



ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΙΡΑΙΩΣ

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**The “essence” of oil and gas export decisions:
Political or economic considerations prevail?**
The relation between energy and politics revisited

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Preface

This paper examines, albeit in brief, the famous relationship between energy and politics, focusing on oil and natural gas export decisions. It aims at moderating the widespread view that the “political dimension” is always the single most important one dictating the routes of international energy projects (oil and gas pipelines). Because these mega-projects do link countries and build international relations, they are usually viewed through the leading “paradigm” of international relations, namely political realism. The latter puts an emphasis on the role of the nation-state as the key “actor” or “player”, with the importing states seeking “energy security” and the exporting states seeking to maximize their power.

Being realist ourselves, we would not like to denounce this concept altogether, but rather to explore the interpretative limits of political realism, as far as energy infrastructure is concerned. We believe that the “*specific gravity*” of the political factor behind oil and natural gas export decisions is related to several other conditions, therefore is not always of the same magnitude. Sometimes, a certain combination of these particular factors may result in a very powerful “political element”, indeed, but some other times it may not. Therefore, case-specific analysis is always needed when we analyze these decisions, in place of a general theory with universal application.

To be precise, there seem to be at least five conditions-variables determining (all together) how “political” the export choices are, namely: a) how much is at stake for the exporting nation, b) the prevailing energy doctrine in the exporting nation, c) the type of legal agreement between the exporting nation and the international contractor-operator of the field, d) multi or single-export capabilities in the exporting nation and, last but not least, e) the international oil prices. This said, we recognize that a more thorough and elaborative examination of the issue is needed, most likely at a Ph.D. or Post-Doc level.

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NOTES: 1) For references and bibliography, please see the text’s footnotes 2) The original version of this paper was originally presented by the author as a lecture in ADA University, Baku (April 2015) and it’s available in his personal page of www.academia.edu

I. THE LEGACY OF POLITICAL REALISM. The discourse about infrastructure projects for exporting energy resources, such oil and gas pipelines, is dominated by political scientists, strategic analysts and scholars of international relations, myself -a Ph.D. on nuclear deterrence in the Cold War- being not an exception to the rule. Therefore, very often energy politics dwarfs energy economics. This perception seems to have a strong case, indeed, at least as far as developed economies (most of them consumers or importers of energy resources) are concerned. From the consumer's point of view, "energy security" -meaning the continuous supply of resources at a reasonable price- is perceived as a key part of national security, especially after the first "oil shock" of 1973.

The idea of a "nexus" existing between energy and security, originating from the USA in the 1970s, is common place today. This theoretical scheme simply confirmed what History had repeatedly demonstrated: The quest for securing access to oil supply, so vividly described by Daniel Yergin's "Price",¹ has always been a primary motive of action for the Great Powers, with the Japanese entry into WW2 after the US embargo in 1941 being the classic example². The so-called Carter doctrine, formulated in January 1980 and applied 11 years later during the First Gulf War, considers any attempt by any outside force to gain control of the Persian Gulf region (where the majority of world oil is produced...) "*as an assault on the vital interests of the US, to be repelled by any means necessary, including military force*".³ Another strategic rationale which emerged during the Cold War, albeit in Europe, was forging a relationship of energy (and, overall, economic) interdependence with the Soviet Union, with the hope that this would reduce the probability of tension and war. The "Big Three" of what was then known as the European Economic Community, namely Federal Republic of Germany, France and Italy, were pioneers in this field. The road was paved by the German Chancellor (1969-1974) Willy Brandt and his famous "Ostpolitik", only in the framework of which the February 1970 gas supply contract between Germany and the USSR can be understood⁴.

¹ Daniel Yergin, *The Price – The Epic Quest for Oil, Money & Power*, Simon & Schuster 1991

² Vassilios Sitaras, *The world antagonism for oil resources since 1914*, Historic Affairs (Istorika Themata), issue n.137, April 2014, and Vassilios Sitaras *The origins of the global oil industry in the 19th and early 20th Centuries*, Historic Affairs (Istorika Themata), issue n. 171, February 2017

³ Daniel Yergin, *ibid*, p.p. 683-684

⁴ Vassilios Sitaras, *The development of energy cooperation in oil and gas between Western Europe and the Soviet Union during the Cold War*, *Historic Affairs*, issue n. 177, August 2017

But even from the producer's point of view, where the final decisions are taken, economics -in other words, profitability- does not appear to be the main concern. Despite the facts that these projects are, *prima facie*, nothing more than capital investments and that revenues from oil and gas are very important for the exporter countries, the latter seem to be driven by strategic considerations, as well.

The example of 21st century Russia is, by far, the most influential one in the international literature of energy geopolitics. Since the early 2000s, Russia has been masterfully playing the game of energy politics, in order to regain its Great Power status. Vladimir Putin's own Ph.D. Thesis of the late 1990s for the Mining Institute of St.Petersburg, entitled "*The Strategic Planning of Regional Resources under the Formation of Market Relation*", was the distinct forerunner of this trend.⁵ A huge country with vast energy resources, Russia must exploit to the fullest degree this comparative advantage, Putin stated, by placing once again the majority of production under the control of the state (like in USSR times). Therefore, ever since he assumed the leadership of Russia, energy diplomacy, especially in the "mid-stream" sector of export pipelines, is an integral part of Russian foreign policy. Political realism and, in particular, the ever-lasting desire for state power clearly underpins this line of thought.

