Understanding Pipeline Politics in Eurasia: Turkey’s Transit Security in Natural Gas

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ABSTRACT
As the importance of natural gas for the energy future of the European Union rises, many new pipeline projects are proposed to transfer rich resources of Eurasia towards Europe. Why do some of these projects succeed, and others fail? To explain this phenomenon, the energy security literature has focused mostly on the security of energy supply and demand, while the specific challenges faced by transit states attracted relatively less attention. This paper focuses on the reasons that make pipeline politics and economics controversial and challenging by introducing and operationalizing the concept of transit security. It defines transit security broadly where transit countries are sensible to changes in supply and demand in addition to pipeline-specific issues, which are determined by a combination of economic and geopolitical factors. It argues that in the case of Turkey, transit security is influenced by asymmetries in trade dependence and political power in addition to prospect of future rents from transit. The last section applies this framework to Eurasian gas transit in order to explain the success and failure of past, present, and future pipelines.

In the last two decades, producers and consumers of hydrocarbons proposed numerous pipeline projects to transport rich natural gas resources of Eurasia to Europe. While some of these projects (e.g. TANAP and Nord Stream) were successfully concluded, others (e.g. South Stream and Nabucco) have famously failed. This paper focuses on the reasons that make pipeline politics and economics controversial and challenging by focusing on the concept of transit security. The energy security literature has traditionally focused on the security of supply and demand, while transit countries were studied mostly in relation to their problematic relations with exporters and their critical importance for the security of importers. This paper shifts the focus exclusively to transit countries with the particular aim of introducing and operationalizing transit security.

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Based on a detailed case study of Turkey’s natural gas transit in addition to insights from other proposed or existing pipelines in Eurasia, the paper reveals that transit countries are sensible to changes in supply and demand in addition to pipeline-specific issues, which are influenced by both external and domestic factors. I argue that these three components of transit security (supply security, demand security, and pipelines) are ultimately influenced by asymmetries in trade dependence and political power vis-à-vis consumers and producers. In other words, transit countries that have more economic and political leverage over producers and consumers will also have more transit security, which would allow them to maintain (or increase) their transit levels and associated financial compensation. In addition to these systemic variables, domestic economic interests, particularly the prospect of rents, also impact transit security in relation to existing and planned pipeline projects.

Transit countries and natural gas pipelines are essential components of the global energy system as they play a crucial role in sustaining the energy demand throughout the world. They also serve as a buffer zone between energy-rich and energy-poor countries that aim to diversify their markets and energy sources, respectively. This essay contributes to an emerging literature on energy transit countries, yet it is the first of its kind to define and operationalize the concept of transit security in the context of Eurasian natural gas pipelines. Understanding transit security not only makes an important contribution to the literature on energy security by broadening its focus and opening up a new research agenda, but it also helps explain the factors that lead to either cooperation or conflict in international relations. As such the concept will serve as a policy guide not only for transit countries, but also for all importers and exporters of energy.

Below, I first review the literature on energy security, discuss its relevance for transit countries, and define transit security. Next, I focus on Turkey as an upcoming transit country in Eurasia and highlight the unique challenges of transit using successful and failed natural gas pipeline projects as case studies. The final section applies the concept of transit security to other pipeline projects in Eurasia.

**Energy Security and Transit**

Energy security is often a vital matter for all governments due to the crucial role of hydrocarbons in the functioning of modern economies and, more broadly, of societies. In this context, securing stable energy supplies is a major strategic challenge for all countries. Yet, despite its importance, energy security remains an elusive concept.

Energy security has been synonymous with security of supply for a long time since the Second World War, reflecting the chronic energy dependence
of many industrialized nations in the West (Kruyt et al. 2009). For the United States, for example, energy security has, until recently, been a reaction to an unwelcome dependence on external suppliers (Winzer 2012). Understood in this way, energy security implies securing access to limited supplies around the world at affordable prices (Cherp and Jewell 2014; Jansen, Arkel, & Boots, 2004; Kruyt et al. 2009). Nevertheless, energy security is no longer equivalent to supply security. The energy regime of the twenty-first century includes global markets, a massive infrastructure network of upstream, midstream, and downstream activities and a growing interdependence of buyers and sellers in a global market (Chester 2010). As such, energy security covers a broad range of actors, institutions, and processes from producer to final consumer (Bielecki 2002; IEA 2017).

In this complex background, it is difficult to find a common definition that can incorporate diverging interests of countries, which may have different interpretations of energy security (Chester 2010; Kruyt et al. 2009; Winzer 2012). Energy exporters, for instance, focus on acquiring market access and avoiding sudden price drops, while worrying about competition from other potential suppliers (Bahgat 2013). For developing countries such as Ukraine and Turkey, energy security is closely related to the cost of energy, and its impact on their balance of payments. For China and India, energy security has signified a rapid adaptation to their dependence on world markets, while making sure that pollution levels are kept in check. In Japan nuclear power and safety is an issue, while in Brazil, rights of indigenous people and corruption are major concerns (Sovacool and Saunders 2014; Yergin 2006).

These variations among countries underline a need to further broaden the concept of energy security to account for changing patterns in global energy trade, supply chain vulnerabilities, and the integration of new major economies into the global market (Yergin 2006). Particularly, the unique nature of transit countries, which represent the interests of both the producers and consumers as well as having their own agenda, has often been overlooked in the literature and deserves further attention.

