ГЛАСНИК Српског географског друштва 103(1) 355-386
BULLETIN OF THE SERBIAN GEOGRAPHICAL SOCIETY 2023

Original scientific paper UDC 536.7(497.11)
https://doi.org/10.2298/GSGD2301355B

Received: February 27, 2023
Corrected: March 22, 2023
Accepted: March 25, 2023

Reade Ben[1*]

* *Princeton University, Princeton School of Public and International Affairs, USA (Fulbright Scholar at the Belgrade Center for Security Policy)*

NO MORE MR. NIS GUY: INVESTIGATING CORROSIVE CAPITAL IN THE SERBIAN ENERGY INDUSTRY

Abstract: This paper examines the question: what does corrosive capital mean, and what enables it in Serbia? Through the design of an analytical framework and robust literature review, this paper adds value to an understudied topic in International Political Economy by giving rigidity to a term that is generally used as an ostensive buzzword. This paper determines that projects are corrosive to the extent that they benefit elites at the public's expense. Corrosive elements can exist in both a project's preliminary phases and post-completion. This paper hypothesizes that corrosive elements are introduced to projects via both domestic and foreign elites. This paper applies its framework to an analysis of Serbia's infamous 2008 omnibus energy agreement with Russia (the Naftna Industrija Srbije (NIS) deal). This paper finds the NIS deal contained a plethora of corrosive elements (political, legal, ethical, economic, ecological) that are still consequential, even today. These elements appear at different points in the NIS deal's life-cycle. Each element generates additional corrosive elements. The positively reinforcing nature of corrosive capital suggests that upstream action can possibly avert devastating consequences, but only when critical, elite actors can be identified and controlled. This paper peels back a layer of existing knowledge surrounding corrosive capital and state capture. It demonstrates that synergistic cooperation between foreign and domestic elites infects projects with corrosive elements that generate reverberating corrosive consequences. Like a cancer, corrosiveness spreads horizontally (across social, political, and economic spaces) and vertically (overtime). Prevention is preferable to mitigation.

Key words: corrosive capital, state capture, foreign direct investment, enablers, corrosive elements

[1] rmbext@gmail.com (corresponding author)

Introduction

At the end of the Cold War, military strategist and historian Edward Luttwak (1990) predicted a new age of conflict: one where financial flows would replace firepower as the instrument that influences world affairs. Indeed, in the days since the fall of the USSR, global powers and regional hegemons have used foreign direct investment (FDI) as a tool of statecraft. The positive effects of FDI, including knowledge spillovers, consumer market growth, and wage increases, conveniently bolster the images of domestic leaders and foreign powers alike. While butter has not replaced guns (as the current crisis in Ukraine reflects this), capital has certainly challenged combat as a powerful medium of influence over the past three decades.

In low-to-middle income states, FDI is often praised as a necessary ingredient for economic growth. This is particularly true in the Western Balkans. However, a shift in the global dynamics of FDI has generated nefarious consequences in Southeastern Europe. Particularly in Serbia, independent experts, political opposition, NGOs, and international governance bodies have criticized large scale projects, aggressively marketed by the state and foreign partners as critical for domestic prosperity, as non-transparent, economically infeasible, ecologically destructive, and downright corrupt. Thus, FDI, once a tool for positive development, appears to have been hijacked by self-interested elites for their own benefit. This form of state capture (where FDI incurs personal gain at the public's expense) has a name: corrosive capital (Pejič, 2021; Preleć, 2020).

The term corrosive capital, however, exists as a cloud of ideas lacking a rigid definition. It is given an ostensive meaning through its use to describe projects with varying negative consequences. Moreover, it is unclear who is ultimately responsible for corrosive capital: domestic politicians, authoritarian foreign governments, states feigning interest in the rule of law, or companies. Ultimately, corrosive capital is defined with a "I know it when I see it" approach.

To develop a better understanding of corrosive capital, particularly within Serbia, this paper will establish a novel analytical framework that can be used to discern various corrosive elements within foreign investment projects, providing a general understanding of the ways in which a project is corrosive. This paper will use its framework to analyze a controversial and important project: the 2008 omnibus energy agreement between Serbia and Russia (hereinafter NIS deal). The forthcoming analysis will construct a broad and detailed investigation of the corrosive elements that enabled the deal and its corrosive consequences.

The paper is structured as follows. A brief background section will describe the state of the Serbian oil and gas industry and the terms of the NIS deal. Then, a literature review will describe existing theory regarding state capture and corrosive capture before presenting an outline of this paper's analytical framework. Next, a robust analysis will follow, which will methodically review the NIS deal as it relates to each part of this paper's analytical framework. Finally, the conclusion describes key findings, limitations, and policy solutions.

Background

This section briefly describes Russia's historic presence in Serbia's energy industry. It then outlines the various provisions of the NIS deal.

An Elaborate Scheme: Middlemen and Debt Bondage

Through its energy giant, Gazprom, Russia has dominated the Serbian energy ecosystem via a complex monopoly for nearly three decades. Russia is responsible for about 65% of Serbia's natural gas imports and 70% of Serbia's crude oil consumption (CSD, 2018).

Historically, Russia's stake in the Serbian energy industry has largely been confined to the gas sector. Russia has exercised its influence by targeting Serbian state-owned enterprises (SOEs) controlled by easily corruptible, politically appointed managers. Russian and Serbian elites have engineered a clientelist resource extraction scheme via gas intermediaries that grants Moscow political influence in Belgrade. These intermediaries inflate the import price of gas via unnecessary patronage fees. Subsequently, artificially high gas import prices (coupled with a subsidized gas price for Serbian citizens) has placed Srbijagas (Serbia's state-owned natural gas provider) in incredible debt to Gazprom (CSD, 2018). Moreover, other Serbian SOEs are in immense debt to Srbijagas (CSD, 2018). Consequently, if Gazprom were to demand that Srbijagas settle its debts, this could set off a chain reaction that would freeze the entire Serbian economy. This looming threat puts pressure on Serbia to remain in Russia's good graces. Moreover, Russia has also attracted support from powerful politicians embedded in the Serbian energy industry (CSD, 2018). By securing a weaponizable choke point and political legitimacy, Russia's energy cartel has embedded itself in Serbia's gas industry.

Gazprom's presence in Serbia's oil industry is comparatively recent, but nonetheless important. Following the NIS deal, Gazprom attained a monopoly over Serbia's oil industry. This includes the upstream and downstream (extraction, refining, and retail processes).

The NIS deal also allowed Russia to make further inroads in the Serbian gas industry via two important gas infrastructure projects. Thus, the NIS deal is a critical juncture. It marks the evolution of Russia's extractive practices into a complex state capture strategy that consolidated and linked its control of Serbia's oil and gas industries.

2008 Retold: "The Oil and the Glory"

The year 2008 was critical for Serbia. Western support for an independent Kosovo contributed to feelings of geopolitical isolation that had been festering for years, especially as Serbia dealt with Hague Tribunals and Montenegrin separatism to separate (Anonymous interview, 2023). In the context of this turbulence, 2008 witnessed the inception of an omnibus energy agreement between Serbia and Russia (Shchedrov, 2008). This NIS deal contained three critical provisions:

1. Gazprom's 51% stake in NIS, Serbia's leading oil and gas company.
2. The construction of the South Stream Pipeline.
3. An obligation to invest $500 million in an underground gas storage facility in Banatski Dvor.

Over the course of the next decade, these provisions would be substantiated through complex, opaque interactions among various political and corporate entities.

The first leg of the NIS deal was actualized in December 2008. Gazprom attained a 51% stake at a purchase price of NIS of $450 million (Balkan Insight, 2008a). Many experts contend the Serbian government willingly accepted the low sale value of NIS because Belgrade anticipated NIS's sale would guarantee the lucrative South Stream pipeline. The Serbian branch of South Stream would have spanned over 400 kilometers (Mirović, 2016). In

2009, Srbijagas and Gazprom created a joint-venture company, South Stream Serbia AG (based in Switzerland), to finance and construct Serbia's section of South Stream (B92, 2018). The dream of South Stream, however, died in 2014, after Serbia had already invested €30 million (Conley et al., 2016). Russia terminated the project after a dispute between Brussels and Moscow regarding South Stream's route across Bulgaria (Crisp, 2014).

After canceling South Stream, Russia announced a new project: Turkish Stream. Turkish Stream was a simplified (about half the size) version of South Stream (Bowden, 2019). Serbia joined the project in 2018, and South Stream Serbia AG was re-registered as Gastrans (B92, 2018). Gastrans oversaw the construction of a 400-kilometer pipeline connecting Serbia, Hungary, and Bulgaria (B92, 2018). The pipeline was completed in November 2020 and became operational in 2021 (Ozturk, 2022).

In 2010, Srbijagas and Gazprom created a joint-venture to manage the modernization of Banatski Dvor (Reuters 2010). This joint-venture would finance Russia's $500 million pledge to expand the facility's storage and withdrawal capacities (to 450 million and 5 million cubic meters, respectively). Gazprom and Srbijagas pledged the upgrade would be completed by 2012 (CSD, 2018). However, this 2012 target only concerned the first phase of Banatski Dvor's modernization. A second, lesser-publicized modernization phase was planned to really upgrade Banatski Dvor's storage and withdrawal capacities to actually meet Serbia's growing energy needs (doubling them to 800 million and 10 million cubic meters, respectively) (AERS, 2012). However, this second phase has not yet been initiated. Its cost is unknown.

The NIS deal is a mosaic of separate, distinct projects. The deal delegated project responsibilities to various actors. The subsequent actualization of the deal's various terms has been ongoing since 2008.

Literature Review and Analytical Framework

This section will provide robust analytic definitions for state capture and corrosive capital. These definitions will extend existing theory, giving it greater depth and rigidity. Then, this section will develop a novel framework to assess a project's degree of corrosiveness.

Defining State Capture

A consistent theme across the many definitions of state capture is that it is often described abstractly as the highest form of corruption. Transparency International defines state capture as "one of the most pervasive forms of corruption" where elites "use corruption… to influence and shape a country's policy, legal environment, and economy to their own interests (Martini, 2014)." Subsequently, "the main risk of state capture is that decisions no longer take into consideration the public interest but instead favor a specific group (Martini, 2014)." Transparency International's description of state capture as a type of corruption enabled by other forms of corruption is confusing: the notion that corruption can be defined by corruption appears circular. However, if one thinks of corruption as a condition that occurs at various levels, then Transparency International's definition is a bit more palatable. Lessig introduces some more clarity to the abstract characterization of state capture as a form of meta-corruption, contending that it is a form of "institutional corruption," which is a pervasive "influence… that undermines the institution's effectiveness by diverting it from its purpose…. weakening either the public's trust in that institution or the institution's inherent trustworthiness (Lessig, 2013)." Effectively, Lessig contends that using institutions as agents of corruption inherently corrupts those institutions themselves. Finally, David-Barrett adds some additional layers to the idea that state capture is an institutional form of corruption. She describes various arenas of capture, including the formation of law and policy, the implementation of policy, and the accountability of institutions (David-Barrett, 2021). These arenas are spaces where one can perform acts of state capture, such as bid rigging in public procurements, lax enforcement of existing laws, and more.

The above definitions note that state capture can involve multiple actors. State capture has evolved over time, and more modern versions of state capture involve kleptocratic officeholders who "abuse the power attached to their office to steal money and assets for themselves, but also to change the rules of the game in ways that consolidate and entrench their hold on power (David-Barrett, 2021)." Whereas politicians formerly served as middlemen for private business interests, they have now taken on the role of captors, often acting in their own self interest (David-Barrett, 2021). Modern state capture is becoming increasingly complex. It is difficult to now separate the public and private sectors, which seemingly almost act in tandem. Multiple sources can initiate acts of capture.