The very same year that Putin completed his Thesis (1997), *The Grand Chessboard* by Zbigniew Brzezinski -ironically the man responsible for drafting the Carter doctrine- appeared in the West. A pivotal book, it has marked the triumphant return of geopolitics, as well as geo-strategy, which seemed to have fallen into oblivion at the end of the Cold War. Brzezinski was especially interested in Caspian energy resources, given the fact that oil-rich Azerbaijan, three years after the so-called "*Contract of the Century*" with foreign oil companies (September 1994), was exploring route possibilities for its main export pipeline. Under President Clinton, the route to be adopted by Azerbaijan was of utmost importance, thus the appointment of "energy guru" Richard Morningstar (1998) as Special Envoy for Caspian Energy.

⁵ After Putin became President, these ideas were officially adopted in a 2003 White Paper entitled "*Russian Energy Strategy until 2020*" (*Energeticheskaya Strategiya Rossii na period do 2020 goda*). This far-reaching policy paper clearly states that energy should be treated as "*an instrument of domestic and foreign policy*" and also that "*the role of the country on global energy markets to a great degree determines its geopolitical influence*". For a detailed analysis, see Martha Olcott, *Vladimir Putin and the Geopolitics of Oil*, Baker Institute 2004, www.carnegieendowment.org

It is no surprise, therefore, that some very interesting works about the relationship between energy projects and international politics either dealt with the Caspian region itself or were written by scholars extensively involved with the region. A brilliant example of the first category is Turkish Ambassador's Tuncay Babali Ph.D Thesis at the University of Houston, Texas, *Caspian Energy Diplomacy since the end of the Cold War*⁶. His purpose was "to identify the principal factors in selecting export routes for the Caspian energy resources", or, in other words, "to develop a model in order to understand the outcome of the policies of the major actors, governments and companies, in the development and marketing of the resources". Despite the fact that trans-national companies are treated (rather correctly, in my opinion) as actors equal to nation states, he concludes that political factors are dominant, so the political process is more important than economics in determining which pipeline is to be built.

In 2009, eminent political scientist Dr. Brenda Shaffer published *Energy Politics*, probably the single most important introduction to the relation between energy and politics ever written. "Energy and politics are inseparable", Dr Shaffer claims, as "Political factors significantly affect the commercial viability of energy infrastructure projects" (investment risk). "Decisions on natural gas export projects are likely to be affected by political considerations", she adds⁷. Nobody would seriously challenge these claims. But then she goes one step forward: "States, in choosing routes to export their commodities, naturally consider and promote the political ramifications of the various route options". The nation-state, main actor for political realism, emerges supreme in energy infrastructure projects. Shaffer's view is a generalization on a global scale of the highly "political" energy environment of the Caspian, already studied in depth by scholars such as Brezinski, Babali and also herself. Therefore, as the perfect example of the energy and politics nexus behind export decisions, she uses the Baku-Tbilici-Ceyhan (or BTC) oil pipeline, built from 2002 until 2005, which "strongly illustrates that major energy infrastructure projects inherently involve political considerations".

⁶The full text of Dr Babali's doctoral dissertation (printed in 2006) is now available online here https://www.researchgate.net/publication/280008589_Caspian_Energy_Diplomacy_since_the_end_of_the_Cold-War

⁷ Brenda Shaffer, *Energy Politics*, University of Pennsylvania Press, 2009, p.p. 1-3

Being a political realist myself, my purpose here is not to challenge outwardly, but rather to moderate the above-mentioned claims. Energy cooperation, especially in natural gas, is the most politically-flavoured sector of international economic relations, but not quintessentially political. Although my appreciation for Ambassador Dr. Babali and Prof. Dr. Shaffer is the highest one, the main argument here reads as following: the relationship between energy and politics, indisputable as it may be, is not always of the same strength, therefore case-specific analysis is needed. The following five conditions, which I will try briefly to analyze, affect the “*specific gravity*” of the political factor:

- a) How much is at stake for the exporter state,
- b) Prevailing energy doctrine (market economy or “*resource nationalism*”), with all its managerial, as well as financial, implications
- c) Type of legal agreement with the contractor (concession agreement or PSA), and
- d) Multi or single-export capabilities,
- e) High or low international prices.

II. HOW HIGH THE STAKES ARE FOR THE EXPORTING NATION. Nation-states traditionally pursue several goals, including political ones. The top political objectives are the preservation of national security, sovereignty and independence. As political realism rather rightly points out, we live within an anarchical international system, where every nation-state must take care of its own survival (the so-called “self-help” doctrine), otherwise its very existence is at stake. In such an inherently hostile world, states inevitably tend to promote self-interest and to maximize their relative power by any means available, including, of course, energy diplomacy.