Energy transit is primarily an economic phenomenon. Accordingly, economic approaches to understanding transit relations have focused on issues such as externalities caused by transit states (Yegorov and Wirl 2009), dual pricing (Tarr and Thomson 2004), relative bargaining power of suppliers and transit countries (Omonbude 2007), and analysis of gas contracts (Pirani 2009). While these studies have substantial value in demonstrating technical aspects of energy commerce, transit is often a political issue for all the actors involved and a matter of both national and international security (Heinrich 2018).

The academic literature on energy security has traditionally focused on diversification as a key concept (Yergin 2006) Diversification is useful as it presents alternatives, prevents monopolies, and serves the interests of consumers and
producers. Transit countries feature in this literature mainly in relation to how they can contribute to diversification of either supply or demand. Studies often focus on the problematic relations of transit countries with producers and their critical importance for European energy security (Bilgin 2009; Kovacevic 2009; Kropatcheva 2011; Ruseckas 2000; Yafimava 2011).

In addition, a number of comparative studies focus on key transit countries such as Ukraine, Belarus, Moldova, or Turkey (Balmaceda 2006, 2007, 2013; Bilgin 2010; Fink 2006; Opitz and von Hirschhausen 2001; Yafimava 2011). These studies help evaluate domestic interests and geopolitical constraints that affect energy policies of transit states. Yet, the literature still lacks a definition of transit security that conceptualizes economic, domestic, and security-related implications of being a transit country.

In summary, the current conceptualization of energy security focuses primarily on availability, access and affordability (Kruyt et al. 2009). However, today’s energy relations could be best understood as a “system” with various actors with different priorities, different fears, and different opportunities in addition to “standard” concerns regarding guarantee of supply and demand (Cherp and Jewell 2014; Jewell, Cherp, and Riahi 2014; Sovacool and Mukherjee 2011; Sovacool and Saunders 2014). The following sections focus on transit security as part of an effort to broaden the definition of energy security.

**Transit in Natural Gas**

The physical distance between the centres of production and consumption of oil and natural gas is one of the fundamental characteristics of contemporary global energy relations that necessitates transit (Yergin 2011). Transit signifies a process where goods produced in one country are transferred through the territory of another one to be sold somewhere else (International Energy Charter 2016). The nature of transit, particularly its technical feasibility and economic profitability, is strongly influenced by the materiality of energy resources (Balmaceda et al. 2019). Due to its lighter-than-air physical state, natural gas trade has traditionally had to rely on pipelines, which require compressor stations to make sure that adequate amount of pressure is maintained (Balmaceda 2018). In this sense, natural gas is quite different than crude oil, which is easier to transport via rail, trucks, and tankers. This could, however, change in the near future thanks to increasing availability of Liquefied Natural Gas (LNG), which is suitable for maritime trade. The share of LNG in global gas trade is expected to reach 40% by 2024 (IEA 2018). Nevertheless, most natural gas importers today still have to ensure the security of their energy source over long distances through transit countries via transnational pipelines.

In natural gas markets, transit countries play a very important role especially in the Eurasian region, where vast distances separate producers and consumers
(Energy Charter Secretariat 2015). LNG is becoming more important also for this region thanks to import terminals in Lithuania and Poland. In the long run, this might reduce the strategic importance of pipeline transit from Russia by allowing Baltic and Eastern European countries to import from other sources such as the United States (Noack 2018). However, the overwhelming majority of the natural gas trade in Eurasia still relies on pipelines and land transit (Shaffer 2013; Stevens 2009). As a consequence, geographical considerations and pipeline politics continue to influence natural gas transit in Eurasia.

**Is Transit in Eurasia a Curse?**

Eurasia is one of the key theatres of global natural gas trade. In 2018, Russia delivered approximately 200 Bcm (billion cubic metres) of gas to European countries with major importers being Germany, Turkey, Italy, the United Kingdom, and France (Export 2019). Overall, Russia supplies 35% of Europe’s total imports mostly via Ukraine and Belarus. Other transit states in the region include Bulgaria, Romania, Moldova, Georgia, Slovakia, Czech Republic, Poland, and Turkey. In the last two decades, transit conflicts featuring most of these countries appeared prominently in global news outlets. For example, Ukraine had three major disputes with Russia (2006, 2009, and 2014) concerning price negotiations, transit costs, unpaid fees, and unauthorized off-take. These conflicts received significant attention since Ukrainian pipelines have traditionally supplied the majority of European Union’s (EU) gas imports.

Belarus also had three major disputes with Russia (2004, 2007, and 2016) due to ownership conflicts and disagreements over discounted prices (EurAsia Daily 2017; RTÉ 2008). Poland also has had arguments with Russia over the amount of gas flows. In 2014, both Slovakia and Poland have seen their intake from Russia significantly reduced as a response to their reselling of Russian gas to Ukraine (Carney 2014; DW 2016).

Why is gas transit in Eurasia so problematic? A simple answer is transit relations are complex. Successful transit requires reliable supply and demand, trustworthy transit countries, secure routes, realistic building costs, support from major powers, and reasonable transit fees. In this complex web of pipelines and countries, multiple problems may arise. Traditionally these issues are analysed via the concepts of supply and demand security, which focus on themes such as guaranteed provisions, diversification, geopolitical conflict, and market access. Nevertheless, it should still be possible to clarify how energy security specifically relates to transit.