State capture is a type of institutional hijacking, where the ultimate impact is inequality: one small group gains at the expense of a larger one. According to David Barrett, the best way to measure state capture is through its "impact on inequality," which is a relative measurement of the "distribution of power (David-Barrett, 2021)." Much like an exchange rate, the strengthening of one group must be compared to the weakening of another to grasp an understanding of the full magnitude of inequality. Subsequently, when measuring state capture, one must be able to determine both how elites benefit and how the public loses. Indeed, this idea of measurable inequality, or net public loss, is where this paper's definition of state capture hopes to add to existing literature. State capture is now not another synonym for an "ism" (authoritarianism, nepotism, etc), but an equity measurement.

State Capture = Elite Gain + Public Loss

Defining Corrosive Capital

The Contours of Corrosive Capital

The study of corrosive capital is an underdeveloped field. Corrosive capital refers to financing that "lacks transparency, accountability, and market orientation" that usually "originate from authoritarian countries," particularly China and Russia (David-Barrett, 2021). Pejič defines corrosive capital as a diametric opposite of constructive capital, which is characterized by "transparent and financial flows…governed by market principles" (Pejič, 2021).

In the Western Balkans, corrosive capital is believed to enable state capture, which already permeates the region. Foreign governments and investors alike view Western Balkan nations as one-stop shops for economic and diplomatic deal-making, largely because ruling coalitions exert immense influence over governmental and non-governmental institutions. Corrosive capital entrenches the position of domestic strongmen (further facilitating state capture) while giving investors a direct connection to consolidated power nuclei. This "vicious cycle of corrosive capital" is extractive, because it benefits a "small elite," ostensibly at the public's expense (Preleć, 2020). Within Serbia, the effects of such practices are particularly acute. This is because Serbia is a regional hegemon in the Western Balkans, with the capacity to host large-scale foreign investments with a large corrosive magnitude.

Preleć notes that popular discourses assert corrosive investments are often spawned by partnerships with non-Western countries (particularly Russia and China) (Preleć, 2020). Russia and China have attracted attention through a series of high-impact investments (Preleć, 2020). This association has spawned a narrative that "non-Western actors" are malign investors seeking to extract rents, capture domestic strongmen as patrons, and guide their partners away from the United States and EU (Preleć, 2020). The association between corrosive investments and authoritarian powers supports a broader "East vs. West" geopolitical discourse. This ideological soft power approach to corrosive capital stipulates that competition for influence is a zero-sum game. It frames corrosive capital in mutually exclusive terms. This is reflected in how corrosiveness has been traditionally defined. It is framed as one of two ways to characterize FDI (the other being constructive). Moreover, the predominant association of corrosive capital with China and Russia frames corrosiveness as a symptom of authoritarian foreign policy. This subtly suggests that Western powers, standing in stark contrast to China and Russia, are the sole sources of constructive capital (Marusic, 2021). This binary approach to corrosive capital, constructed along the axis of East and West, sounds extremely palatable. While it is not wrong in determining the sources of many corrosive projects, it does present a false dichotomy that constrains the origins of corrosive capital to only the coffers of Moscow and Beijing. The simple narrative that non-Western states are scheming to stymie Serbia's (and the Western Balkans') integration with the rest of Europe has been challenged and partially debunked (Preleć, 2020; Bieber and Tzifakis, 2019). The subsequent critical flaw of the traditional, binary approach to corrosive capital is that it hyper-focuses on the source of investment, and not the linkages and elements that enable it. The "East vs. West" discourse subsequently casts out critical actors such as the UAE, which has no underlying ideological motivations and is supportive of EU integration, but nonetheless has financed a series of controversial investments (Preleć, 2020). Moreover, Western firms can sponsor corrosive projects: these firms are not the appendages of their governments and their governments' ideologies (Preleć, 2020).

Preleć makes the astute point that not all non-Western capital is corrosive, and not all Western capital is constructive. This revisionist approach to corrosive capital provides a nuanced alternative to the binary approach. Preleć observes actors in the corrosive capital equation from the perspective of supply (the entities offering corrosive capital) and demand (and the entities accepting it). Preleć theorizes that causes of corrosive capital are "demand side" in nature. (Preleć, 2020). Domestic actors often enable corrosive projects in Serbia by using their legal, political, and social authority to favor foreign investors (Preleć, 2020). Preleć ultimately concludes that investment can only "be malign insofar as the local authorities allow it to be (Preleć, 2020)." Thus, while the exploitation of a broken system by foreign powers is problematic, corrosive capital can only flourish where roots can find fertile soil.

Preleć's claims are echoed (to a greater degree) by Ivan Radenković, who describes FDI as a tool being grossly abused by Serbia's political elites and foreign creditors. For Serbia's political elites, FDI is attractive for a few reasons. First, it is a buzzword that is synonymous with economic growth and, subsequently, votes. Additionally, FDI also benefits political elites because of a pre-existing, pocket-lining ecosystem of corruption and state-corporate connections (Radenković, 2022). Multinational firms benefit from Serbia's favorable tax rates, lax corporate oversight, and low wages, but they are not encouraged to reinvest their profits in the Serbian economy (Radenković, 2022). This is because actual economic development would detract from Serbia's appeal as an informal and inexpensive playground for foreign investors. The benefits of FDI are skewed towards Serbia's foreign creditors and elites, at the expense of domestic economic benefits. Radenković's approach to corrosive capital highlights that responsibility for corrosive capital can be found in the relationship between domestic and foreign elites.

Thus, the existing literature supports the following claims. Corrosive capital leads to state capture. It requires a relationship between two actors: one cannot have supply without demand, and one cannot have demand without supply. Thus far, however, existing literature addressing corrosive capital has only provided a broad, theoretical framework with which one can operate. The specifics of corrosive capital (its causes, consequences, cyclical nature, and the relationship between its enablers) must be further explored.

Redefining Corrosive Capital

Existing theory stipulates that corrosive capital ultimately leads to state capture. As part of a vicious cycle, corrosive projects entrench the position of captors, who subsequently invite more corrosive capital via both supply-side and demand-side mechanisms. However, perhaps a better way to describe the vicious cycle of corrosive capital is as a sort of 'snowball.' The snowball analogy captures the cumulative effect of various corrosive instances that can occur throughout a project's life cycle. From its fledgling stages to its completion, a project can accumulate 'corrosive mass.' In theory, initial instances of corrosiveness can induce other corrosive consequences further along in a project's timeline (this will be described in the following paragraph). Each project (depending on its level of corrosiveness) can contribute to a larger snowball of state capture.

Consequently, this framework subsequently divides corrosive elements into two categories: causes and consequences. Corrosive causes occur at the beginning of a project's life cycle, often involving subversion of governing institutions to create more favorable and self-serving project conditions. Corrosive causes can include a lack of transparency, violations of the rule of law, a project's financing processes, and a special treatment of foreign partners. Causes address both the elite gain and public expense side of the state capture equation. Causes benefit elites because they enable self-serving projects, but do so at the public's expense by circumnavigating good governance practices. Consequences are the by-product of a project. Consequences can include unprofitability, various negative externalities (such as environmental damage and the displacement of persons), human rights abuses, and the capture of a host country's political and economic domains by a foreign government. Consequences often relate to the public expense side of the state capture equation but can also pertain to the elite gain aspect of state capture as well.

Since causes occur earlier in a project's life cycle, they have the potential to generate corrosive consequences (of possibly a far greater magnitude). For example, bid rigging to sell a parcel of land to a well-known polluter (like the Anglo-Australian firm Rio Tinto) is a causal element of corrosiveness that would generate a corrosive consequence of pollution. Thus, distinguishing between causes and consequences allows one to identify where to best place responses to corrosiveness in the project's timeline. Taking action upstream makes responses more effective, because they are preventative rather than remedial.

What Causes Corrosiveness?

The literature supports three hypotheses.

Hypothesis 1: The Malign Roots (Supply Side) Hypothesis

A binary approach to corrosive capital would stipulate that corrosive investments are driven by malign investors with adverse, self-interested, and targeted foreign policies. Using ideological soft power as a basis, this hypothesis predicts that corrosive investments will be sourced primarily from countries that employ the use of strategic, state-led FDI.

Hypothesis 2: The Fertile Soil (Demand Side) Hypothesis

Preleć and Radenković's revisionist approaches to corrosive capital would characterize corrosive capital as a demand driven phenomena. In Serbia, internal strongmen administrations will drive corrosiveness. These investments best serve the interests of such administrations, which is ultimately to further consolidate wealth and power within a captured state.

Hypothesis 3: The Mutual Enthusiasm (Supply and Demand) Hypothesis

This final hypothesis, and the hypothesis this paper endorses, stipulates that highly corrosive projects originate from the joint efforts of investors and domestic actors. Much like a chemical reaction, both supply and demand sides are necessary to create a corrosive result. Collaboration between these two parties creates a whole that is greater than the sum of its parts.

No More Mr. NIS Guy

The following section will identify various corrosive elements at various points in the NIS deal's lifecycle. These elements include the causes that established the terms of the deal and the consequences that followed.

Corrosive Causes: The Makings of a Bad Deal

A lack of transparency, violations to the rule of law, and susceptibility to malign foreign influence enabled a multi-level form of state capture that benefitted Serbian elites at the expense of the public and benefited Russia at the expense of Serbia.

What You Don't Know Can't Hurt You, or Can It?

All aspects of the NIS deal were rife with a lack of transparency. The IGA between Belgrade and Moscow was negotiated in total secrecy (Ekapija, 2008; Brkić 2008). Following the IGA, the negotiations preceding the official sale of NIS were not readily available for public scrutiny (Wikileaks, 2008). At an April 15 press conference, Gazprom representative Dimitry Malyshev refused to answer specific questions concerning the terms of NIS's sale (Wikileaks, 2008). When NIS's sale contract was finally published in late December 2008, many relevant questions were still left unanswered. For example, Section 2 of the contract failed to explain how Belgrade and Moscow determined NIS's questionable sale price (BalkanMagazin, 2008). Additionally, there was no mention of South Stream or Banatski Dvor in the NIS sale contract, which meant these two projects were not legally linked to the sale of NIS, and that Russia technically had no obligation to honor its verbal commitments.

Details surrounding the South Stream and Banatski Dvor projects were extremely opaque. The contracts governing both the South Stream and Banatski Dvor joint-ventures were not made publicly available (Anonymous interview, 2023). Important, specific project details were omitted from the public discourse or buried deep in official documents. For example, the fact that Banatski Dvor's full modernization would require two construction phases can only be gleaned from a close reading of annual reports published by the Energy Agency of the Republic of Serbia (AERS, 2012-18). The second upgrade is vaguely conditioned upon an increase in Serbia's demand for "storage capacities (AERS, 2012)," and its cost is unknown.

Expert criticism of the NIS deal was ignored or actively silenced. Valuations of NIS by Deloitte, Merrill Lynch, and Raiffeisen group, which placed NIS's value roughly 3 times higher than its official sale price, were not considered in official negotiations (Reuters, 2008). The most egregious suppression of criticism occurred in the final stages of NIS's sale. In the weeks before the finalization of the NIS sale contract, the entire Serbian negotiating team was restructured. Critical watchdog negotiators were replaced by comparatively inexperienced counterparts who lacked the vigor to push for more favorable sale terms (Wikileaks, 2008). Mlađan Dinkić, who publicly voiced his dismay with NIS deal, was dismissed from his position as the head negotiator and replaced with a Ministry of Foreign Affairs official, Borko Stefanoić who had no practical experience in the energy realm (Wikileaks, 2008). Other high-ranking officials also left the negotiating team, such as Nebojša Ćirić (the State Secretary in the Economy Ministry) and Branislav Zec (from the Privatization Agency)(Wikileaks, 2008). In the final, most important phases of the negotiation, critical economic and energy experts that would have lobbied for the public interest were absent. By the end of 2008, any sort of official opposition to the NIS deal had been eliminated. The NIS deal was negotiated by a few, elite interests. It induced the transfer of Serbia's energy industry to Russia.

