0375
		(0.0222)		(0.0294)		(0.0246)
Services (% GDP)		0.00112**		0.00153**		0.00149**
		(0.000454)		(0.000637)		(0.000668)
Nat. Resources, log		-0.00757		-0.00823		-0.000484
		(0.00617)		(0.00821)		(0.00815)
Polity IV (2018 imputed)		0.000713		0.000633		0.000864
		(0.000885)		(0.00114)		(0.00137)
Share, log = L,	0.568***	0.573***				
	(0.0799)	(0.0446)				
Share = L,			0.548***	0.557***		
			(0.0896)	(0.0499)		
Anderson = L,					0.591***	0.690***
					(0.0919)	(0.0313)
Constant	0.0974***	-0.597	0.119***	-0.914	0.0914***	0.935
	(0.0165)	(0.517)	(0.0201)	(0.700)	(0.0216)	(0.647)
Observations	3,635	1,982	3,636	1,982	3,636	1,982
R-squared	0.356	0.374	0.292	0.357	0.331	0.491
Number of ccode	205	140	205	140	205	140
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

An even further concern would indicate that not all forms of sanctions produce this effect. For this reason, I separate the sanctions into components, based on the "type of sanction" specified in the GSDB dataset. These types include sanctions related to arms, trade, finance, and travel, and include a non-specified category. Table 3 demonstrates how different types of sanctions yield differing results. First, only the non-specified type ("Other") has significance at the 5% level, whereas financial and trade-related sanctions are significant at the 10% level, and travel and arms sanctions do not produce a significant relationship. These findings imply a particular pronouncement of the relationship between sanctions and illicit finance for trade and finance-related sanctions.

Table 3: Types of Sanctions



Note: *Coefficient plot is based on fixed effects regressions including control variables and country-/year-fixed effects with robust standard errors clustered on countries.*

As shown in the plot, both travel and arms sanctions have high degrees of error related to their respective coefficient estimates. Meanwhile, trade-related and financial sanctions have quite similar estimates, indicating that both have a similar effect on capital flight to tax havens. One possible reason could point to the fact that these categories overlap, and trade and financial sanctions often go hand-in-hand.

Conclusion & Policy Implications

Sanctions have become a tool central to the foreign policies of major Western powers. Yet, autocratic leaders, such as Russia's Vladimir Putin, continue to maneuver around them to continue financing their policy aims. This circumvention raises the question of whether a relationship exists between sanctions and illicit finance.

In this paper, I examine the mechanisms through which leaders utilize illicit finance to evade sanctions. In analyzing this question, I begin from the idea that autocratic regimes require resources to remain in power, and that the imposition of sanctions constrains these resources. Thus, sanctions should encourage autocrats to turn to illicit means to avoid sanctions' constraining effects. Given this premise, I argue that sanctions will lead to increases in illicit

trade and financial activity. To illustrate this effect, I take the examples of Russia, Iran, and North Korea. Through these case studies, I detail the mechanisms through which illicit trade and finance operate. Moreover, I demonstrate how, in more totalitarian countries, political structures more effectively channel illicit financial flows to the policy aims of the regime. Next, a quantitative assessment confirms a positive relationship between the imposition of sanctions and capital flight to offshore financial centers. These empirical models establish a close association between sanctions and illicit financial activities. Importantly, I verify that these effects are most pronounced when a regime attempts to circumvent financial and trade sanctions.

Several important policy implications emerge from this argument. First, a systematic approach to tackling illicit finance must precede any effective sanctions policy. In the first case, for example, Russia's pre-existing *Sistema* enables not only sanctions evasion but the fortification and expansion of illicit networks. Therefore, the sanctions following the invasions of Crimea and, later, all of Ukraine have encouraged closer ties between illicit finance, the Russian state, and the Russian private sector. The Iranian case leads to a similar conclusion on the cross-national level. Thus, against a nation with complex illicit financial networks, sanctions may do more harm than good by incentivizing the target to expand its networks internationally. Second, policymakers must better understand the political and economic systems of targeted countries to craft sanctions that do not backfire. Sanctions must counter the ideological narrative of targeted nations, rather than support it. North Korea provides a case in point. Kim Jong-Un's regime, committed to the principle of steadfast self-reliance (*juche*) and equipped with the political economy mechanisms to foster financial innovation, paid little attention to Western economic pressure. Consequently, policymakers must ensure that sanctions align with the motives of the political leaders of a targeted country in order to achieve a targeted outcome. Finally, Western governments must consider the implications of how sanctions reorient political and trade ties. Sanctions have had a negative effect on foreign policy aims by promoting closer ties between target states and Western adversaries. In sanctioning Russia, the West hoped to isolate the nation economically and politically. Instead, Russia bolstered its relationship with China and increased its influence in Africa. This adjustment presents a challenge to the international order. As a result, sender nations should seek to limit the scope and time frame of sanctions policies.