The existence of a potential for both conflict and cooperation in transit reflects the Liberal versus Realist dichotomy in International Relations (IR). A Liberal perspective assumes that pipelines, as mediums of commerce, would make transit conflicts unlikely by creating mutual interests and
incentives to maintain trade (Van de Graaf et al. 2016). Subsequently, these shared interests make disruptions too costly (Mansfield and Pollins 2009). Pipeline projects often involve public and private companies from exporting, importing, and transit countries. These investments and joint ownership deals thicken the relationship among these actors and create linkages and conflict resolution processes (Fettweis 2009; Kahler and Kastner 2006).

There is some evidence in favour of the Liberal approach. In Eurasia, even if pipeline politics appear controversial, many European private companies closely cooperate with the Russian state-owned Gazprom, which has been a reliable supplier of natural gas to Western Europe for decades (Stulberg 2012). Similarly, as an emerging gas exporter in the region, Azerbaijan has had very good relations with Georgia and Turkey, which transit the Caspian gas towards Europe. Existing and planned pipelines create mutual interests and dependencies where producers rely on revenues as much as consumers depend on natural gas.

A liberal theory of IR is also concerned with how societal ideas, interests, and institutions can impact state behaviour (Moravcsik 1997). Domestic politics and institutions can indeed influence energy policies of transit states (Heinrich and Pleines 2015). In fact domestic interests are very useful in explaining policy variations among transit countries that face similar geopolitical constraints. Balmaceda (2013), for example, demonstrates how domestic economic groups in Ukraine and Belarus, prevented diversification away from Russian natural gas until late 2000s due to existence of high transit rents. In Lithuania, however, the relative scarcity of rents allowed the government to make limited progress towards diversification.

In terms of international institutions, trade in natural gas is subject to similar regulations in international commerce. World Trade Organization (WTO) rules state that member countries have a right to transit through other members’ territories subject to reasonable charges (Willems and Sul 2008). Similarly, the Energy Charter Treaty (ECT) requires signatories to “facilitate transit of energy, consistent with the principle of freedom of transit, and to secure established energy flows” (International Energy Charter 2017). The treaty also prevents countries from disrupting existing transit flows even if they are in conflict regarding the terms of transit.

Despite these expectations regarding mutual interests and incentives for cooperation, transit relations also give merit to Realism, which claims that states aspire to maximize their own benefits at the expense of others. In contrast to Liberal Institutionalist focus on markets and institutions, Realists emphasize rival political and economic blocs that compete for resources and markets through the use of political, economic and military power (Correlje and Van der Linde 2006), which is often demonstrated in what is called “pipeline politics”. These conflictual relationships are enabled by the lack of an overarching authority to manage transit affairs. Despite the above-
mentioned ECT and WTO regulations, there is no international organization or treaty that specifically regulates energy and transit relations between two or more parties. Russia, a key natural gas exporter, has not ratified the ECT and the related transit protocol (Peters and Westphal 2013). Furthermore, there is no standard international mechanism for conflict resolution in transit (Stevens 2009). The parties to transit conflicts often seek international arbitration by independent sources and the findings of these arbitrations are legally non-binding (ESMAP 2003).

How to assess transit security in light of these complex interdependent relationships, which can be prone to conflict? This paper argues that a comprehensive treatment of transit security should go beyond the Realist vs. Liberal dichotomy to understand the conditions under which transit relations can become either cooperative or conflictual. It is true that economic interactions can often create incentives for domestic and international actors to push for cooperation; however, geopolitics can undermine this cooperation and cause instability (Shaffer 2013). The next section will define transit security and identify its three major components.

**Defining Transit Security**

Despite the geopolitical and economic importance of transit countries, transit security remains to be defined. A quick survey of energy strategies of transit states reveals the virtual non-existence of the concept as guidance for these countries. For example, *Ukraine’s Energy Strategy 2035*, a 37-page document, does not have a single reference to transit. Similarly, Turkey, a country aspiring to be a transit corridor, does not sketch out a specific definition of transit security in its 2015–2019 strategic energy plan (Ministry of Energy and Natural Resources 2014).

In the academic literature on energy security, one of the few definitions of transit security comes from Yafimava (2011, 17), who defines gas transit security as the “acceptable level of threat of supply and price disruption arising from risks associated with the transit of gas supplies”. She demonstrates how problems in Eurasian natural gas networks and the asymmetrical power relations between Russia and Eastern European countries adversely affect transit security. She also shows how contractual, governance-related, political, and technical problems, or discontinuities, can overlap to undermine EU’s energy security. While her definition and analysis is valuable, as the title of her book suggests, its primary focus is the “transit dimension of EU energy security” (Yafimava 2011). In fact, many discussions of transit security treat the concept as a sub-category of EU’s gas supply security (Energy Charter Secretariat 2015).

In this paper, I define transit security in natural gas broadly as the ability to maintain and increase continuous flow of natural gas, which is not intended
for domestic consumption, through the borders in exchange for some form of financial compensation. This definition can be divided into three components. First, it closely associates transit security with producers of natural gas. After all, in the absence of a stable supply, less gas would flow and transit security would be negatively affected. The second component relates to consumers of natural gas. Again, in the absence of a strong demand, a country’s transit prospects would suffer. These two components highlight the fact that transit countries are heavily affected by the energy security concerns of both producers and consumers. Supply and demand security in relation to transit are fundamentally determined by diversification, or in other words, trade dependence (Shaffer 2013). In transit relations, countries that heavily depend on the natural gas trade either as a source of energy, or as a source of revenue will be more vulnerable to threats and disruptions from less dependent countries. Meanwhile countries that have diverse options to either buy or sell natural gas would be more secure.