Explaining Opacity: Malign Foreign Influence and Conflicts of Interest

Patronage Games

Evidence suggests the NIS deal was a reciprocal gesture that acknowledged Russia's refusal to recognize Kosovo's sovereignty. Russia's refusal to recognize Kosovo's independence was more than symbolic. Russia's position as a permanent UN Security Council member allowed it to block the UN's official recognition of Kosovo (Anonymous interview, 2023). Subsequently, the pressure of the Kosovo crisis, widespread feelings of indebtedness to Russia, and a looming presidential election likely supercharged Tadić's pivot to Moscow. Tadić, in the midst of the Kosovo affair, was pitted against "hardline" Tomislav Nikolic in an extremely contentious presidential election (Deloy, 2008). Tadić's "short trip" to Moscow in January 2008 to sign the IGA allowed him to "reap big political dividends." (Moscow Press, 2008) He appeared more united with his coalition partner, the pro-Russian Prime Minister Koštunica, who prior to the IGA refused to even endorse Tadić (VOA, 2009).

The importance of Koštunica and his Democratic Party of Serbia (DSS) in orchestrating the NIS deal cannot be understated. Against the backdrop of Kosovo-driven, anti-Western sentiment, Koštunica presented himself as a Eurosceptic hardliner who condemned Tadić's pro-Western enthusiasm. Koštunica's criticisms threatened the image of the ruling coalition and Tadić's reelection.

As Koštunica used public criticism to erode the electorate's confidence in Tadić, he also used NIS as a bargaining chip to secure Russia's support regarding Kosovo. This subsequently bolstered his public image. The connections of key DSS officials to Moscow suggests that elite-level interactions committed Serbia to the NIS deal long before official negotiations occurred. Some of Koštunica's closest political compatriots were deeply tied to Russia, particularly Nenad Popović. As DSS's financier and head of DSS's Economic Council, Popović has been described as "'Russia's man' in the government (KRIK, 2017)." Popović made his fortune in Russia, partnering with notable Russian firms (EKapija, 2008). Popović served as a member of Serbia's delegation to the 2007 Economic Forum in St. Petersburg (Brkić, 2008). It is here that the delegation's head, Božidar Djelić, "talked to the representatives of Gazprom about an energy agreement between Serbia and Russia (EKapija, 2008)."After this forum, Koštunica started simultaneously drawing attention to Serbian-Russian unity regarding Kosovo while teasing the idea of the NIS deal. In October 2007, Koštunica traveled to St. Petersburg to meet with Vladamir Putin, who confirmed that Resolution 1244 of the UN Security Council "would not pass (Deutsche Well, 2007)." Over a month later, Moscow sent an initial bid for NIS, and Koštunica strongly supported it (Filipović, 2007). Thus, remaining in good graces with Moscow was a critical component of Belgrade's foreign policy calculus. With Tadić on board, signing the IGA was a political downpayment that secured Russia's support over Kosovo.

Reciprocity did not end with Tadić and Koštunica's trip to Moscow: it was a tit-for-tat process. Moscow's Kosovo commitment catalyzed the IGA in January 2008, which led to Russia's official backing of Serbia when Kosovo declared independence in February 2008. However, since Russia could technically renege on its anti-Kosovo stance at any time, Belgrade felt pressure to finalize the NIS deal as quickly as possible. A sensitive cable from the US Embassy to a number of European counterparts, noting the reckless restructuring of the negotiating team, emphasized that "the special relationship with Moscow '' was "the key headline" of the NIS Deal (Wikileaks, 2008). The carrot and stick nature of reciprocity for Russia's continual support of Kosovo appears to have likely contributed to NIS's low sale price, the sidelining of important negotiators, and Serbia's unquestionable commitment to the deal.

The web of political conflicts of interest influencing the NIS deal is intricate, and it demonstrates the importance of timing when assessing corrosiveness. The seeds for a lack of transparency were planted in the proto-preliminary phases of the NIS deal, as Koštunica began to engineer the deal in 2007 and prey upon Serbia's growing anti-Western sentiment. This induced a "domino effect" that pressured Tadić to quickly endorse a poll-boosting opportunity. Thus, early-onset, elite level interactions generated a host of transparency issues and the alienation of important voices in the Serbian discourse.

A Deal on Two Fronts: The Gas Side

The NIS deal, while headlined by the sale of NIS, allowed Russia to further its capture of the Serbian gas industry by establishing Gazprom's leading role in two long-term projects. One cannot discuss South Stream and Banatski Dvor (or the Serbian energy industry) without mentioning Dušan Bajatović. Throughout the entirety of the NIS deal, Bajatović served as the CEO of Srbijagas, the Director of Gastrans, and the Chair of the Supervisory Board at Banatski Dvor (CSD, 2018). These positions made Bajatović a critical actor in facilitating the South Stream and Banatski Dvor projects. However, Bajatović did not prioritize Serbia's interests. It appears Russian money led him astray.

By 2014, Bajatović's earnings from his positions in Gastrans and Banatski Dvor constituted the bulk of his €20,000 monthly salary (making him the highest paid public servant in Serbia) (Marković, 2020). Bajatović's income gave him a very personal stake in sustaining both the South Stream and Banatski Dvor projects. This is reflected in

Bajatović's opposition to any source of energy other than Russian gas, even when this position goes against official stances of the Serbian state (CSD, 2018). Despite South Stream's failure, Bjatović pushed Serbia to join Turkish Stream in lieu of the EU-backed Trans Adriatic Pipeline (CSD, 2018). This was presumably to keep his position as Director of Gastrans. Moreover, Banatski Dvor's long-anticipated second upgrade has also sustained Bajatovic's income by creating demand for the storage facility's supervisory board. In light of these facts, one can understand why Serbia's Anti-corruption Agency suggested Bajatović resign (BIRN, 2018).

Bajatović's vulnerability to malign foreign influence has wider-ranging impacts. Through Bajatović, Russia sustains close ties with the Socialist Party of Serbia (SPS). SPS is one of Serbia's most influential political parties. Consistently capturing 7-10% of the vote in Serbian elections, SPS is the linchpin for any coalition government. It also maintains and impregnable influence in the Serbian energy industry: SPS members dominate high-ranking positions in various energy related SOEs. Through its relationship with SPS, Russia has abused, captured, and extract rents from the Serbian gas industry. This evidently reflected in the NIS deal.

Bajatović is the problematic link that has made Serbia's gas industry a Russian appendage. Bajatović's immense personal gain from his connections to Gazprom likely motivated him to sacrifice good politics for profit, at the expense of the Serbian state and public.

Corrosiveness Assessment

In the realm of transparency and malign foreign influence, the NIS deal can be identified as highly corrosive. Limited access to critical information and the isolation of critics resulted in the creation of a deal tailored to narrow interests. More importantly, the NIS deal allowed Russia to become a prime patron in Serbia's energy industry. The degree of Russia's state capture means any Serbian political cartel seeking influence must directly or indirectly cooperate with Moscow.

On another level, the interaction and sources of these various corrosive causes is also important. The NIS deal is a Trojan Horse: the vulnerability of a few elite actors allowed Russia to penetrate Serbia's entire energy industry. The structure of the NIS deal as a tripartite omnibus energy agreement reflects Russia's ability to adeptly navigate Serbia's complex political system. Exploiting differences within the Tadić administration and using its clout within the UN as a bargaining tool, Russia was able to extract from Belgrade an impulsive commitment to a broad energy agreement. By attaching the Banatski Dvor and South Stream initiatives to the sale of NIS, Gazprom used its acquisition of NIS as a pathway to strengthen its existing position in the Serbian gas industry.

Again, in this scenario, timing is critical. Serbia's turbulent domestic conditions and factional political sphere allowed the NIS deal to occur, unimpeded. The upstream seeding of corrosive elements in the deal's most preliminary stages evidently generated additional instances of corrosiveness and a functionalist spillover into the Serbian gas industry.

The Rule of Law

The NIS deal violates a variety of Serbian and EU statutes relating to public procurement, taxation, and energy. There are also criminal concerns related to bribery and corruption.

Public Procurement Laws

The NIS deal violated various aspects of Serbia's Law on Public Procurement, through the sale of NIS. The NIS sale was a negotiation procedure without public invitation, there was no space for competition, and all offers were no-tender offers (MFIN, 2008). There are some circumstances that would justify these violations of public procurement law, but they do not apply to the NIS sale.

The most important circumstance involves a lack of competition. Sometimes, the pool of available bidders is too small to be competitive. In an interview with a senior Tadić official, the author learned that despite several attempts to secure potential buyers from "major Western governments," no firms appeared to be interested (Anonymous interview, 2023) However, the official mentioned that "smaller Eastern European firms" expressed interest, but they would have been non-competitive with Gazprom (Anonymous interview, 2023). This assertion can be challenged. For example, Hungary's MOL and Austria's OMV are far from small companies. As of 2007, MOL was "one of the biggest listed firms in central Europe by market value (Reuters, 2007a)." OMV was Central Europe's largest oil and gas producer in Central Europe (Reuters, 2007a). It also acquired the Romanian firm Petrom and was praised for its "turnaround of the formerly state-owned oil company (Reuters, 2007a)." Moreover, Austria has historically been one of Serbia's largest foreign direct investors (Bjelotomić, 2021). Close Austro-Serbian economic ties would have made an OMV deal feasible. Moreover, even if some Eastern European companies might have been unable to purchase NIS for its fair market valuation on their own, this does not mean they should not have been given the opportunity to bid. Smaller firms could have organized a consortium, combining their capital to compete for a stake in NIS (Reuters, 2007). This idea was suggested as early as 2007 by OMV (Reuters, 2007). Furthermore, shares of NIS could have been auctioned off in smaller percentages, rather than a block sum of 51%. This strategy was considered when the privatization of NIS was first discussed. According to Reuters, "Belgrade initially planned to sell a 25% stake for some $300 million," but were unsure if they should attempt to sell a "majority stake for a better price (Reuters, 2007)." Ironically, the majority stake they eventually sold was at a discount. Thus, the idea that Gazprom was Serbia's only option is disputable. Using this information, one can also assume that the modernization of Banatski Dvor and the construction of South Stream were not projects that lacked alternative partners. Serbia, for example, actively shied away from projects such as the Trans-Adriatic pipeline and gas interconnectors with Bulgaria and Croatia (CSD, 2018). It is only within a political context that NIS's options were Gazprom-or-none. The availability of multiple, interested, capable bidders supports the notion that the NIS deal was motivated by political and personal interests against the backdrop of the Kosovo issue and subsequent anti-Western sentiment.

Tax Laws

The NIS deal eloquently circumvented Serbian tax laws. According to CSD, all projects "encompassed" by the NIS deal "could be taxed only according to the legal provisions which were in force in 2008, until the investment is recouped (Stefanov et. al., 2020). However, there is no rigid criteria determining what constitutes the recoupment of an investment. NIS has benefited from this provision. NIS pays a 3.5% extraction fee for oil, even though Serbia has raised the rate to 7% (Stefanov et. al., 2020). Moreover, NIS's tax rate advantage and vague criteria for determining investment might have created a moral hazard. Since 2008, NIS has pursued a slew of modernization investments and oil-drilling expeditions that have generated few returns (this will be described in greater detail later) (NIS, n.d-a; NIS 2019). This is likely attributable to a NIS's desire to preserve the IGA tax loophole.

EU Law: The Third Energy Package

In connection with the EU's Third Energy Package, the NIS deal violates clauses relating to transparency and security (CEER, 2008). Limited access to project information and Russia's control of the Serbian industry guided Serbia away from energy market liberalization.

Corrosiveness Assessment

As it relates to the rule of law, the NIS deal is highly corrosive. In a competitive industry, Gazprom was afforded preferential treatment. The IGA tax loophole is also problematic, as it has suggestively altered NIS's capacity for efficient investment and reduced government revenues. The violation of the EU's Third Energy Package poses a major problem, as it directly impacts Serbia's EU accession prospects by perpetuating its status as an energy island. From a corruption standpoint, Russia has effectively purchased one of Serbia's most influential politicians and one of Serbia's most influential political parties. These examples reflect an instance of consolidated horizontal dispersion of corrosive elements. By permeating various, unrelated elements of the broad category of rule of law, these corrosive causes each generate their own consequential branches, much like the growth of an invasive species.