But what does all this mean in practice? Could it possibly mean that each time that a nation-state (of those endowed with energy recourses) expresses its “preference” in favour of a particular export project, “strategic” or “political” criteria are of the same magnitude? To my understanding, this is not the case. There are, in practice, different degrees of importance which a producer state attaches to a particular export route for its hydrocarbons, ranging from very high to rather low. The highest the stakes are from the outcome of the selection, the more political the choice is. But there are not always as high as we may think. Three distinct examples will help me illuminate this position.

As noted earlier, the famous BTC oil pipeline “strongly illustrates that major energy infrastructure projects inherently involve political considerations” (Shaffer). It is no wonder that for a small and land-locked country, like **Azerbaijan**, which exports just a single commodity, hydrocarbons (until very recently 94% of its total exports), it could not have been the other way round. Being a “hostage” of another country, either transit or receiving one, would simply be a non-option for Azerbaijan, no matter what the cost of the project is. In that case, its national security would be jeopardized, so the stakes are, indeed, extremely high. Therefore, the primary goal of Azerbaijani energy policy, as defined by its historic leader, Geydar Aliyev, and continued since 2003 under his son, Ilham Aliyev, is to help the nation achieve real independence from its two former masters, the Northern and the Southern. As US Ambassador S.Mann, a real expert of energy diplomacy, has summarized it back in 2001, “*We have never said it’s just about business. It’s about these countries gaining a greater measure of autonomy*”. In other words, exporting towards the West (via Georgia and Turkey) is of existential importance for Baku, despite the fact that both the Iranian and the Russian transit options were cheaper, therefore more profitable. The danger of losing national sovereignty would be an unacceptable risk, so here the export route choice is deeply political.



Still examining the Azerbaijani case, we should note that nation-states very often sign IGAs (Inter-Governmental Agreements) in order to “promote” export projects, like the Nabucco pipeline IGA (2009) or the Trans-Adriatic pipeline IGA (2013), two of the candidates to carry the Caspian natural gas -not oil- to Europe. Proponents of the “political nature” of international energy relations tend to overestimate the role of IGAs, together, of course, with political leaders, who want to portray themselves as the driving

force of history. Still, we have witnessed too many IGAs for “might-have-been” pipelines, which never saw the light of the day. In effect, by signing an IGA, a state merely decides to endorse a project conceived and initiated by companies, often private ones, which are the ones responsible to fund and implement it. An IGA per se, also known as “institutional” support, is never the decisive factor in favour of a project. Feasibility, sufficient reserves, existence of a market and bankability (which follows the first three) always matter, as the demise of Nabucco showed. Therefore, Nicolo Sartori of the Italian Institute of International Relations was probably right when commenting on the TAP victory over Nabucco West in the summer of 2013: *“When it comes to energy, political support and institutional involvement do not always represent the decisive element, and may be counterproductive at times”*.⁸ But it was only within the context of a Western-oriented route (see above) that commerciality played its role. *Both* Nabucco West and TAP were aiming at the EU market, so they *both* fulfilled Baku’s strategic criterion. The final verdict was the result of TAP’s superiority according to the eight selection criteria set up by the Shah Deniz international consortium, seven of which were purely commercial. *“There was a significant commercial difference between the two competing projects”*, as BP’s Gordon Birrel said publicly after the selection.

A slightly different story from the Azerbaijani one is the main competitor of the Southern Gas Corridor, Russia’s ambitious project to bypass Ukraine. Since the collapse of the USSR, Ukraine has always been viewed by **Russia** as its “Near Abroad” or a country with limited sovereignty. Initially (2007-2014) the bypass project was to materialize through the “South Stream” pipeline and now through the “Turkish Stream” pipeline. Both of them are, in effect, politically-driven projects enhancing the nation’s leverage and not simply means of getting rid of the problematic -as Moscow regards it- Ukrainian transit route. Ever since the 2004 “Orange Revolution”, Russian leadership has been adamant that bypassing Ukraine as a transit route will be a lever of pressure on it. Actually, there was also an effort by Gazprom to buy the entire transmission network, but it failed, due to a disagreement with Kiev about the price tag. That’s why Gazprom, acting under orders from Russian leadership, has repeatedly declared that it will terminate 100% the Ukrainian transit by the end of 2019, regardless of the cost.

⁸ Nicolo Sartori, *Energy and Politics: Behind the Scenes of the Nabucco versus TAP Competition*, Istituto Affari Internazionali Working Paper 13/17, July 2013

The question, of course, is if all this constitutes an absolute “must” for Russian foreign policy. Any rational analyst would think that the stakes are not so high, or that Russia can well do with the Ukrainian transit even after 2019 (albeit much reduced in scale), without harming its vital interests. From a cost-benefit analysis point of view -and with this I do not mean only the commercial aspect- the Ukraine bypass pipeline is probably not worth the trouble, given also the vehement opposition of the EU Commission (which, by the way, is also political). Back in 2007, the whole idea seemed affordable, but in 2014, at a total price tag of at least 40 billion USD -cost estimate at the time of “South Stream” cancellation- was it still a good idea? Russia should first and foremost aim at differentiating its export markets, not just its export routes. Therefore, new projects towards China, such as the “Altai” and “Power of Siberia” mega-projects, as well as the new LNG export terminals (like Yamal LNG), are more beneficial⁹.