The impact of asymmetrical trade dependence is best observed in Russia’s approach to many former Soviet Union and Eastern Block countries, where Moscow is the exclusive natural gas supplier. In this context, Russia’s increasing influence fuelled by its hydrocarbons and its record of using pipeline politics to punish divergent behaviour led to numerous conflicts with its neighbours (Vatansever 2010; Yafimava 2011). In many cases, Russia was willing to use its near monopoly over gas flows to Europe to punish non-cooperative transit states such as Ukraine (Stulberg 2012).

In contrast, the nature of the natural gas trade between Russia and the EU via Germany is a good example of an interdependent relationship where it is in the essential interests of both parties to maintain trade due to its relatively high volume for both sides (Shaffer 2013). As a result, Germany and Russia might expect to have more cooperative and less disruptive transit relations after the completion of proposed Nord Stream II, compared to that between Russia and Ukraine.

The third component of transit security differs from the previous two in the sense that it is specific to actual transit flows. It relates to current and future pipeline projects, which would strengthen a country’s transit status and help the country receive compensation for allowing transit. I expect this component to be mainly affected by economic interests (domestic and international) as well as the geopolitical context. Pipelines can be costly for all parties to transit; however, transit countries are more likely to support new pipeline projects if they create rents and contribute to more competitive prices. At the same time, pipeline politics are also affected by short-term geopolitical competition among major powers. Here, it is important to note that while the first two components (supply and demand) are geopolitical in essence, the third component also includes a role for domestic interests. The
following section will apply this definition of transit security on Turkey. Turkey is a relatively new transit country in natural gas. However, its geographical location makes it a crucial bridge between energy-rich Eurasia and the European markets.

The Case of Natural Gas Transit in Turkey

Overview

As a developing country with a growing urban population, Turkey’s energy demand has grown faster than any OECD country in the last 15 years (MFA 2018). Unable to extract oil and natural gas domestically, the overwhelming priority for Turkey’s energy security during in this period has been to secure external sources from neighbouring countries to satisfy its growing thirst for energy.

Natural gas has had a growing share in Turkey’s overall energy portfolio (Berk and Ediger 2018). BOTAŞ, the state owned Petroleum Pipeline Company, predicts that the demand for natural gas will increase by an average of 2.3% from 2014 until 2030, from 48 Bcm to 70 Bcm (Austvik and Rzayeva 2016). At the moment, four pipelines from Russia, Iran and Azerbaijan serve 83% of Turkey’s natural gas demand. These are Blue Stream and West Line (Trans-Balkan Pipeline) from Russia, East Line (Tabriz-Doğubayazıt) pipeline from Iran and the South Caucasus Pipeline (SCP) from Azerbaijan via Georgia (EIA 2016). In addition to these pipelines, Turkey-Greece pipeline connects the gas grids of both countries and allows the transport of Azerbaijani, Russian and Iranian gas to Greece. The rest of Turkey’s natural gas demand is covered by LNG imports (Rzayeva 2018).

Turkey’s primary objective as a consumer is to ensure sustainable, high quality, and cheap supplies for its growing demand for gas. For that, Turkey is ideally located in close proximity to world’s richest gas resources. Especially, in the last decade, Turkish government began to take advantage of this proximity to carry out an active energy policy, which included new pipeline projects not only to satisfy growing domestic demand, but also to diversify supply and to become a transit hub for natural gas (Babali 2012; MFA 2018).2

Two recent projects serve this purpose. The first will bring more Azerbaijani gas to Turkey and Europe as part of the Southern Gas Corridor by first expanding of the capacity of the existing South Caucasus Pipeline. Subsequently, the newly built Trans-Anatolian Pipeline (TANAP), which has a capacity of 16 Bcm would carry gas from the South Caucasus Pipeline towards Turkey’s western border (DW 2018). At the moment, 10 Bcm is reserved for European gas markets while the rest will be used for Turkish domestic consumption (Fırat 2016). Finally, the Trans Adriatic...
Pipeline (TAP) will connect with TANAP to serve Italy and Southeast Europe (Ministry of Energy and Natural Resources 2018).

The second project is the TurkStream. Two adjacent pipelines from Russia will supply Turkey and southeast Europe via the Black Sea, replacing gas coming from Trans-Balkan pipeline via Ukraine. The first pipeline to feed domestic consumers is now complete, and the construction of the second pipeline is expected to begin soon. Two pipelines are expected to have 31.5 billion cubic metres per year (Bcm/y) of gas (Ahval 2018; Ministry of Energy and Natural Resources 2018). These existing gas pipelines and upcoming projects will allow Turkey to create a Southern Gas Corridor in the near future (Berk and Schulte 2017; Üçok 2014), which would make the issue of transit security a key priority for Ankara.

**Turkey’s Transit Security**

In consistent with the definition of transit security detailed above, I expect Turkey’s transit security to be conditioned by security of supply and demand as well as particular concerns that affect pipelines. Firstly, supply security is essential. Turkey’s ability to transit natural gas depends on its capability to not only secure enough supplies to satisfy domestic demand, but also have additional capacity for transit without becoming dependent on one source. Secondly, changes in quantity of gas demanded can influence Turkey’s transit prospects. In particular, Turkey’s transit security depends on the stability of the European demand and the EU countries’ willingness to diversify. Finally, pipeline politics have specific dynamics that distinguish them from both supply and demand security. These components are analysed next.

**Turkey’s Supply Security in Relation to Transit**

Diversification of supply is a major priority for Turkish energy policy. However, despite being surrounded by gas-rich neighbours, Ankara has been unable to diversify its natural gas intake due to problems of capacity, infrastructure, conflict, and geopolitics (Austvik and Rzayeva 2016; Umucu, Altunisik, and Kok 2011).