Financing Process

The NIS deal posed major financing issues, including the initial valuation of NIS and the financing of South Stream and Banatski Dvor.

Gazprom's Valuation of NIS

NIS was severely undervalued at sale. As aforementioned, estimates from independent auditors put NIS in the value range of €1.2 - 2.5 billion (Reuters, 2008). To date, there is no explanation for the low valuation. NIS's opaque valuation and process and low sale price not both set a precedent for a lack of transparency and robbed Serbia of one of its greatest assets.

Overpaid and Under Par: South Stream and Banatski Dvor

The financing process and budgets for South Stream and Banatski Dvor were excessive and unsatisfactory. As it relates to South Stream, the project's likely budget far exceeded what Serbia could afford. Estimates place the cost of on-shore European segments of South Stream at around €9.5-16 billion, and this paper's estimates place the cost of Serbia's segment at about €3-6 billion (Natural Gas World, 2014). Serbian sources estimated that the Serbian segment of South Stream would have cost €1.9 billion (Mirović, 2016). However, even this figure is rather costly. This is reflected through the likely mediums of financing for the project. Mirović et al. note that the project would be majority financed via debt, in the form loans from Russia's Sberbank and Gazprom or the issuance of debt from South Stream Serbia AG (Mirović, 2016). Srbijgas's performance limited its ability to finance the project via equity capital (Mirović, 2016). Thus, the project's budget was unreasonable: Serbia's domestic energy industry could barely afford it. Additionally, Serbia's earnings from transit fees (roughly €100-200 million), would likely cover less than half of Serbia's annual import expenses on natural gas, let alone recoup the investment in South Stream

(Mirović, 2016). South Stream was never about economic efficiency. It was integral to Russia's strategy to maintain influence in European energy markets (Reed, 2014). More importantly, the same schemes governing South Stream have been transferred to Turkish Stream. While the numbers differ slightly, the effect is the same.

Banatski Dvor's modernization has failed to meet Serbia's gas storage needs: its storage and withdrawal capacities can only provide Serbia with a single day's worth of reserves before depletion. A €500 million investment (plus interest payments) that leaves a piece of infrastructure just as inadequate as it was before is a negligible investment. Moreover, little is known about the costs of the second phase of the Banatski Dvor upgrade. Serbia will likely have to pay more for Banatski Dvor's second upgrade to meet its energy demands.

Corrosiveness Assessment

Positioned at the intersection of opaqueness and inefficiency, all parts of the NIS deal were undeniably costly to Serbia. They were highly corrosive as they impacted the public side of the state capture equation. NIS's low sale price generated a massive economic loss for Serbia. The method of debt financing and the failures of both South Stream and Banatski Dvor are also costly drains on Serbia's time and resources. They have trapped Serbia in a lengthy, extortive, promise-based energy relationship with Russia. Again, the corrosive elements here are both horizontal and vertical. Bartering NIS for political favors and false hope has evidently not been an adequate form of compensation.

After the Deal: A Decade of Corrosive Consequences

Measuring Efficiency: Failure and Completion Rates

A Long, Long Time

Russia has not honored its end of the NIS deal. There has been a serious lag in the completion of all three provisions of the NIS deal, leaving Serbia's energy industry and infrastructure underdeveloped and stagnant. The NIS sale took nearly a year to finalize after it had been announced. To put this into perspective, in 2010, the average length-to-completion for a midsize acquisition ($500 million to $5 billion) after announcement was 106 days (Gartner, 2019). The NIS sale's lengthy completion timeline was a consequence of Russia's stonewalling. Serbia's negotiation for better terms did nothing more than identify Serbian political elites that needed to be ousted. The theatrics of negotiation merely made a mockery of civil society, revealing how elites clearly determined the deal's terms far in advance.

If one groups South Stream and Turkish Stream as the same project, its total duration is roughly 8 years (JPM, n.d.). This project ranks the most inefficient when compared to a basket of similar projects. It required Serbia to waste time and resources that could have been directed towards other energy diversification initiatives. Finally, Banatski Dvor's second upgrade is taking much longer than it should, largely because the criteria determining the initiation of the upgrade are vague. The second upgrade depends upon an increase in Serbia's demand for natural gas storage, but there is no indication as to how this increase will be measured. When compared to Bulgaria, the ridiculous length of the Banatski Dvor Upgrade becomes clear. Like Serbia, Bulgaria possesses a singular natural gas facility with similar storage capacities to Banatski Dvor: Chiren Underground Gas Storage (Chiren UGS) (CEEnergy News, 2023). Chiren UGS is scheduled for an upgrade that will more than double its current storage and withdrawal capacities. The upgrade, announced in 2023, is scheduled to be completed by 2024 (CEEnergy News, 2023). UGS Chiren reflects what should have happened with Banatski Dvor in the first place: the upgrade should have occurred all at once. It should not have taken this long.

Corrosiveness Assessment

Lengthy timelines for energy projects are a corrosive consequence of Serbia's inextricable energy relationship with Russia. The corrosive consequence of inefficiency sheds light on an important source of Russian influence. The perpetuity of indefinite "in-progress projects" is a testament to Russia's ability to artificially create demand for itself. For Russia, failure is a form of success, because it brings Belgrade back for more: more projects, more money spent, more dependency.

Profitability, Financial Health, and Externalities

NIS's Forever Investments

NIS's pursuit of capital intensive investments might be damaging its fiscal health by increasing dependency on Russian credit. NIS has been pursuing a massive investment campaign since 2008. NIS seeks to modernize existing infrastructure and increase its market share across the Balkans by establishing a retail and expeditionary presence in Romania, Bulgaria, and Bosnia (NIS, n.d.-a). NIS's annual reports praise these investments as a testament to success and modernization. However, a few key financial metrics suggest otherwise.

NIS has taken a plethora of loans to fulfill its grand plans of modernization, which has increased its debt obligations to foreign creditors. Over the decade and a half, NIS's debt burden has increased significantly. Its total borrowings and net debt averaged 12% and 11% growth (NIS, n.d.; NIS, n.d.-a; NIS n.d.-b) (Figure 1). The growth of these metrics at the same rate suggests NIS's cash and cash equivalents have not kept pace with its ballooning debt, placing it in danger if its creditors seek recompense. NIS's gearing ratio has grown at a faster rate (39% per year), meaning NIS's growth of debt has outpaced the growth of equity (Figure 2). This makes it harder for NIS to obtain financing from credible creditors and suggests it has borrowed more than it is worth.

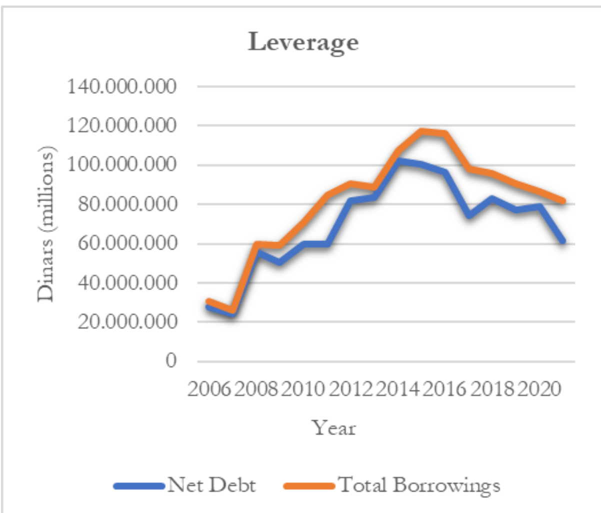

Fig. 1. Leverage

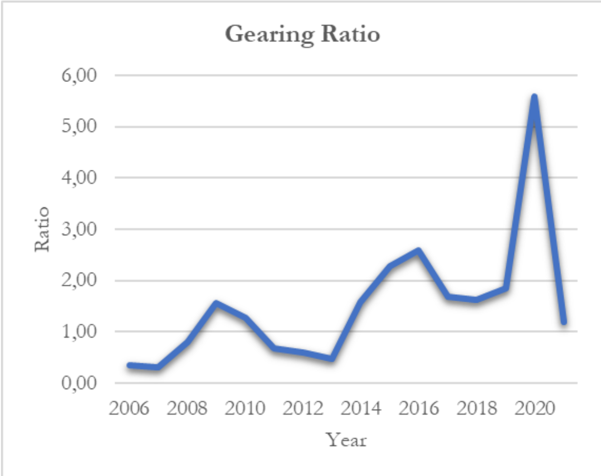

Fig. 2. Gearing Ratio

NIS's debt burden has increased its dependency on predatory creditors. NIS's increase in leverage is associated with an increase in reliance on foreign creditors. All evidence suggests Russia is likely NIS's predominant creditor. Prior to 2008, NIS's major creditors were domestic banks, and its foreign creditors were all European (NIS 2007.). NIS received a great deal of support from the Paris and London Clubs of Creditors, which are informal developmental credit groups that specialize in loaning to companies facing macroeconomic and financial difficulties (CADTM, n.d.). These creditors provided NIS with favorable interest rates (NIS, 2006; NIS 2007.). Around 2008, this dynamic started to shift. NIS stopped listing interest rates on its balance sheet (NIS, 2008a). By 2010, NIS's largest creditor was the Moscow Bank (NIS, 2010a). In 2015, NIS stopped listing its specific foreign creditors in its annual report (NIS, 2015a). As the details of NIS's borrowings became unknown, one discernable fact became clear. The ratio of NIS' foreign to domestic loans skyrocketed: more than quadrupling from 2008-2015. By 2015, NIS's major creditors were foreign, not domestic (NIS, 2015a). In its annual reports, NIS notes that these foreign creditors are likely to be Russian or Arab, not European (NIS, 2017). NIS's increasing debt burden suggests the quantity and quality of loans NIS is taking is problematic. The rates these creditors are charging NIS are unlikely to be as generous as those of the Paris and London Clubs. As NIS has accumulated more debt, its fiscal vitality has become increasingly endangered. NIS's ballooning debt burden makes a great deal of sense in the context of its predominant creditor. Moscow is using the same debt bondage tactics with NIS that it uses with Srbijagas. It seems likely that NIS's investments fall into the same category as South Stream and Banatski Dvor. They are schemes that extract rents from Serbia via interest payments and exorbitant spending on indefinite, long-term projects.

Poor Profit, Poor Management?

NIS's net profits have significantly declined since 2014, after peaking at about €300 million (NIS, n.d.; NIS, n.d.-b) (Figure 3). Moreover, while NIS's effective tax rate has increased, its total contribution to public revenues has decreased since 2008 (NIS, 2008-2019) (Figure 4 and 5). This all suggests that NIS's earnings might be growing at a slower rate relative to the growth of the rest of the Serbian economy. NIS was a larger proportional contributor to state coffers even when its effective tax rate was half of its present value, this indicates the company is becoming massively inefficient.