Eventually, we now know that the Ukraine bypass pipeline towards the Balkans will be built, but only *half in scale* than originally planned (two “Turkish Stream” underwater strings with a combined capacity of 31,5 bcma, instead of four “South Stream” strings with a combined capacity of 63 bcma). Indeed, just two months after the new IGA was signed between Russia and Turkey (10/10/2016), Gazprom also signed a commercial contract with Swiss company Allseas to start construction of the “Turkish Stream” in mid-2017 and the project is going pretty well. Nevertheless, the final product bears little relation with the original (2007) -much more grandiose- idea, i.e. the “South Stream”. Therefore, a small amount of the Ukrainian transit route may still be in usage after 2019.

Finally, let’s come to **Israel** and the potential gas exports from the offshore “Tamar” and “Leviathan” fields, discovered in 2009/2010. Israeli economy is not based on energy and will never be, no matter how big the gas “windfalls” will be. Even more important, Israeli foreign and national security policy since 1948 does not need the “tool” of gas exports to be highly effective. That’s why back in March 2014, then Israeli Foreign Minister Mr A. Lieberman, when asked (in Athens) about the alleged preference of the Israeli state towards the proposed “East Med” gas pipeline to Greece, replied rather honestly: *“The export decisions will be taken by the private sector, because it’s their*

⁹ See full details about these projects in Unipi Energy Working Paper n.1, Vassilios Sitaras, *Pipeline Geopolitics in Eurasia*, May 2016, <http://energypolicy.unipi.gr/index.php/work/pipeline-geopolitics-in-eurasia-the-new-gas-projects-linking-russia-and-china/>

project and their money we are talking about". In the Eastern Mediterranean environment, dominated by private players like Noble Energy and Delek (IOCs, see below), profitability for gas projects, such as Tamar and Leviathan, is the major concern. It would have been absurd for the Israeli government to try to "impose" an export route to these investors, at the same time that it doesn't allocate any funds for these projects.

Still, of course, an export license will have to be given to the producers by the Israeli state, which enjoys "veto power" to block any undesirable route. No Israeli government would ever give such a license if the receiving or even the transit state was at odds with Tel Aviv. Indeed, the initial Israeli -from Tamar- deliveries to Jordan (starting late 2016) did get an export license. But the decision itself or at least the "proposed route" lies to the private sector, which pays for the investment, as Mr Lieberman clearly said. The stakes for Israel are not so high, so there is plenty of room for commercial considerations, with IOCs being at the driver's seat. Therefore, many hard-core "geopolitical" analyses by Greek scholars about this region -and especially those contemplating an emerging Greek-Cypriot-Israeli "Axis" that goes well beyond energy affairs and aims to "balance" Turkey- seem to miss this point¹⁰.

III. RESOURCE NATIONALISM: NOT ALWAYS THE CASE, NOT WITHOUT LIMITS. The nation-states may possess the resources, but they are not always the sole decision-makers when it comes to export decisions. While nation-states can politically support or even block (see above, Israel's "veto power") international energy routes, in the majority of cases they cannot finance huge investment projects entirely by themselves. In effect, these decisions are often the output of a complex "interaction" between different decision-makers, each of different nature: a) nation-states, b) international organizations, such as the EU, c) financial institutions, not always private (World Bank, ADB, EIB, EBRD etc), d) National Oil Companies (NOCs), ownership of which belongs entirely or at least primarily to the state, and e) International Oil Companies (IOCs), usually stock exchange-listed.

The relative power of each "actor" is case-specific, depending on the project concerned, and their criteria of decision-making are obviously not the same. Commercial

¹⁰ Vassilios Sitaras, *The Trilateral Energy Alliance*, ELIAMEP Symposium Lecture , January 2014

entities, such as IOCs, only care about profit maximization, i.e. are driven by commercial considerations, as Minister Lieberman noted. To put it rather bluntly, IOCs do not seem to care much about energy security, despite their declaratory policy. There are many cases where we have observed the so-called “market failure” (reluctance of the private actors) to provide energy security, because profitability was not certain. Banks only care about getting their money back, especially where there are no state guarantees for the loans. After the monumental financial crisis of 2008/2009, there is no abundant capital around, thus only the most viable of projects are bankable. The most usual form for moving ahead with infrastructure projects today, as far as IOCs are concerned, is the so-called “project financing”, based upon the *projected* cash flows of the project itself, rather than the “balance sheets” of its sponsors. In project financing, IOC and bank calculations always include the factor of “political risk”, mentioned by Dr Shaffer, but even this will just add to the aggregate *cost estimate* of a project. Political risk is just a component of a project’s cost, and rarely the most important one. Therefore, an IOC project strategic (for the exporting state) but not bankable, will face serious challenges.