Russia’s rich reserves, geographical location, rapid development of pipeline systems, technical expertise and know-how make the country the most important energy partner for Turkey. However, incidents that give the impression that Russia uses natural gas as a political weapon heighten fears about Turkish energy security (Nygren 2008) and encourage efforts to diversify natural gas intake. Russia accounts for more than half of Turkey’s gas imports and this role is likely to increase after the completion of TurkStream, which guarantees direct access to Russian gas.

When countries rely heavily on one country for their energy demand, they may also pursue contractual diversification – varying contracts in terms of
companies and duration- to reduce associated risk (Balmaceda 2013). In Turkey, the Natural Gas Market Law in 2001 was signed to liberalize the market. Accordingly, several private companies now import natural gas from the West line (Rzayeva 2018). While this is a positive development for Turkey’s transit security, all companies (including BOTAS) have signed long-term contracts with Russia, which involve strict take-or-pay clauses. These clauses require importers to pay for an agreed quantity of natural gas regardless of their ability to actually take deliveries, which limits Turkey’s ability to improve its supply security (Rzayeva 2018).

Overall, these examples show how concerns about diversification and supply security can affect transit countries. At a first glance, Turkey’s proximity to rich natural gas reserves can be seen in a very positive light. Yet, Turkey’s ongoing heavy dependence on Russia for natural gas makes Ankara vulnerable not only as a consumer country, but also as a transit state. In fact, the major asymmetry in trade dependence – Russian gas is vital for Turkey’s economic growth, meanwhile Turkey is one of Russia’s many energy partners – may eventually constrain Ankara’s hand in becoming a transit hub for Caspian gas.

_Turkey’s Demand Security in Relation to Transit_

Transit security as defined in this paper requires stable and preferably increasing demand for gas in transit. For Turkey’s current and future transit fortunes, the EU is the main source of this demand. The natural gas is a major component of EU’s overall energy demand and many Central and Eastern European countries depend on stable deliveries from Russia.

The existence of a large market of natural gas at its western borders provides incentives for Turkey to increase its natural gas intake (Müftüler-Baç and Başkan 2011). Especially, in the last two decades, Turkey has aspired to become a new corridor to Europe in order to satisfy the continent’s energy needs with natural gas from the Middle East and the Caspian. The potential Turkish route has been called the fourth corridor (the others being Russia, Norway and North Africa) and seen as an opportunity for the EU to diversify away from Russian gas after the supply crises of 2006 and 2009 (Bilgin 2011; Roberts 2003). The fourth corridor eventually came alive with the construction and completion of TANAP (Gürel and Mullen 2014). TANAP and TAP establish Turkey’s position as a contributor to Europe’s energy security and realizes Turkey’s long-term strategy as a reliable transit corridor (Richert 2014).

Overall, the existence of a strong EU demand is a major factor increasing Turkey’s transit security. At the moment, Turkey’s contribution to the overall EU energy mix is rather small. Furthermore, Turkey’s transit security could still be negatively affected by a decrease in European demand, and the EU’s ability to find other sources of natural gas and increase its LNG intake (Berk and Schulte 2017; Roberts 2003). Yet, as mentioned in the previous section,
Turkey is now emerging as a key transit state for the EU not only for Caspian reserves but also for Russian gas via TurkStream. As such it acquires a unique strategic position in relation to EU as a transit country from two different sources. With the finalization of the TurkStream, Turkey and the EU are likely to establish an interdependent relationship in natural gas trade, which would strengthen Turkey’s transit security.

**Transit Security in Relation to Pipelines**

Preceding sections showed how transit countries often inherit the security concerns of both importers and exporters. Yet, pipeline transit also has its own prospects and challenges. First, pipeline projects appeal to potential transit countries due to their financial and strategic benefits including transit fees, easy access to gas, investment technology, potential partnership deals, and political influence once they are built (Bahgat 2006). Especially for energy-poor countries, becoming a transit hub is attractive due to the existence of rents. At the same time, building a new pipeline is costly and necessitates significant investment from all actors involved. Finally, pipeline relations are complicated by geopolitical factors that are intrinsic to transit.

**Pipeline Economics.** Pipeline projects are economic phenomena constrained by calculations such as profitability, long-term sustainability, and cost-effectiveness. As with any economic interaction involving more than two parties, transit relations can get complicated, particularly when rents have to be shared.

Turkey is in an ideal geographical position to become a transit hub. However, Ankara has not substantially benefited from its transit potential due to contractual limitations and the urgency of satisfying its on growing demand.⁴ Therefore, unlike other energy-poor transit countries such as Ukraine and Belarus, Turkish government did not have access to transit rents. In the case of Turkey, hence, it was the prospect of future transit rents and the government’s associated policy to become a transit hub, which drove its active energy diplomacy in the late 2000s (Bilgin 2015). As such, economic interests in Ankara have played an important role in Turkey’s current transformation into a transit corridor.

Two pipelines, TANAP and TurkStream, could be considered as a culmination of this energy diplomacy. TANAP helps Ankara diversify its energy sources. Furthermore, Turkey can sell any unused gas from Azerbaijan to third countries and become a natural gas exporter. This is because the sales and purchase agreement between BOTAŞ and Shah Deniz consortium does not contain a destination clause (Rzayeva 2018). TurkStream realizes Turkey’s long-term goal of becoming a major transit partner to both Russia and the EU. These two developments strengthen Turkey’s transit security by increasing the amount of natural gas it
can transit and allowing financial benefits in the form of re-exports and discounted prices in the longer term (Austvik and Rzayeva 2016; Rzayeva 2018).