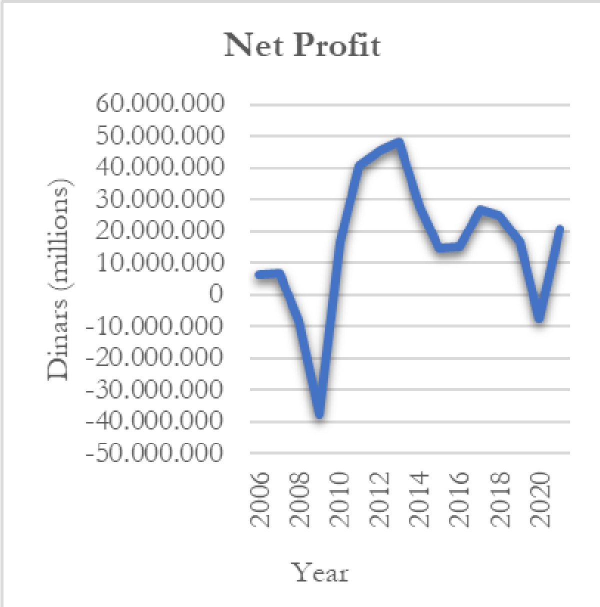

Fig. 3. Net Profit

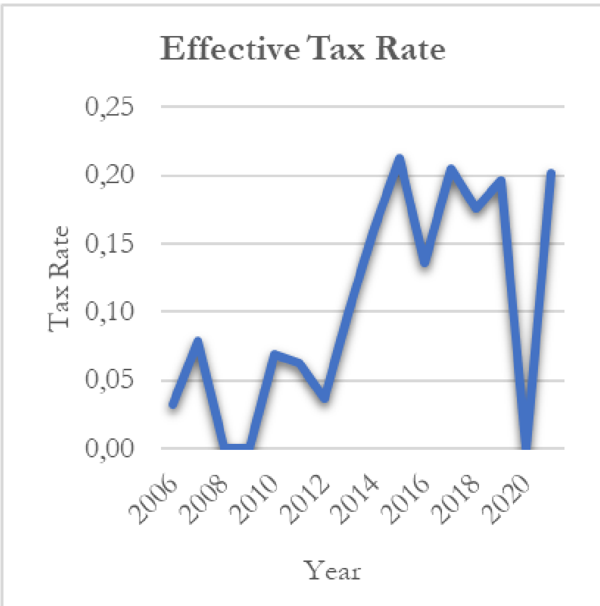

Fig. 4. Effective Tax Rate

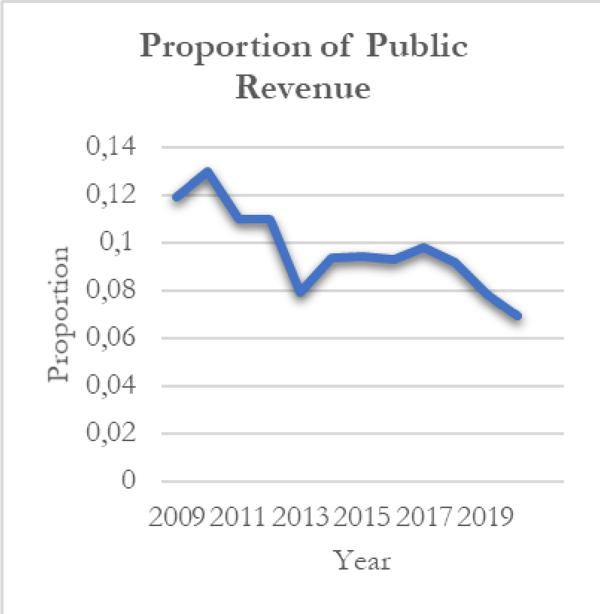

Fig. 5. Proportion of Public Revenue

NIS's operating margin reveals information about how well NIS is maximizing profits. Operating margin is an efficiency measurement that reflects the profit a firm can make from a dollar of sales, before taxes. A high operating margin would reflect that a firm has done an effective job at minimizing its expenses or increasing its sales. NIS's operating margin, however, has decreased at an average rate of about 6% since 2008, despite a yearly average sales growth rate of 7% since 2008 (NIS, n.d.)(Figure 6). Given that sales and expenses have grown at similar rates, it is evident that some endogenous, non-quantifiable factor (such as management) is inhibiting NIS from increasing the share of its profit relative to its sales.

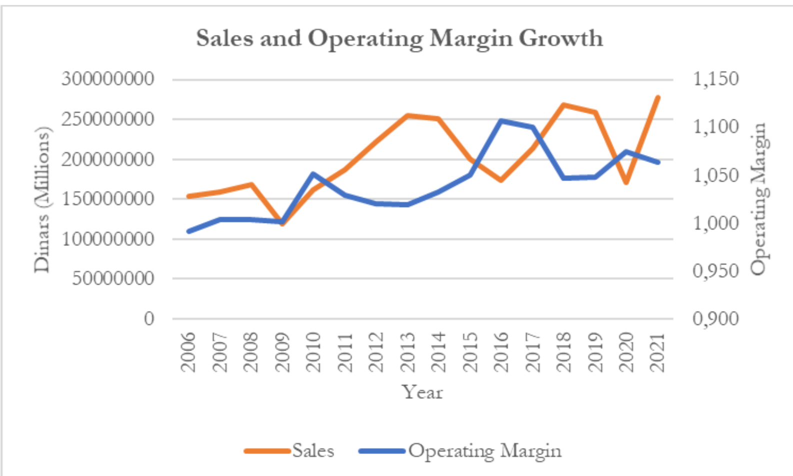

Fig. 6. Sales and Operating Margin Growth

In Another Life: Quantifying Better Management

Gazprom's presumptive poor management of NIS has resulted in an overleveraged company with a bloated balance sheet. Subsequently, this paper compares the net present value (NPV) of NIS and a hypothetical NIS (hereinafter NIS-OMV) under different management, to demonstrate what NIS could have been. The NPV value is calculated for two years: 2007 and 2021.

OMV was selected as NIS's hypothetical acquirer for a few reasons. OMV demonstrated an immense interest in acquiring NIS prior to the 2008 deal. Moreover, OMV's acquisition, Petrom, is a great source from which one can derive hypothetical performance metrics (OMVPetrom, n.d.). Analyzing Petrom's financial statements, one can calculate the compounded annual growth rate of Petrom's free cash flows (FCF) and use that as a growth rate for NIS-OMV's FCF. In both periods, the NPV of NIS-OMV is greater than that of NIS. For the 2021 to 2030 period, the NPV of NIS-OMV is nearly 1.5 that of NIS. For the 2007-2020 period, the NPV is only slightly higher for NIS-OMV (Table 1). This discrepancy reflects the compounding effect of quality management. Over time, well-placed investments earn generous returns: or not. As the NPV calculations show, the 2020 NPV of the hypothetical NIS-OVM was greater than its 2007 NPV by almost a factor of 3 (compared to a factor of just barely 2 for the actual) This suggests that the opportunity costs of the NIS deal increase year after year.

Tab. 1. NPV Comparisons

	NIS-OMV	NIS
NPV (2007)	17,958,599.52	15,941,240.07
NPV (2021)	51,788,257.85	36,085,499.85

The question to ask then is: did the sale of NIS pay off? The answer: perhaps not. NIS would have fared better under a better sale price and better management. A better sale price would have provided the Serbian government with greater tools to manage public debt, invest in infrastructure, and make improvements that could benefit EU accession. More adept management could have avoided practices that made NIS less efficient.

South Stream: Another Loser

South Stream was not a profitable project. It failed, and evidently cost Serbia €30 million. However, some might offer some counterarguments to this claim. First, some might contend that if South Stream had not been sidelined, Serbia would have not recouped its initial investment. Serbia's transit fees would barely cover a fifth of Serbia's gas import prices (even less under the renegotiated gas contract that would have accompanied South Stream). South Stream would have increased Srbijagas's cost of debt and increase expenditures on gas imports. Moreover, nothing indicates that there were financial synergies resulting from Serbia's inclusion in Turk Stream. The costs incurred by Serbia from South Stream were not related to infrastructure, but rather liability purposes. The author reached out to a Serbian official with expertise in the energy sector to verify this claim beyond what Dušan Bajatović has said, but his request was declined.

Banatski Dvor: Inadequate Storage

The initial 500 million invested in Banatski Dvor was inadequate, the facility still remains insufficient to meet emergency heating needs in Serbia, and its much needed second upgrade has not yet occurred. This was particularly evident during the global gas crisis in the winter of 2021-22 (Ekapija, 2022). Emergency gas imports to Serbia cost Serbia nearly

€750 million. Given that Serbia will have to foot the bill for the second phase of Banatski Dvor's upgrade, the project seems to be a costly burden that is inhaling Serbia's finances. Upgrading the facility all at once would have been obviously more efficient and cost effective (for Serbia, that is). As a part of a Russian money-making cartel scheme, the Banatski Dvor fiasco is another guaranteed revenue stream from Serbia.

Off the Balance Sheet: Positive Externalities?

The NIS deal has generated a series of spillover effects. While some of these spillovers have been positive, they are largely outweighed by the NIS deal's negative consequences.

The Nis deal appears to have generated investments in infrastructure and local communities throughout Serbia. NIS has also prioritized the modernization and upgrading of Serbia's petrochemical infrastructure, particularly the modernization of the Pančevo Oil Refinery and the infrastructure surrounding Pančevo. For more than a decade, NIS has made significant improvements to the Pančevo Oil Refinery which has eliminated emissions of sulfur-dioxide by 98.8%, nitrous oxide emissions by 98.8%, and particulate matter by 2% (NIS, n.d.-c). However, while recent air quality reports denote acceptable amounts of sulfur-dioxide and nitrogen-oxide, particulate matter concentrations, on any given day, can stand at more than 5 times higher than the WHO annual air quality guideline (IQAir, 2023). The modernization of Pančevo has only slightly reduced air-pollution.

NIS evidently also makes contributions to civil society in Serbia, particularly in the areas surrounding the cities of Belgrade and Novi Sad. From 2009-2019, NIS dedicated over €32 million to philanthropic initiatives (NIS, 2019). This has included the construction and renovation of children's hospitals, playgrounds and parks, laboratories, and maternity hospitals (NIS, 2019). NIS has sponsored multiple cultural festivals, provided fuel discounts for farmers, and revised their policies to employ local managers rather than expatriates (NIS, 2019). They have signed agreements with universities in Belgrade and Novi Sad and opened several schools (NIS, 2019).

Monopoly Money and Market Failure: Oil-igopoly

NIS possesses an oil monopoly in Serbia. NIS directly owns nearly a quarter of all gas stations in Serbia (325) and is the predominant fuel supplier to other retail gas stations in Serbia (CSD, 2018). NIS's massive market share, as a part of Russia's broader monopoly, is associated with oil-price discrepancies in Serbia. In 2014, for example, while crude oil prices declined by roughly 50%, declines in Serbia were about 5 to 10 times smaller (CSD, 2018; European Commission, n.d.). This is especially concerning given the average income for the EU 27 is larger than Serbia's by a factor of five. Thus, the gas price-to-income ratio for Serbia is significantly higher than for the rest of the EU 27. Putting this into perspective, based on the author's own calculations, the average Serb would have to expend four days of pay for a full gas tank (Popović, 2019; Eurostat, n.d). For a German and a Slovenn to fill up his tank, it would take only 6 and 10 hours of work, respectively (Popović, 2019).

South Stream and Turkish Stream: Upstream and Downstream

Gazprom's control of the Serbian gas industry has been explained at length in this case study. Gas prices in Serbia are indeed lower than those in the EU 27 (Eurostat, n.d.). However, it is important to note that these prices are heavily subsidized by Srbijagas, which only adds to the company's mounting debt. However, despite subsidized prices, the price to income ratio for Serbia is still twice the EU 27 average. These pricing analyses reveal critical insights about Serbia's non-liberalized gas market. In a country with an annual income far below the EU 27 average and with generous fuel subsidies, Serbs pay nearly five times as much for oil and twice as much for gas relative to their incomes.