Finally, a secondary informal international economy may emerge among these common adversaries. For example, the financial network created by Iran can help other sanctioned nations

develop evasion mechanisms. Take Russia as an example: following the Ukraine-related sanctions round, talks began between the Kremlin and Tehran over collaboration on evasion techniques (Dubowitz & Zweig, 2022). Iran could instruct Russia on how to build illicit financial infrastructure, facilitate covert trade for Russia, and create "the world's most sophisticated and expansive sanctions-evasion network" through closer collaboration (Dubowitz & Zweig, 2022). In a quite realistic hypothetical, this network could expand to similarly-targeted countries such as North Korea and Venezuela. This would result in an international underground economy designed specifically to avoid Western sanctions.

Placing this discussion into broader debates concerning geopolitical tensions yields further concerns. China, as a common trade partner in each of these cases, would likely sit at the center of such a network. Thus, any sender nation should seriously reconsider imposing further sanctions on Russia, Iran, North Korea, or (potentially) China. In doing so, it risks inviting these countries to further increase their illicit financial networks. Thus, the proliferation of illicit economic activity in response to sanctions risks creating a unified economic bloc of nations adversarial to Western goals. In this world, the United States and its allies need not bother turning to the threat of sanctions to deter the next foreign policy crisis.

Appendix

Table A1: First Difference FE

VARIABLES	(1) Tax Haven (%)	(2) Tax Haven (%)	(3) Tax Haven (%)	(4) Tax Haven (%)
Share, log = L,	-0.151***	-0.432***	-0.526***	-0.526***
	(0.0393)	(0.0801)	(0.109)	(0.109)
Global Sanction = D,	0.0124***	0.0168***	0.0146**	0.0137**
	(0.00406)	(0.00524)	(0.00586)	(0.00618)
Global Sanction = L,	-0.00483*	0.0147**	0.00987	0.0101
	(0.00292)	(0.00611)	(0.00637)	(0.00641)
Log(Population) = D,			0.399	0.390
			(0.420)	(0.412)
Log(Population) = L,			-0.00822	-0.0101
			(0.0328)	(0.0326)
Log(GDP per capita) = D,			0.0810**	0.0824**
			(0.0340)	(0.0342)
Log(GDP per capita) = L,			0.0389	0.0377
			(0.0247)	(0.0243)
Services (% GDP) = D,			-0.000113	-3.31e-05
			(0.000951)	(0.000888)
Services (% GDP) = L,			0.00118**	0.00118**
			(0.000565)	(0.000576)
Polity IV (2018 imputed) = D,				-0.00352
				(0.00476)
Polity IV (2018 imputed) = L,				-1.10e-05
				(0.00114)
Constant	0.0324***	0.0976***	-0.122	-0.0826
	(0.00838)	(0.0164)	(0.565)	(0.564)
Observations	3,635	3,635	2,470	2,463
R-squared		0.237	0.286	0.288
Number of ccode	205	205	144	144
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A2: Dynamic OLS

VARIABLES	(1) Tax Haven (%)	(2) Tax Haven (%)	(3) Tax Haven (%)	(4) Tax Haven (%)	(5) Tax Haven (%)	(6) Tax Haven (%)	(7) Tax Haven (%)	(8) Tax Haven (%)
US Sanction = L,	0.0233**		0.0203		0.0211*		0.0213*	
	(0.00912)		(0.0132)		(0.0127)		(0.0128)	
Log(Population) = L,					0.0360		0.0321	
					(0.0743)		(0.0747)	
Log(GDP per capita) = L,					0.0347		0.0359	
					(0.0575)		(0.0577)	
Services (% GDP) = L,					0.00280**		0.00277**	
					(0.00118)		(0.00120)	
Natural resource rents = L,					-0.000299		-0.000327	
					(0.000967)		(0.000979)	
__ec		-0.427***		-0.431***		-0.422***		-0.421***
		(0.0809)		(0.0821)		(0.0476)		(0.0476)
Global Sanction = D,		0.0179***		0.0118***		0.0154***		0.0157***
		(0.00396)		(0.00456)		(0.00496)		(0.00492)
Log(Population) = D,						0.405		0.398
						(0.357)		(0.355)
Log(GDP per capita) = D,						0.0494		0.0477
						(0.0326)		(0.0333)
Services (% GDP) = D,						0.00129**		0.00130**
						(0.000625)		(0.000630)
Natural resource rents = D,						-0.000251		-0.000251
						(0.000387)		(0.000387)
Polity IV (2018 imputed) = L,							0.00124	
							(0.00242)	
Polity IV (2018 imputed) = D,								0.000699
								(0.00112)
Constant		0.0804***		0.0997***		-0.331		-0.310
		(0.0157)		(0.0194)		(0.536)		(0.540)
Observations	.	.	.	.	.	.	.	.
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

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