In addition to rents, the uncertainty around the compensation of the transit country is one of the key economic reasons for conflictual transit relations (Stevens 2009). In the context of Turkey’s transit security, the negotiation of the failed Nabucco pipeline is a good case in point. The Nabucco pipeline would have transferred gas from Turkmenistan to Europe under the Caspian Sea and through Azerbaijan, Georgia and Turkey. Turkey’s demand to claim 15% of the gas at discounted prices either for domestic consumption or re-exporting was one of the main reasons that reduced the economic viability of the project for the investors (Traynor 2009).

The literature on foreign direct investments indicates that the supply side has more leverage prior to the building of a pipeline. Evidently, a pipeline without a dedicated energy source will be unfeasible and the supplier has the luxury of choosing from different transit routes, evaluating potential costs and benefits. Once the pipeline is built and operational, however, the transit country may acquire substantial leverage (Eden, Lenway, and Schuler 2005). This process is explained by the concept of an obsolescing bargain (Vernon 1971), where a company loses its bargaining power after having made a major investment. Accordingly, with the pipeline route already built and making supernatural profits, transit country would be aware that it would be very difficult for the supplier to seek an alternative route (Omonbude 2013). Hence, the transit country will have incentives to charge higher transit tariffs; demand more offtake and re-export quotas, and divert pre-agreed transit gas for domestic use (Willems and Sul 2008).

While useful in terms of understanding shifting incentives, the concept of obsolescing bargain has to be qualified, especially when applied to commerce in energy. Many transit countries also import energy from the same source. If transit countries push too far, exporters can stop gas flows and invest in economically more sound alternatives (Willems and Sul 2008). This is especially relevant for Eurasia, where Russia is in a position to diversify its export routes if transit countries become economic liabilities. Hence, the existence of multiple routes from a single supplier is likely to reduce leverage of transit countries. With multiple routes production can be allocated to transit countries that have good relations with the supplier (Woehrel 2010). This explains Russia’s decision to build new, direct pipelines to Germany and Turkey, respectively.

**Pipeline Politics.** Energy security is a strategic priority for all nation states; hence it invites a substantial role for governments to play, especially regarding pipeline politics. Pipeline politics signify a process where producers, transit countries, and importers engage in strategic competition to increase their energy security based on their respective interests and priorities. This
process inevitably implies geopolitics (Öge 2015). In certain cases, such as Ukraine’s future transit status, geopolitical influences (e.g. Russia’s annexation of Crimea) are blatant. Apart from open military conflict, however, the broader geopolitical context can also have a huge impact on the prospects of existing and future pipeline projects.

Particularly in Eurasia, the competition of the OECD countries with Russia, China, and Iran has had a direct influence on the success and failure of proposed pipelines. From the late 1990s onwards, the United States and the European Union have eagerly lobbied for the Nabucco project. Due to ongoing economic sanctions against Tehran, Washington firmly rejected any gas route that involved Iran even if it was financially the most logical one to bring Caspian gas to Europe. Instead, Washington lobbied for pipelines that passed through the territory of its ally Turkey (Hancock 2006, p. 76; Lubin 1999, p. 63; Traynor 2009).

Interestingly, despite the political support from Western countries, the Nabucco project failed due to questions about financial feasibility, limited supply commitments from Caspian countries, and Russia’s opposition. In fact, until the construction of the Southern Gas Corridor, which transfers Azerbaijani gas towards Europe, Russia had been successful to prevent its competitors from securing access to the European market by offering sticks and carrots to transit countries such as Ukraine, Georgia, and Turkey.

As seen in the example of Nabucco, geopolitics has had a major impact on Turkey’s transit security in a relatively turbulent geographical region with substantial resources and lucrative markets (Bilgin 2015). Russia has been Turkey’s biggest trade partner in natural gas, however, until recently, Ankara did not have friendly political relations with Moscow. Turkey-Russia relations have warmed up in the last few years in the context of Turkey’s changing foreign policy (Öniş & Yılmaz, 2016). However, the brief cancellation of TurkStream by Moscow after Turkey shot down a Russian jet in Syria is a good indicator of how geopolitics can still impact Turkey’s transit security. At the moment, Turkey’s future transit security relies heavily on maintaining good relations with Russia, its biggest supplier, and Turkey remains vulnerable to foreign policy changes in a very turbulent region.

Geopolitics can also affect future natural gas transit opportunities for Turkey including from Iran, Kurdistan Regional Government (KRG), and Eastern Mediterranean (Berk and Schulte 2017). However, reinstated US sanctions against Iran, Turkey’s ongoing conflict with the PKK (Kurdistan’s Workers’ Party), and Ankara’s frosty relations with Cyprus and Israel make these potential natural gas sources unlikely targets for Turkey in the short run.

Power asymmetries and political conflict can thus have a direct influence on a country’s transit security. However, this does not necessarily have to be negative. Turkey’s energy relations with Azerbaijan hugely benefit from the geopolitical and economic friendship between the two countries. It is,
therefore, not a surprise that natural gas from Azerbaijan makes a major contribution to Turkey’s transit security. Contrary to Russia and Iran, Azerbaijan remains Turkey’s “only natural gas supplier that was not involved in a serious price dispute with BOTAŞ or subject to other political or geopolitical tensions” (Rzayeva 2018).