Gazprom's immense influence over Serbia's energy sector has generated both domestic and geopolitical implications. Serbia's pursuit of South Stream and Turkish Stream lack of has perpetuated corrosive partnerships with Russia and caused conflicts with the broader EU Energy Community energy community. Gazprom and Srbijagas are entitled to exclusively use 88% of the capacity of Serbia's Turkish Stream branch (which connects Hungary, Serbia, and Bulgaria) (Bowden, 2019). While the EU Energy Community Secretariat (ECS) recommended that Gastrans limit its 88% capacity access to 70%, Gastrans ignored this (Bowden, 2019). This has pitted the rest of the EU Energy Community against Serbia. Multiple decisions of the ECS's Ministerial Council have found Serbia responsible for noncompliance with a plethora of Energy Community Treaties. For example, Gastrans' market dominance has enabled Srbijagas to restrict the Horgoš entry point of TurkStream from "unrestricted and non-discriminatory third-party access (European Energy Community, 2018). According to the ECS, this places the project as noncompliant with the unbundling regime of the Third Energy Package: upstream and downstream control exercised by Gazprom and Srbijagas on Turkstream respectively limits market competitiveness in Serbia, Bulgaria, and Hungary (Bowden, 2019). Moreover, Serbia's inability to implement ECS decisions, according to the ECS, "constitutes a serious and persistent breach" as it relates to the Energy Community Treaty (European Energy Community, 2018). As long as Gazprom dominates Serbia's energy space, Serbia's relationship with the EU Energy Community will be perpetually strained.

Non-Monetary, Still Costly

NIS presents a glamorous public image in its annual reports. However, evidence suggests its commitments to development and sustainability might be disingenuous. NIS's prerogative to enhance domestic production has generated negative externalities. NIS has reportedly introduced reckless hydro-fracking practices to maximize oil extraction. A group of former NIS engineers reported that NIS's hydrofracking practices have led to both "the rapid disappearance of domestic resources" and "uncontrolled environmental pollution (Marković, 2021). The Ministry of Mining and Energy in the Republic of Serbia estimates that if the current "exploitation rate continues," the reserves of domestic oil and natural gas will be depleted in 15 years (Ministry of Mining and Energy, n.d.). NIS's extreme hydrofracking practices have doubled Serbia's oil extraction rates and polluted Serbia's waterways in Serbia's Vojvodina Province (News Serbia Energy, 2017). The effects of NIS's practices are felt in local communities, who, according to one local representative, feel "[NIS's] idea is to take as much money out of here and forget us (News Serbia Energy, 2017). In Palić, NIS's exploits have caused drinking water to become "more turbid" and acquire a certain odorous smell (this is likely the effect of arsenic, methane, iron, ammonia, and bacteria contaminating the water) (Marković, 2021). A 2019 study reflected that in Vojvodina, of 43 tested waterworks, only 10 had drinkable water. In the village of Stajićevo, a viral video showcased a man lighting his faucet-water on fire (Marković, 2021). NIS has denied their involvement with water contamination (Marković, 2021). Even if this is true, one cannot deny the undeniable negative externalities of drilling, which causes buildings to crack, creates noise pollution, and degrades the surrounding topography.

The Big Picture

In a larger context, Russia's state-capture is reinforced through its increased presence in Serbia, especially after the NIS deal. One cannot go anywhere in Serbia without seeing Gazprom's logo, whether it's in Belgrade or a rural village outside of Loznica. By acquiring NIS, Gazprom also acquired free advertising: on billboards, sports jerseys, at ski resorts, on television, and more. Finally, politicians such Dušan Bajatović, who are frequently featured in Serbian and Russian sponsored media outlets, use airtime to laud Russian gas and its importance.

Corrosiveness Assessment

The NIS deal generated a diverse array of highly corrosive negative externalities. The list is extensive, including the erosion of NIS's financial health, the lack of competition in the energy industry, negative returns on both South Stream and Banatski Dvor, high prices of critical fuels, and environmental damage. These externalities far outweigh the positive, public-facing, feel-good campaigns outlined in NIS's annual reports The NIS deal's spillovers are indicative of Russian state capture that benefits Moscow at the expense of Serbia.

Foreign State Capture

Direct and Indirect Control

The NIS deal undoubtedly increased Russia's influence and presence in the Serbian economy. Gazprom's acquisition of NIS gave it control of one of Serbia's most profitable companies. Even under current management, NIS still was Serbia's second highest earner in 2020 (Statista, n.d.). The NIS deal was also a watershed moment for the future of Srbijagas. It reaffirmed Srbijagas's commitment to Gazprom by bringing the two companies into closer cooperation via South Stream and Banatski Dvor. Under the protection of Gazprom, establishment leaders (such as Dušan Bajatović) continue to promote the basic operational characteristics that place Srbijagas in a position of debt-bondage Both South Stream and Banatski Dvor were a drain on Serbia's time and resources. They have thwarted energy diversification efforts and kept Serbia as an energy island devoted to Russian gas. Subsequently, the leverage that Gazprom exercises over Srbijagas are attributable to the events of 2008.

The value of the assets Gazprom directly controls (through its ownership of NIS) and indirectly controls (through its debt leverage) is roughly 348 billion dinars (as of 2020)(APR, n.d.). This is more than 6% of Serbia's GDP (as of 2020). To put this into perspective, a 2013 report published by the Fiscal Council of the Republic of Serbia recorded that indebted SOEs and former SOEs (over roughly 500) possessed assets with a value equivalent to roughly 17% of the Serbian economy (Fiscal Council, 2014. The indirect control Russia currently exercises over the Serbian energy industry, purely through the NIS deal, is alarming.

Corrosiveness Assessment

The NIS deal generated spectacular dividends for Russia, and Russia's subsequent capture of the Serbian state is highly corrosive. Russia's domination of Serbia's critical industries and political patronage networks earned it a significant stake in Serbia's economy. Thus the NIS deal catalyzed a critical expansion of Russia's influence in Serbia.

Conclusion

The NIS deal generally supports this paper's hypothesis: that highly corrosive projects originate from the joint efforts of investors and domestic actors. The NIS deal also supports this paper's idea of a corrosive cumulative mass, where upstream corrosive elements positively reinforce other instances of corrosiveness throughout a project's life cycle. However, the above analysis also reveals some critical facts that give this paper's hypothesis and framework greater nuance and depth. These facts relate to enablers, corrosive causes, and corrosive consequences.

As it stands, this paper's hypothesis is supported by the facts provided in the aforementioned analysis. However, at the same time, this analysis also reveals this hypothesis is one dimensional. An analysis of enablers should focus on the synergistic connections formed between investors and domestic actors. Enablers ultimately form a singular, supranational unit working towards the same goal. In the case of the NIS deal, this supranational unit is reflected in Serbia's powerful Russia lobby, which has successfully transcended coalition leaders and individual leaders alike. This observation adds nuance to the nature of power politics within Serbia, even today. For example, while popular discourses often attribute all of Serbia's decision-making to its President, Aleksandar Vučić, the findings of this analysis suggest that it is important to consider greater, pervasive forces that influence decision-making. It seems likely Vućič's pandering to both Moscow is influenced by a deep-seeded Russian influence that Vućič pragmatically respects and acknowledges.

Additionally, it is also important to understand the interactions between enablers that facilitated the NIS deal. It would be wrong to construct the NIS deal as a collusive, illusive round-table scheme that involved hand-shaking and deal-making between Putin, Koštunica, Popović, Bajatović, and Tadić. The reality is that much like an epidemic, various actors became "infected" as the NIS deal progressed. While Russia and Gazprom might have been the NIS deal's "viral agents," their ambitions could not have survived without a host. Hosts were found in a series of different critical, Serbian actors. Moreover, much like how epidemics are sustained by optimal conditions, the domestic and political contexts surrounding the NIS deal are also important to consider as enabling factors. The NIS deal might have not even survived initial negotiations if Serbia had not been experiencing the Kosovo crisis as well as a weak coalition government consisting of two diametric opposites: Tadić and Koštunica.

This paper also emphasizes the importance of the placement of corrosive elements within a project's life cycle. Of the various corrosive elements in the NIS deal, upstream corrosive causes appear to be the most impactful as they relate to inducing further corrosiveness. This is because they catalyzed chain reactions that caused corrosive elements to spillover into various competencies. For example, the costly consequences of South Stream and Banatski Dvor can be traced to the Russian-SPS special interest that enabled the creation of unsupervised joint ventures. While one could argue this link chain can be categorized as one corrosive element, it is important to divide it into different parts, because each part is independently corrosive. For example, even if South Stream and Banatski Dvor had succeeded, the elite-level partnership that enabled these projects would still be problematic, because it relegates an important decision-making process to a selective, unrepresentative few. It is important to note that upstream causes are relative. While one can debate where upstream ends and downstream begins, this is technical and pointless. The critical fact to consider is that the earlier corrosiveness occurs, the greater are opportunities for subsequent corrosiveness.

Obviously, this paper possesses limitations. Some might argue that its analysis is limited in scope, as it only addresses a Russian acquisition in the oil industry from 2008. This is a fair point. Indeed, corrosive analysis could differ if the country, sector, type of project, and period were all different. However, while limited in scope, this paper's findings can still inform broader conclusions about corrosive capital. This is because this paper identifies pervasive systemic issues that evidently enabled the NIS deal. As aforementioned, while the NIS deal might have taken place in 2008, the institutions and political ethos that enabled it are still alive and well in Serbia. Aleksandar Vučić has inherited them, and like those before him, he often uses them. Ultimately, while the investment conditions and characteristics might differ, the systems that enable corrosive capital have not changed. Moreover, even though the NIS deal occurred in 2008, it is still very topical. Serbia's energy industry remains captured by elites. The failure to modernize Banatski Dvor cost Serbia hundreds of millions of Euros only last year. Serbs experience the deal's impacts daily, whether it be high energy prices or pollution in Vojvodina.

Policy solutions ought to be creative and interactive, not prescriptive. More often than not, Serbia is told where its governance gaps exist. The solution is usually a written law, imposed by the EU, that fails to be enforced. Copy-paste legislation has a limited impact. The next step for Serbia is endowing important national watch-dog institutions, such as Serbia's Agency for the Prevention of Corruption (ACK) and Public Procurement Office (PPO), with greater resources.

An enhanced ACK and PPO could complement other creative initiatives to combat corruption and state capture. For example, important state-corporate positions should not be occupied by politically neutral officials (much like judges), or they should have term limits. Subsequently, Serbia's ACK could oversee the selection process of a new CEO of Srbijagas. Finally, agencies like the PPO and ACK should oversee the formation of high-level investment partnerships between Serbia and other nations. Stronger institutions could allow for more vigorous investigation of reportedly corrupt officials. To-date, no high level Serbian officials have been tried for corruption.

Again, many of these ideas are not particularly novel. A corruption probe against NIS was launched in 2014, but it ultimately failed (Beta, 2022). A lack of will for change and often stymies such efforts. This is where larger actors can play a bigger role. The EU, for example, frequently mentions in its annual reports the low institutional capacities of Serbia's various independent government oversight agencies (European Commission, 2021). The EU should dually implement a rigorous selection program to identify top Serbian talent for such institutions while also directing funds to increase these agencies' budgets, salaries, and capacities. Just as Aleksandar Vučić has recently raised the pay of Serbian military and police servicemen, a similar initiative could entice quality recruits that would otherwise take their talents elsewhere for better pay. Ultimately, combating corrosiveness goes beyond finger pointing and broad generalizations. Prevention requires understanding, which in turn requires the identification of channels of influence, critical actors, and critical junctures that create vicious corrosive chain reactions. This kind of process tracing is absolutely necessary for prediction, early action, and prevention. This is how corrosive capital can be combated.

Acknowledgements: I would like to acknowledge and thank the following for assisting me in my research. Dr. Mikica Sibinović and the Faculty of Geography at the University of Belgrade have been instrumental in guiding me and giving me opportunities for publication. Dr. Filip Ejdus at the Faculty of Political Science at the University of Belgrade has guided me in my research while connecting me with relevant literature and interlocutors. Finally, my host institution, the Belgrade Center for Security Policy, has created a perfect environment for me to conduct my research. My mentors have critically assisted me in my research efforts, providing me with the necessary resources and motivation to complete my project. These critical individuals include: Dr. Vuk Vuksanović, who has spared no effort in reviewing every piece and page of literature I have written. Igor Bandović and Dr. Srđan Cvijić, for their consistent support and willingness to connect me with relevant interlocutors. Marija Ignjatijević and Luka Sterić, for bringing me to BCSP as a Fulbright Scholar.