NOCs are a different -but not an entirely different- story¹¹. Being the children of “*resource nationalism*”, as well as “*state paternalism*”, they do control nowadays the vast majority of oil & gas reserves of the world (80-90%), as well as production. Therefore, they can become a useful tool of foreign policy for their owners, the nation-states, by applying non-commercial criteria in the decision-making process. When Putin proposed “*The Strategic Planning of Regional Resources*”, he knew that this could not happen without NOCs, that’s why he managed to get control of Gazprom by 2005 and to eliminate Russian’s top private oil company (Yukos) in 2003. The example of NOCs which enjoying strong state support in order to achieve strategic and not just commercial goals, seems to be most influential among scholars, when they try to interpret the very nature of international energy relations. In a world without NOCs, any discussion about energy politics -as far as export decisions are concerned- would be almost meaningless. The producer nation-states are always willing to support their NOCs, obviously with some constraints in exchange. This quid pro quo relationship means that the NOC is dependent on state aid, but, on the other hand, its decisions are state-dictated.

¹¹ Vassilios Sitaras, *National Oil Companies and the relation of some of them with Greece*, *Foreign Affairs (Hellenic Edition)*, issue n. 22, February 2014

A typical example is SOCAR and the “Southern Gas Corridor” mega-project, which will require Azerbaijani funding (CAPEX) of almost 12 billion USD¹² or 1/3 of this country’s GDP for 2017. Instead of raising all this capital itself through the financial markets, which would have been extremely expensive, due to its low credit ranking, SOCAR benefits from another two state entities. These are the SGC joint-stock-company, established in 2014, and the Sovereign Oil Fund or SOFAZ. The first entity has already placed Euro bonds, backed by state guarantees, in order to finance the project. SOFAZ, too, allocates a huge amount from its budget as direct capital injection to the new Corridor. Because this is considered of strategic, almost existential, importance for Baku (see “*how much is at stake*” above) and not just a commercial endeavour, state aid to SOCAR is justifiable, although international credit Agencies, such as Moody’s Investors Service, are rather unhappy to remark that “*the financial demands on SOFAZ have increased significantly and highlight the blurred line between the state budget, SOFAZ and state-owned entities*”¹³.

NOCs are in a very advantageous position, therefore, as they benefit from financial assistance unavailable to IOCs. Actually, these financial instruments are privileges unknown not only to IOCs, but even to those NOCs operating within a purely market economy, such as the USA or the European Union (EU). Within the EU legal framework of very strict anti-monopoly provisions, any measures which fall within the definition of “state aid” are generally considered as unlawful, unless provided under an exemption or notified¹⁴. That’s why all market economies cannot disregard the basic economic data (viability) of an energy project, even if there are NOCs involved.

And still, even NOCs in non-market economies have their limitations, too, as: **a)** They must provide their respective state budgets with constant “rent”¹⁵, otherwise social cohesion will be threatened. Therefore, profitability cannot be ignored altogether. It’s probably not the main concern, but it still is a concern. **b)** NOCs must secure enough investment in the “upstream” sector in order to maintain or increase their levels of

¹² <http://caspiabarrel.org/en/2017/10/southern-gas-corridor-project-s-cost-revealed/>

¹³ www.moodys.com 18/8/2017

¹⁴ See article 107 of the EU Treaty

¹⁵ The rentier state theory has its origins in the classic paper by by Hossein Mahdavy, *The Pattern and Problems of Economic Development in Rentier States: The Case of Iran*, in M.A. Cook (ed.) *Studies in the Economic History of the Middle East*, Oxford University Press 1970

production. They don't always do so, with very negative consequences in the long-term. This is, for example, the case of SOCAR, which has been repeatedly downgraded by credit agencies in 2016/17, due to -among other factors- its inability to maintain a steady level of production. **c)** Their traditional monopoly status -or dominant market position- is now being challenged, like the decision by Russia in late 2013 to enable natural gas exports (albeit only in LNG form) by business entities other than Gazprom. **d)** Last but not least, different types of NOCs operate in different countries: There are some cases where the managing Board of a NOC does enjoy a degree of independence from the state, namely the supervising Energy Ministry. The typical "revolving doors" management system, with state officials and NOC managers succeeding each other, does not apply to all NOCs. Statoil Hydro, for example, is not like Gazprom or Saudi Aramco, where an "iron grip" seems to exist on behalf of the political authority.

IV. CONCESSIONS VS PRODUCTION SHARING AGREEMENTS. The agreement with the operator of the field, in terms of exploration and exploitation, can also be of some importance for the export decisions: there seems to exist a relationship between the type of the legal text and the relative power of the exporting state, meaning that the "upstream" regime affects, indirectly, the "midstream" decisions (pipelines). To start with, not all NOCs possess the capital, as well as the know-how, to drill entirely by themselves. This is particularly the case in the Caspian, where the main reservoir deposits of oil and gas are located either very deep or offshore or, usually, both deep and offshore (ACG field, Shah Deniz field, Absheron field etc). IOCs with enormous experience in difficult drilling, such as BP, are called to the rescue, leading international consortia of companies.