Overall, Turkey’s aspirations to become a transit hub are fundamentally affected by its transit security, which is in turn determined by asymmetries in trade dependence and political power in addition to Turkey’s domestic interests in favour of becoming a transit corridor. Interestingly, the key dilemma for Turkey’s current policymakers is that their ambition to become a transit hub could in the end increase Turkey’s dependence on Russia. Pipeline projects rely on firm commitments from suppliers, without which pursuing an ambitious transit strategy becomes extremely difficult. For example, In the 2000s, Turkey’s goal of channelling Caspian gas to Europe mostly failed due to lack of commitment from suppliers such as Turkmenistan and Kazakhstan (Bilgin 2011; Tiftikçil and Yesevi 2014). At the moment, with the exception of Azerbaijan, Turkey’s only realistic additional supply source remains Russia, which gives Moscow an asymmetrical advantage over Ankara. The next section evaluates the successes and failures of pipeline projects in Eurasia based on the definition of transit security employed in this paper.

**Transit Security in Practice: Success and Failure of Natural Gas Pipeline Projects in Eurasia**

The preceding section defined transit security as a complex phenomenon overlapping with both supply and demand security, as well as having its own economic and geopolitical dynamics underlined by asymmetries in trade and political power as well as domestic interests. This section will operationalize the concept of transit security and apply it to five major natural gas pipelines in Eurasia to further demonstrate its explanatory value. In cases where the dynamics of the pipeline projects align with the components of transit security described above, the pipelines will have a higher likelihood of success. However, in cases where pipeline projects conflict with these components, the outcome is more likely to be negative.

Table 1 lists selected Eurasian natural gas pipelines that include transit countries. It shows that in cancelled pipeline projects (*Nabucco* and *South Stream*) problems of demand, supply and transit (pipeline economics and geopolitics) were prominent. For example, in the case of *Nabucco*, both supply and demand were feeble. In terms of supply, only Azerbaijan firmly committed natural gas to the project while Kazakhstan and Turkmenistan declined to do so. At the same time, the European demand was weak due to the economic recession of 2008. *Nabucco* also suffered from complications specific to the
| Pipeline | Transit Countries | Status | Components of Transit Security |
|----------|-------------------|--------|--------------------------------|
| Nabucco  | Azerbaijan, Georgia, Turkey, Bulgaria, Romania, Hungary | Cancelled | - Lack of supply commitment from Turkmenistan (Supply)  
- Financial crisis in 2018 (Demand)  
- High costs + Turkey’s offtake demands to re-export 15% (Pipeline – Economic)  
- US Support vs. Russia’s opposition (Pipeline – Geopolitical) |
| South Stream | Bulgaria, Serbia, Hungary, Slovenia | Cancelled | - Fears about increasing asymmetrical dependence on Russia – (Supply)  
- Lack of urgency thanks to the existing Ukraine route (Demand)  
- Gazprom’s demands to have priority in reserving gas transportation capacity against EU regulations (Pipeline-Economic)  
- Russia’s annexation of Crimea (Pipeline-Geopolitical) |
| Southern Gas Corridor (TANAP and Trans-Adriatic Pipeline) | Turkey, Georgia, Greece, and Albania | Partially Complete | - Newly discovered gas fields in Azerbaijan and potential contribution from other sources such as Iran and Iraq (Supply)  
- Turkey and Europe’s desire to diversify its natural gas intake (Demand)  
- Re-export options for Turkey (Pipeline-Economic)  
- Support from the US and Europe (Pipeline-Geopolitical) |
| The Ukranian and Yamal-Europe pipelines | Ukraine, Belarus, Poland, Slovakia, Czech Republic | Potentially obsolete after 2019 | - Reliability of Ukraine for European consumers (Demand)  
- Asymmetry of trade dependence between Ukraine and Russia (Supply)  
- Dispute between Ukraine and Russia over discounted prices and debt (Pipeline – Economic)  
- Asymmetry of political power between Russia and Ukraine (Pipeline – Geopolitical) |
| Turktream | Turkey | Partially complete | - Interest from Southeast Europe and Turkey (Demand)  
- Turkey’s eagerness to become a transit corridor for Europe (Demand)  
- Russia’s eagerness to bypass Ukraine (Supply)  
- Turkey’s eagerness to become a transit hub and re-export gas from other sources (Pipeline – Economic)  
- Warming relations between Russia and Turkey (Pipeline – Geopolitical) |
pipeline project itself. For instance, Turkey’s demands to re-export 15% of its offtake and the high costs of building the pipeline slowed down the whole process. In terms of geopolitics, while the United States was strongly in favour of the project, Russia was determinedly against it and put forward South Stream to undermine Nabucco’s progress (Hancock 2006, p. 76; Traynor 2009). As such, the components of transit security were overwhelmingly against the completion of this project, which was eventually cancelled. This outcome was a major blow to Turkey’s transit aspirations at the time.

South Stream would have transferred Russian gas to Bulgaria under the Black Sea eventually terminating in Austria, making Bulgaria, Serbia, Slovenia and Hungary transit countries. In discussions of South Stream in the EU, fears about asymmetrical gas trade with Russia were prominent, which highlighted the challenge Moscow posed to the supply security of Europe. Importantly, the Russian proposal for South Stream also failed to conform to the new EU stance on the issue of transit, which necessitated third-party access, tariff regulation, ownership bundling and transparency (Stratfor 2015). This policy makes it difficult for new pipelines to be built and consequently prioritizes LNG, which can help the EU diversify away from Russian gas (Yafimava 2018). These issues were compounded by Russia’s annexation of Crimea and Gazprom’s demands for preferential treatment. Again, these components of transit security as defined in this paper explain why the pipeline project was eventually cancelled (Richard 2015).