Conflicts of Interest: The author declares no conflict of interest.

Publisher's Note: Serbian Geographical Society stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

References

Agencija za privredne registre. (n.d.). *Pretraga evidencije obveznika finansijskih izveštaja*. Retrieved February 11, 2023, from https://pretraga3.apr.gov.rs/pretragaObveznikaFI

BalkanMagazin. (2008, December 24). *Ugovor o prodaji i kupovini akcija naftne industrije Srbije a.d. Novi Sad*. Retrieved February 4, 2023, from http://www.balkanmagazin.net/energetika/cid163-30273/ugovor-o-prodaji-i-kupovini-akcija-naftne-industrije-srbije-ad-novi-sad

Bangkok Post. (2013, November 25). *Gazprom launches South Stream construction in Serbia*. Retrieved February 22, 2023, from https://www.bangkokpost.com/world/381562/gazprom-launches-south-stream-construction-in-serbia

BalkanInsight. (2008a, January 28). *Kostunica Keeps Tadic Guessing*. Retrieved February 5, 2023, from https://balkaninsight.com/2008/01/28/kostunica-keeps-tadic-guessing/

BalkanInsight. (2008b, September 1). *Serbian Oil Firm's Value 'Exceeds Russian Bid.'* Retrieved February 4, 2023, from https://balkaninsight.com/2008/09/01/serbian-oil-firm-s-value-exceeds-russian-bid/

BETA. (2022, July 8). *Fiscal Council: Loss of EPS and Srbijagas in Heating Season 2021/22 One Billion Euros*. Retrieved February 22, 2023, from https://www.ekapija.com/en/news/3761206/fiscal-council-loss-of-eps-and-srbijagas-in-heating-season-202122-one

BETA. (2022, September 7). *Nova: Former Inspector Claims Corruption Task Force Disbanded Prior to Srbijagas Investigation*. Retrieved February 22, 2023, from https://betabriefing.com/news/politics/20659-nova-former-inspector-claims-corruption-task-force-disbanded-prior-to-srbijagas-investigation

BETA. (2023, January 25). *New contract signed by Bulgartransgaz for Chiren UGS expansion—CEENERGYNEWS*. CEEnergy News. Retrieved February 22, 2023, from https://ceenergynews.com/oil-gas/new-contract-signed-by- bulgartransgaz-for-chiren-ugs-expansion/

BETA. (2008, January 26). *Moscow press: Tadić to profit most from energy deal*. Retrieved February 5, 2023, from https://www.b92.net/eng/news/politics.php?yyyy=2008&mm=01&dd=26&nav_id=47243

Bieber, F., & Tzifakis, N. (2019). The Western Balkans as a Geopolitical Chessboard? Myths, Realities and Policy Options (p. 32). BiEPAG. Retrieved October 5, 2022, from https://biepag.eu/wp-content/uploads/2021/07/The_Western_Balkans_as_a_Geopolitical_Chessboard.pdf

BIRN. (2018, November 19). *Multitasking: Collecting Paychecks from the Serbian State. Balkan Insight*. Retrieved October 5, 2022, from https://balkaninsight.com/2018/11/19/multitasking-collecting-paychecks-from-the- serbian-state-11-16-2018/

Bjelotomić, S. (2021, August 30). *Which foreign countries have invested the most in Serbia? Serbian Monitor*. Retrieved February 19, 2023, from https://www.serbianmonitor.com/en/which-foreign-countries-have-invested-the-most-in-serbia/

Bowden, J. (2019). Regional gas flows—Impact of Turk Stream. *SE Europe Gas Markets* (pp. 12–17). Oxford Institute for Energy Studies. https://www.jstor.org/stable/resrep31051.10

Brkić, M. (2008, August 23). *Naš Srbin iz Bosne*. Peščanik. Retrieved February 22, 2023, from https://pescanik.net/nas-srbin-iz-bosne/

B92. (2018, February 5). *Russians to increase ownership in South Stream Serbia AG?* Retrieved February 2, 2023, from https://www.ekapija.com/en/news/2023039/russians-to-increase-ownership-in-south-stream-serbia-ag

CADTM. (n.d.). *London Club*. CADTM. Retrieved February 22, 2023, from http://www.cadtm.org/The-London-Club

Center for the study of democracy. (2018, January 29). *Policy Brief No. 72: Assessing Russia's Economic Footprint in Serbia*. Retrieved November 2, 2022, from https://csd.bg/publications/publication/policy-brief-no-72-assessing-russias-economic-footprint-in-serbia/

CEER. (2008). *E08-PC-33: IMPLEMENTING THE 3RD PACKAGE*. Council of European Energy Regulators. Retrieved February 5, 2023, from https://www.ceer.eu/eer_consult/closed_public_consultations/crosssectoral /implementing_the_3rd_energy_package

Club de Paris. (n.d.). Retrieved February 13, 2023, from https://clubdeparis.org/

Conley, H. A., Mina, J., Stefanov, R., & Vladimirov, M. (2016). *The Kremlin Playbook*. Center for strategic & International Studies. https://www.csis.org/analysis/kremlin-playbook

Crisp, J. (2014, December 4). *EU, US promote alternative projects, following South Stream failure*. Euractiv. Retrieved April 4, 2023, from https://www.euractiv.com/section/energy/news/eu-us-promote-alternative-projects-following-south-stream-failure/

David-Barrett, E. (2021). *State Capture and Inequality*. 27.

Deutsche Welle (2007, June 10). *Koštunica razgovarao sa Putinom*. Retrieved January 26, 2023, from https://www.dw.com/sr/ko%C5%A1tunica-razgovarao-sa-putinom/a-2654744

Deloy, C. (2008, January 14). *Presidential Election in Serbia, A Round Up One Week before the Election*. Retrieved February 5, 2023, from https://www.robert-

schuman.eu/en/eem/0826-presidential-election-in-serbia-a-round-up-one- week-before-the-election
Ekonomist magazin. (2008, February 26). *Popović, ABS Holding—Bez lažnih dilema*. Retrieved February 13, 2023, from https://www.ekapija.com/people/156122/nenad-popovic-abs-holding-bez-laznih-dilema#
Energy Agency of the Republic of Serbia. (2012). *AERS Annual Report 2012*. Retrieved February 21, 2023, from https://www.aers.rs/Files/Izvestaji/Godisnji/Eng/AERS%20Annual%20Report%202012.pdf
Energy Agency of the Republic of Serbia. (2013). *AERS Annual Report 2013*. Retrieved February 21, 2023, from https://www.aers.rs/Files/Izvestaji/Godisnji/Eng/AERS%20Annual%20Report%202013.pdf
Energy Agency of the Republic of Serbia. (2014). *AERS Annual Report 2014*. Retrieved February 21, 2023, from https://www.aers.rs/Files/Izvestaji/Godisnji/Eng/AERS%20Annual%20Report%202014.pdf
Energy Agency of the Republic of Serbia. (2015). *AERS Annual Report 2015*. Retrieved February 21, 2023, from https://www.aers.rs/Files/Izvestaji/Godisnji/Eng/AERS%20Annual%20Report%202015.pdf
Energy Agency of the Republic of Serbia. (2016). *AERS Annual Report 2016*. Retrieved February 21, 2023, from https://www.aers.rs/Files/Izvestaji/Godisnji/Eng/AERS%20Annual%20Report%202016.pdf
Energy Agency of the Republic of Serbia. (2017). *AERS Annual Report 2017*. Retrieved February 21, 2023, from https://www.aers.rs/Files/Izvestaji/Godisnji/Izvestaj%20Agencije%202017.pdf
Energy Agency of the Republic of Serbia. (2017). *AERS Annual Report 2018*. Retrieved February 21, 2023, from https://www.aers.rs/Files/Izvestaji/Godisnji/Izvestaj%20Agencije%202018.pdf
Energy Agency of the Republic of Serbia. (n.d.). *Financial Reports*. Retrieved February 21, 2023, from https://www.aers.rs/Index.asp?l=2&a=53
European Energy Community. (2018). *Case ECS 13/17: Serbia* / gas. Retrieved February 21, 2023, from https://www.energy- community.org/legal/cases/2017/case1317RS.html
European Commission. (2021). *Serbia Report 2021*. European Commission. Retrieved November 24, 2022, from https://neighbourhood- enlargement.ec.europa.eu/serbia-report-2021_en
European Commission. (n.d.). *Weekly Oil Bulletin*. Retrieved February 22, 2023, from https://energy.ec.europa.eu/data-and-analysis/weekly-oil-bulletin_en
European Environment Agency. (n.d.). *What is particulate matter and what are its effects on human health?* Retrieved February 22, 2023, from https://www.eea.europa.eu/help/faq/what-is-particulate-matter-and
Eurostat. (n.d.). *Prices: Energy*. Retrieved February 22, 2023, from https://ec.europa.eu/eurostat/web/energy/methodology/prices
Eurostat. (n.d.). *Statistics*. Retrieved February 22, 2023, from https://ec.europa.eu/eurostat/databrowser/view/ten00118/default/table?lang=en
Filipović, G. (2007, December 28). *Minister slams Russian grab for Serb oil monopoly*. Retrieved February 5, 2023, from https://www.reuters.com/article/us-serbia-russia-nis-idUKL2852531920071228
Fiscal Council of Republic of Serbia. (2014). *Analysis of State Owned Enterprises Fiscal Aspect*. Retrieved February 22, 2023, from https://www.fiskalnisavet.rs/doc/eng/analysis_of_state-owned_enterprises-fiscal_aspect.pdf.

Fiscal Council Republic of Serbia. (n.d.-b). Retrieved February 22, 2023, from http://www.fiskalnisavet.rs/english/index.php

Gartner. (2019, October 15). *Gartner Says the Average Time to Close an M&A Deal Has Risen More Than 30% in the Last Decade.* Gartner, Inc. Retrieved February 22, 2023, from https://www.gartner.com/en/newsroom/press-releases/2018-10-15-gartner-says-the-average-time-to-close-an-manda-deal-has-risen-more-than-30-percent-in-the- last-decade

Gloystein, H., & Zhdannikov, D. (2014, December 2). Russia's South Stream pipeline falls victim to Ukraine crisis, energy rout. Retrieved February 22, 2023, from https://www.reuters.com/article/us-russia-europe-pipeline-idUSKCN0JG0VH20141202

Hydrocarbons Technology. (n.d.). *South Stream Pipeline Project, Europe*. Retrieved February 22, 2023, from https://www.hydrocarbons-technology.com/projects/southstream/

IQAir. (2023, February 7). *Pančevo Vojlovica Air Quality Index (AQI) and Pancevo Air Pollution*. Retrieved February 10, 2023, from https://www.iqair.com/serbia/central-serbia/pancevo/pancevo-vojlovica

JPM. (n.d.). *The Construction of Turkish Stream Gas Pipeline Serbia's Section has been Completed.* Retrieved February 4, 2023, from https://www.jpm.law/the-construction-of-turkish-stream-gas-pipeline-serbias-section-has-been-completed/

KRIK. (2017, November 14). *Leaked Documents Reveal Offshore Holdings of Controversial Serbian Minister*. Retrieved February 22, 2023, from https://www.krik.rs/en/leaked-documents-reveal-offshore-holdings-controversial-serbian-minister/

Lessig, L. (2013). "Institutional Corruption" Defined. *Journal of Law, Medicine&Ethics*, *41*(3), 553–555. https://doi.org/10.1111/jlme.12063

Liquefied petroleum gas. (n.d.). Chart of fuel prices in Serbia. Retrieved February 22, 2023, from https://www.mylpg.eu/stations/serbia/prices/

Luttwak, E. N. (1990). From Geopolitics to Geo-Economics: Logic of Conflict, Grammar of Commerce. The National Interest, 20, 17–23. https://www.jstor.org/stable/42894676

Marković, S. (2020, June 15). *RSD1.4 Billion for MPs, Money Goes Even to Inactive Ones*. Center for Investigative Journalism of Serbia. Retrieved January 19, 2023, from https://www.cins.rs/en/rsd1-4-billion-for-mps-money-goes-even-to-inactive-ones/

Marković, S. (2021, March 23). *Vojvodina: Hundreds of Oil Wells and the Worst Drinking Water*. Retrieved February 13, 2023, from Center for Investigative Journalism of Serbia. https://www.cins.rs/en/vojvodina-hundreds-of-oil-wells-and-the-worst-drinking-water/

Martini, M. (2014, March 11). *State capture: An overview*. Transparency International.