Leaving aside the Iranian case, which is one of a kind and extremely complicated, there are basically -from a legal point of view- *two main forms of cooperation* with an international consortium: The traditional model of exploration and exploitation in oil and gas industry is called a *concession agreement*, under which the State awards a company the exclusive right to search, prospect and extract mineral resources for a certain period of time. The company or consortium, known as the concessionaire, usually has to pay back either a fixed amount or a percentage of revenues or both. The very word "concession" implies that the State has conceded authority and ownership to the concessionaire, which is, in effect, the new master of the reserves, fully in charge of their development. The great history of Middle East oil in the 20TH century was

concession-based. Gas exporter-to-be Israel also has a similar regime. In the EU, every single member-state, except Cyprus, still uses the traditional model. This is rather precarious for the concessionaires, as they do have to finance the project themselves, to pay “royalties” from day one and maybe they don’t find anything at all. Investment risk is therefore high. It follows that it’s absolutely natural for them to have a strong “say” on everything, including, of course, export infrastructure, which significantly affects total cost, especially for natural gas. There is less room for energy politics here, because the investor needs at least to recoup the enormous capital investment.

Production-sharing contractual agreements (PSAs), originating in Indonesia in 1969 and widely used in the Caspian region since the early 1990s, seem to be of a different nature. Their rationale is to minimize investment risk for the international consortia, although this comes “at a price”, which has to do with their decision-making ability. In PSAs the potential investors, usually consortia of foreign IOCs, are allowed to receive the entire oil, gas & condensate quantities during the first stage of exploitation (the so-called “*cost oil*” phase), in order to secure recouping of their capital investment. At a second stage (the so-called “*profit oil*” phase), they will receive just a small share of the production volume as specified in a contract, with the rest -usually the vast majority- going to the host state (to be precise, to the NOC on behalf of the host state). PSA investors acquire no more than a mere entitlement to a stipulated share of the oil produced, as a reward for the risk taken. The host state remains the owner of the oil or gas produced, subject only to the contractors’ entitlement to their share of production. No loss of authority or ownership whatsoever takes place, as in the concession regime. Because sharing of production takes place only after the return of capital investment, the consortium is more or less safe that it will “break even”. The nation-state, on the other hand, can opt for a lower profit, in order to promote “strategic” objectives via a certain export route. Therefore, in PSAs, the decision-making bodies of the consortia are always dominated by the NOC’s representatives, rather than those of the private sector. If we read the 1996 PSA for the Shah Deniz gas & condensate field, we will understand this point. SOCAR, representing the Azerbaijani government, enjoys a representation much higher than its percentage of shares in the Shah Deniz consortium itself. This does not mean that the foreign companies do not have a “say” at all, but it is weaker than in the regime of concessions. By empowering the state’s representatives, the PSA regime is much more “political” than the concession one, as far as export decisions are concerned.

V. SIZE MATTERS - NOT EVERYONE IS A "BEAR". As noted before, the example of Russia using energy as a lever of international politics is probably the most influential one among scholars, even in the West. But Russia is one of a kind, not only because of its “*resource nationalism*” (common to many countries), but primarily because of its vast size and resources. Russia is a true energy superpower with an unmatched combination of oil and gas production, at least until the recent “shale revolution” in the US. But even today, the US consumes almost all the energy it produces, in contrast with Russia, which is the greatest net exporter in the world. And while in oil there are several Russian “players”, both state and private, in natural gas exports the state-controlled Gazprom reigns supreme. While many other producer countries, such as Azerbaijan and, potentially, Israel and Cyprus, have just a single export market and a single pipeline or other means of transportation, this is definitely not the case with Russia and, specifically, with Gazprom. The latter exports gas to more than 30 countries (!) within and beyond the former Soviet Union or CIS.

Because Gazprom is such a giant of an exporter with multiple export capabilities, both via pipelines and via LNG, it enjoys a privileged position which enables it to operate with minimum, if any, profit in certain markets (either for political reasons or simply to “kill” the competition and become a monopoly), offsetting the losses through gains from other markets. This is the case, of course, in every sector of the economy with mega-producers or retailers, not only in energy: a store chain like the American *McDonald's* restaurants does not mean that all the stores or locations are profitable, but they exist because they have to. Therefore, “playing” with the gas price according to the political relationship between Moscow and the receiving state is, indeed, a very challenging game, albeit one in which only Russia can participate, because of its size. Scholars of “energy geopolitics”, therefore, shouldn’t forget that Russia is not just another exporter. It does play politics both with its export routes and the pricing, because this is a (rare) luxury it can afford to play. For Israel, on the other hand, such a practice would be commercially unsustainable & out of question. When you have a single main export route, there is still place for strategic choices, but not to the degree of losing money.

And still, even Russian affordability has its limits. As of 2017, Gazprom faces enormous challenges: because of too many export projects to Europe and Asia undertaken simultaneously, the Russian company is now under extreme financial pressure, suffering (for the first time after many years) from a negative cash flow: In the first half of 2017,

its capital expenditures amounted to 800 billion rubles, while its operating profit was only 450 billion rubles. By early 2020, Fitch Agency estimates that its debt will be increased by 1,8 trillion rubles¹⁶. Only the fact that Gazprom, as a NOC, receives huge state aid such as loan guarantees, permits this reckless economic management. And still, if low gas and oil prices persist for many years (see below), catastrophe is looming... As the final chapter will try to demonstrate, it was a prolonged period of high oil and gas prices which enabled Putin to execute the plan he had drafted in *“The Strategic Planning of Regional Resources”*, that is to exercise a pro-active (and sometimes coercive) energy diplomacy in order to translate energy dependence into political dependence.