Russia is currently in the process of replacing its Ukrainian route (The Ukrainian and Yamal-Europe pipelines) with alternative pipeline projects such as TurkStream and Nord Stream 2 following its economic, political and military disputes with Ukraine. These plans to divert natural gas from the traditional Ukraine route after 2019 will have major implications for many countries in the region (Pirani and Yafimava 2016). Several factors related to transit security contributed to this outcome. First, the unreliability of Ukraine as a transit country has been a major issue from the point of view of both supply and demand security and this was reflected in the proposals for Nord Stream 2. These concerns emerged from chronic pipeline disputes between Moscow and Kiev, which culminated in shortages in some EU countries. Finally, in the aftermath of the ongoing state of war between Russia and Ukraine, asymmetries in trade and political power in favour of Russia allowed Moscow to diversify away from the Ukrainian route.

The components of transit security as lined out in this paper also explain why certain pipeline projects were successful. The Southern Gas Corridor extends from Azerbaijan through Turkey to Greece, Albania and Italy, is slated to transport natural gas from the Caspian Sea to the EU. The corridor includes TANAP and TAP, which is expected to be operational by 2020. Both TANAP and TAP benefited significantly from the EU’s urge to diversify its natural gas intake away from Russia. The project gives significant economic incentives to
the Turkish government in the form of re-export options and is politically supported by both the United States and Europe (O’Bryne 2011). In addition, political affinity between Turkey and Azerbaijan was a major factor in the success of TANAP. Overall, the success of the Southern Gas Corridor is partly due to its alignment with Turkey’s priorities in transit security.

Finally, TurkStream was proposed to Turkey by Russia as South Stream negotiations collapsed. In that sense, Russia’s eagerness to bypass the Ukraine route was also a key motivator for TurkStream. There was also a strong interest from South Eastern European countries as it had become clear that the Ukraine route was no longer viable for Russia. Similar to the Southern Gas Corridor, TurkStream lines up with components of Turkey’s transit security. It provides substantial potential economic benefits to Ankara in the form of discounted gas prices and allows Russia to bypass EU regulations on gas trade. Finally, the geopolitical context was also a major precipitator for TurkStream. Particularly, Turkey’s deteriorating relations with the West and warming relations with Russia facilitated the project (Ahval 2018).

Conclusion

The complexity of energy security requires a broad treatment of the concept that includes a whole range of activities from the producer to the consumer. As a pioneer study, this paper makes a significant contribution to the theory of energy security by defining and operationalizing transit security. Transit takes place in substantial amounts everyday, yet interestingly transit security remains a vastly understudied concept. Rather than focusing on transit relations outside of their global context, this paper takes a holistic view to analyse how transit security is conditioned by different sets of factors that relate to energy security. As such, this paper defines transit security broadly where transit countries are sensible to changes in both supply and demand security, in addition to transit-specific issues, which are determined by economic and geopolitical factors. Defined as such, the paper argued that transit security is heavily influenced by asymmetries in trade dependence and political power as well as domestic interests in favour of acquiring transit rents.

This paper focused on Turkey as an emerging transit power in a region where trade in natural gas is a major strategic concern for all parties concerned. In recent years, new pipeline projects from Azerbaijan and Russia had a positive impact on Turkey’s transit security; however, asymmetries in trade and political power between Ankara and Moscow can still undermine Turkey’s future as a transit hub for European natural gas demand.

Additionally, the concept of transit security in this paper is useful in explaining how future pipeline projects are either cancelled or built and how existing pipelines are either sustained or abandoned. Eurasia is
notorious for pipeline politics where states compete to secure access to energy, diversify their sources, host new pipelines, and prevent market access to their competitors. In certain cases, the competition between importers, transit states, and exporters led to the failure of proposed pipeline projects. In others, components of transit security described here actually facilitated progress. Future studies can focus on transit in other parts of the world to further test the arguments of this research.

Notes

1. The paper draws upon in-depth interviews by the author with officials from Ministry of Foreign Affairs, Ministry of Energy and Natural Resources, and BOTAŞ Petroleum Pipeline Corporation in Ankara in 2015.
2. Interview with Ercan Kılınçkran. Branch Manager, The Ministry of Energy and Natural Resources. Ankara. 15 June 2015. Interview with Aslin Savran. Chief Clerk, Energy, Water, and Environmental Affairs. The Ministry of Foreign Affairs. Ankara. 26 June 2015; Analyses estimate that Turkey can facilitate the transit of up to 100 BCM per year if the relevant infrastructure is built and the storage facilities are established. (Austvik and Rzayeva 2016).
3. Interview with İsmail Kürşad Çapanoğlu, Acting Vice Head of Department, International Projects, BOTAS. 25 June 2015.
4. For instance, destination clauses in Turkey’s contracts with Russia and Iran prevent Ankara from re-exporting unused natural gas for profit (Rzayeva 2018).
5. Ankara has expected Turkish companies to pay discounted prices for Russian gas delivered to the Turkish market via the new pipeline (Rzayeva 2018). However, this is unlikely to happen before the contracts expiration due to a recent arbitration ruling against Turkish companies (Sputnik News 2019).
6. Interview with Ercan Kılınçkran. Branch Manager, The Ministry of Energy and Natural Resources. Ankara. 15 June 2015.

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