Marusic, D. (2021, May 17). *Corrosive Capital in the Western Balkans: An Analysis of Four High Impact Chinese Investments*. CIPE. Retrieved November 2, 2022, from https://www.cipe.org/resources/corrosive-capital-in-the-western-balkans-an-analysis-of-four-high-impact-chinese-investments/

Ministry of Mining and Energy. (n.d.). *Energy Security of Serbia*. Retrieved February 22, 2023, from https://www.mre.gov.rs/en/aktuelnosti/saopstenja/energy-security-serbia

Ministarstvo finansija Republike Srbije. (2008). *Zakon o javnim nabavkama*. Retrieved January 17, 2023, from http://www.antikorupcija-savet.gov.rs/Storage/Global/Documents/zakoni_pdf/Zakon%20o%20javnim%20nabavkama.pdf

Mirović, V., Andrašić, J., & Zakić, V. (2016). Financing of South Stream Pipeline in Serbia. *Anali Ekonomskog fakuteta u Subotici, 52*(36), 133-143.

Natural Gas World. (2014, March 7). *In Serbia: Nothing Is Holding Back South Stream – Bajatović*. Retrieved February 22, 2023, from https://www.naturalgasworld.com/nothing-is-holding-back-south-stream-Bajatović

Natural Gas News. (2014, October 9). *South Stream Offshore Cost Rises*. Retrieved February 22, 2023, from https://www.naturalgasworld.com/south-stream-offshore-cost

News. (2009, November 1). *Serbia's Kostunica Refuses to Endorse Tadic for Re-Election*. Retrieved February 5, 2023, from https://www.voanews.com/a/a-13-2008-01-30-voa48/343910.html

News. (2009, November 1). *Serbs Demonstrate Against Kosovo Independence*. Retrieved March 11, 2023, from https://www.voanews.com/a/a-13-2008-02-18-voa39/334281.html

News Serbia Energy. (2017, April 26). *Serbia: NIS is destroying Serbian oil fields*. Serbia-Energy.Eu. Retrieved February 20, 2023, from https://serbia-energy.eu/serbia-nis-destroying-serbian-oil-fields-using-method-forbidden-world-oil-disappearing-water-polluted/

News Serbia Energy. (2016, March 28). *Serbia: Srbijagas & state budget under financial liabilities from cancelled South Stream*. Serbia-Energy.Eu. Retrieved February 21, 2023, from https://serbia-energy.eu/serbia-srbijagas-state-budget-financial-liabilities cancelled-south-stream/

NIS. (2007). Consolidated *Financial Statements Year Ended December 31, 2007 and Independent Auditors Reports*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/Financial_Statements /English/Consolidated/Financial_Statements_Cons_2007.pdf

NIS. (2008). *Financial Statements Stand Alone 2008*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf /Reporting/Financial_Statements/English/Stand_Alone/Financial_Statements_SA_2008.pdf

NIS. (2010). *Financial Statements Stand Alone 2010*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf /Reporting/Financial_Statements/English/Stand_Alone/Financial_Statements_SA_2010.pdf

NIS. (2011). *Annual Report 2011*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/Annual_Report_2011_eng.pdf

NIS. (2012). *Annual Report 2012*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting /BusinessReports/English/AR_2012_eng.pdf

NIS. (2012a). *Financial Statements Stand Alone 2012*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf /Reporting/Financial_Statements/English/Stand_Alone /SA_Finacial_Statements_FY_2012_eng.pdf

NIS. (2013). *Annual Report 2013*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/NIS_AR_2013_eng.pdf

NIS. (2014). *Annual Report 2014*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/AR_2014_eng.pdf

NIS. (2015). *Annual Report 2015*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting /BusinessReports/English/AR_2015_eng_new.pdf

NIS. (2015a). *Financial Statements Stand Alone 2015*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/Financial_Statements/English/Stand_Alone /2015_FY_SAFS_RS_GAAP_audit_eng.pdf

NIS. (2016). *Annual Report 2016*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting /BusinessReports/English/NIS_AR_2016_eng.pdf

NIS. (2017). *Annual Report 2017*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting /BusinessReports/English/NIS_AR_2017_eng.pdf

NIS. (2018). *Annual Report 2018*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/NIS_AR_2018_eng.pdf

NIS. (2019). *Annual Report 2019*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/Annual_Report_2019_en.pdf

NIS. (2020). *Annual Report 2020*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/Annual_Report_2020_en.pdf

NIS. (2021). *Annual Report 2021*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/AR_2021_eng.pdf

NIS. (2022). *Annual Report 2022*. Retrieved February 22, 2023, from https://ir.nis.rs/fileadmin/template/nis/pdf/Reporting/BusinessReports/English/AR_2022_eng.pdf

NIS. (n.d.). *Financial Statements*. Retrieved February 5, 2023, from https://ir.nis.rs/reporting-centre/financial-statements/

NIS. (n.d.-a). *Annual and Quarterly Reports*. Retrieved February 22, 2023, from https://ir.nis.rs/reporting-centre/annual-and-quarterly-reports/

NIS. (n.d.-b). *Financial Figures*. Retrieved February 22, 2023, from https://ir.nis.rs/en/performance-highlights/financial-figures/

NIS. (n.d.-c). *New plant in the Pančevo oil refinery officially put into operation*. Retrieved February 22, 2023, from https://ir.nis.rs/en/news/single-news/new-plant-in-the-pancevo-oil-refinery-officially-put-into-operation/

OMVPetrom. (n.d). *Publications*. OMVPetrom. Retrieved February 22, 2023, from https://www.omvpetrom.com/en/investors /publications

Ozturk, T. (2022, June 16). *Serbian leader reaffirms strong commitment to TurkStream pipeline project*. Retrieved February 4, 2023, from https://www.aa.com.tr/en/economy/serbian-leader-reaffirms-strong-commitment-to-turkstream-pipeline-project/2615523

Pejić, N. (2021, August 25). *Many a Mickle Makes a Muckle*. CEIAS.

Preleć, T. (2020). The vicious circle of corrosive capital, authoritarian tendencies and state capture in the Western Balkans. *Journal of Regional Security*, *15*(2), 167–198. https://doi.org/10.5937 /jrs15-25716

Politika. (2009, May 7). *Serbia to host 400 km of South Stream*. Retrieved February 4, 2023, from https://www.b92.net/eng/news/business.php?yyyy=2009&mm=05&dd=07&nav_id=58990

Popović, D. (2019, August 21). *Three days pay for a full tank of petrol in Serbia*. Retrieved February 22, 2023, from https://n1info.rs/english/news/a509418-Three-days-pay-for-a-full-tank-of-petrol-in-Serbia/

Poznatov, M. (2014, December 4). *Serbia hasn't given up on South Stream*. https://www.euractiv.com/section/global-europe/news/serbia-hasn-t-given-up-on-south-stream/

Radenković, I. (2016, April 6). Foreign Direct Investments in Serbia. Rosa Luxemburg Stiftung Southeast Europe, Belgrade. Retrieved December 12, 2022, from https://rosalux.rs/rosa-publications/foreign-direct-investments-in-serbia/

Reed, S. (2014, July 1). *A Conduit for Russian Gas, Tangled in Europe's Conflicts*. The New York Times. https://www.nytimes.com/2014/07/01/business/international/south-stream-pipeline-project-in-bulgaria-is-delayed.html

Reuters. (2007, December 10). *OMV mulls bid for Serbia's NIS with Hellenic*. Retrieved February 1, 2023, from https://www.reuters.com/article/nis-idUSL1021974620071210

Reuters. (2007a, September 25). *FACTBOX-Key facts about oil companies MOL, OMV*. Retrieved February 13, 2023, from https://www.reuters.com/article/omv-mol-bid-idUKL2578537020070925

Reuters. (2008, September 6). *REFILE-Serb oil monopoly worth 2.2 bln euros - Deloitte*. Retrieved February 22, 2023, from https://www.reuters.com/article/serbia-nis-value-idUSL633212120080906

Reuters. (2010, February 10). *Serbia, Gazprom sign deal for South Stream storage*. Retrieved February 5, 2023, from https://www.reuters.com/article/serbia-gas-idUKLDE6141IL20100205

Reuters. (2022, May 29). *Serbia's Vucic says he agreed a three-year gas supply contract with Putin*. Retrieved February 5, 2023, from https://www.reuters.com/world/europe/serbias-vucic-says-agreed-3-year-gas-supply-contract-with-putin-2022-05-29/

Reuters. (2011, December 21). *Srbijagas agrees 10-yr gas import deal with Gazprom*. Retrieved February 22, 2023, from https://www.reuters.com/article/serbia-gazprom-gas-idUSL6E7NL4H320111221

Russian News Agency. (2022, May 5). *Russian gas is supplied to Serbia in full scope—Srbijagas CEO*. Retrieved February 5, 2023, from https://tass.com/economy/1447311

Shchedrov, O. (2008, January 25). *Serbia signs strategic energy deal with Russia*. Retrieved February 4, 2023, from https://www.reuters.com/article/uk-russia-serbia-idUKL2515142420080125

Statista. (n.d.). *Serbia: Largest companies by revenue 2020*. Retrieved February 22, 2023, from https://www.statista.com/statistics/1317494/serbia-largest-companies-by-revenue/

Statistical Office of the Republic of Serbia (n.d.-a). *Dissemination database search*. Retrieved February 22, 2023, from https://data.stat.gov.rs/?caller=SDDB&languageCode=en-US

Stefanov, R., Vladimirov, M., Kovačević, M., Novaković, I., Latal, S., Neziri, X., Lefov, G., Vidov, P., Hashani, A., Vokrri, V., Ciko, I., & Preci, Z. (2020). *The Kremlin Playbook in Southeast Europe*. Center for the Study of Democracy.

Tanjug. (2013, November 3). *Bajatović: South Stream construction to start by December 20th*. Retrieved February 22, 2023, from https://www.ekapija.com/en/news/807343/Bajatović-south-stream-construction-to-start-by-december-20th

Tanjug (2016, January 13). *EUR 30mn spent on South Stream, and we won't get it back*. Retrieved February 22, 2023, from https://www.b92.net/eng/news/business.php?yyyy=2016&mm=01&dd=13&nav_id=96688

Telegraf.rs. (2021, October 15). *Bajatović: "I've just returned from Moscow, everything depends on the Vucic-Putin meeting."* https://www.telegraf.rs/english/3405038-Bajatović-ive-just-returned-from-moscow-everything-depends-on-the-vucic-putin-meetingReade

Vogel, T. (2008, January 30). *Serbia's deal with Gazprom has a rotten smell*. Politico. https://www.politico.eu/article/serbias-deal-with-gazprom-has-a-rotten-smell/

Wikileaks. (2008, April 16). *Cablegate: Russian Energy Activities in Serbia - Nothing to See Here?* Retrieved February 5, 2023, from https://www.scoop.co.nz/stories/WL0804/S00383/cablegate-russian-energy-activities-in-serbia-nothing-to-see-here.htm

Wikileaks. (n.d.). *Serbia: Gazprom Nis Purchase Continues to Divide Serbian*. Retrieved January 17, 2023, from https://wikileaks.jcvignoli.com/cable_08BELGRADE1302

World Health Organization. (n.d.). *What are the WHO Air quality guidelines?* Retrieved February 22, 2023, from https://www.who.int/news-room/feature-stories/detail/what-are-the-who-air-quality-guidelines