VI. EVEN FOR THE BIGGEST ONES, PRICE ALSO MATTERS. Scholars in the US such as T.Friedman have already formulated the so-called “First Law of Petropolitics”, suggesting that high oil prices embolden producers to adopt more confrontational policies overall, domestic as well as foreign: *“The price of oil and the pace of freedom always move in opposite directions in oil-rich petrolist states”*.¹⁷ This is a very big issue not to be examined here, where we focus entirely on export infrastructure decisions. The title of a very interesting analysis (2016) spoke for itself: *“China-Russia Project Stalls, as Energy Prices Plunge”*.¹⁸ This project is no other than the gas pipeline “Power of Siberia”, Russia’s most important energy deal ever, which had been finalized in 2014. When completed, the “Power of Siberia” will potentially move the geopolitical tectonic plates of Eurasia, as it will contribute to a Moscow-Beijing “axis”, strong enough to challenge US global hegemony (if several other instances occur). However, after the collapse of global energy prices, which started in mid-2014, profitability for Gazprom is no longer guaranteed, as its anticipated revenues appear shrinking from the original 400 billion USD (over a 30-year period). Competition from Turkmenistan -which already has a big pipeline to China with spare capacity- and from new LNG plants further squeezes the price in the Chinese market, thus derailing Gazprom’s plans. Viability of the project, to cost at least 21 billion USD, is now dubious, as investment and production cost in the two gas fields of Eastern Siberia, namely Kovytko and Chayanda, are also quite high. Geopolitics is good, but revenue is also needed. And, in the case of an export market as

¹⁶ www.turan.az 2/10/2017

¹⁷ <http://foreignpolicy.com/2009/10/16/the-first-law-of-petropolitics/>

¹⁸ M.Lelyveld, *China-Russia Project Stalls, as Energy Prices Plunge*, www.rfa.org 25/1/2016

large as China, what was mentioned above (operating without profit in certain markets) cannot apply to. To put it in perspective, the whole concept of Russian energy diplomacy towards the East can be jeopardized, if low energy prices persist for a long time.

When energy prices go and remain up, as was the case for many years until 2014, so do the ambitions of the producers about which projects they can afford to pursue. Even the most extravagant projects of no other than geopolitical merit seem possible to build. The price specified in the sales agreement with the importers is an important concern of exporters, as it will determine their profitability, after deducting the costs. “Netback” (net revenue to be collected from the agreement, minus all costs, including capital and operating expenditures for transportation infrastructure) dominates the producers’ calculations. If this is low or, even worse, negative, this automatically means that there is no space for “political” manoeuvrings. The so-called “feasibility study” of an export project begins with a calculation (not always easy, as the life span of a project covers decades) of net revenue. Only if net revenue is higher than capital and operating cost of production and transportation, then we can go forward. Even interest rates -the cost of money- do matter, when we have to resort to lending, because a high interest rate will affect the total cost of the investment. Potential competition from another supplier greatly affects the final price and the revenue. Gazprom is powerful in markets where it enjoys the status of a monopoly, like some former CIS or Eastern European markets, but *not in Western Europe*, where competition is strong, thanks to exports via Norway, Algeria and LNG. Especially the LNG market used to be very “tight” the first years after the 2011 Fukushima disaster, but now it’s the other way around, as new export terminals come on stream and global demand is slowing down. This crucial development is a key guideline for the shape of things to come, as will be shown in the *Conclusion*.

CONCLUSION AND FORECAST. There is no universal “environment” behind energy export decisions. Russia, because of size and multiple capabilities, cannot be compared with small exporters. But even among them, the state of Israel, with a fully diversified economy, no NOCs and concession-type agreements which put the risk to the investors, is a different case than the land-locked Azerbaijan, with single exportable commodity, a national oil giant and a PSA regime. That’s why the BTC pipeline is probably *not* the best example of an energy infrastructure project on a global scale, because of its paramount importance for Azerbaijani independence and its relatively low capital expenditure (less than \$ 4 billion), as compared with today’s mega projects of tens of billions. And even in

the BTC decision, economics did play a significant role, which is usually disregarded by the geopolitical “narratives”: What would have been the fate of BTC without the great discoveries of Shah Deniz (with all its condensate) in 1999 and of Kashagan in 2000? Too many political powers pushed hard for BTC, but the leading role and the final “say” belonged to a private company, BP, which put Shah Deniz and Kashagan into the calculation. Last but not least, BTC was saved by a sustained period of high oil prices. And still, some of BP’s assumptions 15 years ago proved over-optimistic and wrong, namely for how long the peak oil production from their Azeri field (ACG) would endure and, also, how early Kashagan production would replace the Azeri “vacuum”...

Therefore, although oil and gas export decisions will always be affected by “political” considerations as defined by the nation-states, they should not be overestimated, especially in every single case. Actually, in the 21st Century the balance is due to shift gradually in favour of economic and commercial factors. No matter how “strategic some projects are, market forces seem to oppose their fully-fledged implementation like strong headwinds, at least for the time being. Therefore, the “Southern Gas Corridor” will be, at a total cost of \$ 40+ billion, including development of Shah Deniz phase 2, the last ultra-big project in Europe for many years to come (the two strings each of “Turkish Stream” and “Nord Stream 2” are much cheaper and, most likely, the swansong of Putin’s energy diplomacy towards the West).

One thing is clear: There is no such thing as energy diplomacy “on the cheap”. Because these investments are extremely costly, they have to pay off, even marginally. And while sometimes there can be a loss (for a big producer...) from a *small* project or in a *small* market, a significant loss from a *huge* project or in a *big* market is not sustainable for anyone, not even for Russia. NOCs are prone to “political” decisions, especially when controlled directly by their respective states, but they are not omnipotent. Nowadays, they are facing intense competition from IOCs, especially when they decide to do business outside their country. Their poor overall performance and efficiency will have to increase, in order to remain competitive.

Natural gas market, the most political of them all, is rapidly changing, especially thanks to LNG. The modern “pipeline saga”, full of geopolitical intrigue, which started with the IGA for the BTC in late 1999, is due to end exactly twenty years later, when the “Southern Gas Corridor”, “Turkish Stream”, “Nord Stream 2” and “Power of Siberia” will

all come in place almost simultaneously. From that point onwards, the age of LNG will be apparent. Combined with the “shale revolution” which took place in the USA, LNG exports are potentially a game-changer, as a recent (2015) paper by Dr. T.Babali has clearly shown¹⁹. In March 2016, the first-ever cargo of US shale gas arrived in Europe, originating from Philadelphia and shipped to Norway, 4,300 miles away, on the LNG carrier *Intrepid*. This hardly-noticed event marked the beginning of a new era, still to be appreciated.

As long as the natural gas market remains fragmented, in sharp contrast with the petroleum one, politics plays a key role, especially in some parts of Eurasia. However, the expansion of LNG trade will gradually erode the “status quo”, creating a more market-oriented gas trade similar to the oil one. By the end of 2021, the aggregate world capacity for LNG production will increase to 124,5 million tons, compared with 50,9 million tons in 2016, as the analysts of BMI -the research division of Fitch ratings-predict. This jump in the indicator by 150% will be the most significant event in the next five years, the survey notes.

As late as in 2014, global LNG trade was exactly 50% the size of the international gas trade via pipeline. By 2035 the latest, it will have overtaken it, with the US and Australia (both market economies with just IOCs) taking the world lead from Qatar. Even Russia will curve a significant share in global LNG trade, but not the state-driven entities: the leading project currently under development is the 27 billion-USD Yamal LNG in the Arctic Ocean, with no Gazprom involvement (Novatek and foreign firms, including from China). The first production facility or LNG “train” will be operational by the end of 2017 and the full capacity of 16,5 million tons will be achieved by 2021.

¹⁹ T.Babali, *The shale gas revolution and its impacts over global energy geopolitics*, available in https://www.researchgate.net/publication/278849547_The_shale_gas_revolution_and_its_impacts_over_global_energy_geopolitics The case of “shale oil” (which has reduced US energy dependence on the Middle East) has also been studied extensively since 2010, for example in a brief article by Alan Riley, *The Shale Revolution's Shifting Geopolitics*, www.nytimes.com, 25/12/2012

Sooner or later most gas contracts will become short-term and flexible (e.g. no “take or pay” clauses, “oil-indexed” prices and other distortions from the supply-demand relationship). More than 50% of the EU gas supplies are already renegotiated or indexed to hub prices, itself a very promising fact. In 2017, the EU already has an LNG import capacity of 208 bcma (153 million tons), with another 23 bcma (17 million tons) under construction. In this new era that has already begun to rise, thanks to the “shale” revolution in extraction and the LNG method of transportation, there will be less room for the “political” relations between states to determine gas prices and export routes. Commercial criteria will progressively gain weight and market dynamics will shape the global energy map more and more in the forthcoming decades. Of course, the doctrine of “Resource nationalism” will not die, but the tendency for the state is to retreat. As late as 2015, if someone spoke about Aramco’s possible IPO, he would have been considered entirely out of touch with reality. Yet, by 2018, it will definitely take place, even if it will start at a relatively small scale, as Saudi Arabia’s Crown Prince Mohammad bin Salman -the mastermind of this endeavour- admitted.²⁰ The sale to private investors of a 5% share in the biggest NOC ever (with an estimated valuation of at least 2 trillion USD) is a centerpiece of bin Salman’s “Vision 2030” to transform the entire Kingdom. “The government should not be in control of the private sector,” bin Salman told Reuters. When even the Saudis are saying so, expect the role of the nation-state in the energy arena to become less dominant than it used to be..



Mohammad bin Salman, a visionary leader due to depart from “Resource nationalism”. (Reuters)

²⁰ www.reuters.com 26/10/2017