
5. Global energy supply: scale, perception and the return to geopolitics

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1 INTRODUCTION

Energy security is back on the agenda. No longer is it an issue of the past like it was during the 1973/74 and 1979 crises.

During the heyday of globalization in the 1990s, energy was increasingly framed as a commodity among others with markets taking care of trade flows between producers and consumers. Since the early 2000s, the growing consumption of China and India has resulted in tightening of the hydrocarbon markets and consequently in rising prices. Moreover, with the 2003 Iraq War it became evident that a geopolitical approach to energy has revived again as a policy paradigm. This large-scale war between a third world country and a Western coalition, led by the United States, which was also fought to gain access to Iraq's vast untapped potential brought home the message that "territory", "geography" and "state interest" are major categories for constructing energy relations again.¹

Whereas in the United States the geopolitical narrative has been closely related to oil, the storyline in Europe is somewhat different: in the EU, natural gas deliveries from Russia have been framed in geopolitical terms. United States criticism on the Soviet-German gas-pipe deals accompanied the trade relationship from the very beginning. More recently, the new Eastern and Central European member states raised the issue of energy security vis-à-vis Russia in a more pronounced way and the Russian-Ukrainian gas crises in 2006 and 2009 were framed as a case in point. We will focus on oil and natural gas, because indeed, these are the two strategic resources around which geopolitical strategies center, and which are seen as potential sources of conflicts over access, use and distribution.

In a multipolar age in which power is diversified among many international actors across nations, and with multilateralism in crisis, these noteworthy incidents raise the question whether disputes over territory and natural resources will again turn into important factors in international politics and whether interstate war is indeed back on the agenda. The concern about "energy security" and its geopolitical framing and hence

“geopolitics of energy” and the securitization of energy is back and now a priority issue for governments.

In this brief chapter, we examine the geopolitical and theoretical bases for a renewed emphasis on energy security. Starting from a discussion of theoretical concepts we then look at how “sector fundamentals” have affected scholarly discussion of energy supply. It has to be emphasized, though, that energy is about geography. Thus, we will start with a mapping of hydrocarbon resources as a given underlying reality of producer – consumer and transit relations. We will also make the point that the landscape of energy is changing profoundly when you take unconventional energy resources and most prominently the shale gas revolution in the US into the picture. We emphasize that the supply situation is characterized by “unprecedented uncertainty”. Third, we analyze different phenomena of the past decade – high and volatile prices, increasing resource concentration, perceived scarcity and state interventions – that have fuelled the fear of resource conflict. This will also shed light on the fact that the dominating mechanism for access and distribution of resources is pricing, not state intervention. Having said this, it is important to preclude that globalization is in retreat. Price structures start to differ between the various regions. Fourth, we focus on prominent case studies that have been analyzed under the geopolitical lens. These case studies illustrate that it makes a difference how analysts describe and frame the actual development in the markets. “Energy security” is indeed back on the agenda, but how governments and/ or markets pursue such an elusive goal is very much – following these analysts – a question of their integration into the global economy, their pluralistic structures, “good governance” in the sector, as well as the perception of the tightness of the future supply market and the availability of power projections forces.

2 RETURN OF TRADITIONAL GEOPOLITICS – WHAT IS “GEOPOLITICS”?

The concept of geopolitics which dates back to the late 19th century currently is enjoying a revival.² While used in the post war era with caution – because of its connection to Nazi Germany – the term was still a useful tool to analyze the relationship between the superpowers and its effects on different regions of the world. Concepts like “geo-strategies” and theories of “falling dominos” were used to explain “influence and control over other states and strategic resources” (Profant 2010, 41). These approaches were deeply rooted with theories of realism and neo-realism, focusing on the state as the main actor in the international system. According to these approaches, dominance and hegemony over territories,

population and endowment of natural resources shape international relations.

Under a geopolitical lens, energy relations are analyzed as state relations driven by state and foreign policy interests. Energy resources are seen as a source of conflict but also as a power tool in international relations. This “securitization” of energy relations has been lately (again) promoted first by US scientists and political circles and then spread to Europe (Götz 2012, 436). Whereas in the US the major focus is on oil, in the EU the gas deliveries from Russia and the EU’s import dependency have fuelled geopolitical approaches.

Michael T. Klare explicitly adheres to a geopolitical approach using traditional and realist concepts. He is a prominent and prolific scholar in the field of the geopolitics of energy security. For more than a decade he has warned that the international oil system is soon to break down, because the growing “energy gap” is going to lead to a geopolitical rivalry and an implosion of cooperation among the main players. He sees a struggle among the major energy-consuming nations in the “new international energy system” absorbed in a competitive struggle over some indispensable resources that are becoming more scarce. The focus is on the United States as the most important player in a new geopolitical game, challenged by new emerging players like China, Russia and India.

These power relations which are “(a)lready edgy and competitive (. . .) hint at future scenarios of conflict among the so-called Great Powers of a far more dangerous sort.” (Klare 2008, 21) In this “new international energy order” governments – and not private corporations – would be the main players and the subjects of geopolitics since governments have increasingly lost confidence in private firms to acquire new oil and gas properties in the last decade. Therefore, governments have to take on a “commanding role” again by taking key strategic decisions leading to new forms of “resource nationalism” (Klare 2008, 22–23). In a world which is divided into energy surplus and energy deficit countries the latter are striving to develop good relationships with the former. It is a logical consequence that the fiercer the competition among the energy-deficit countries over “what is left”, the more the competing states will feel compelled to take recourse to means of military involvement with the key resource supplying areas in particular in Africa and Central Asia:

As the scramble for vital resources intensifies, however, governments will also become increasingly likely to employ more forceful means. In all probability, countries with major resource deposits will receive more weapons, military training, technical assistance, and intelligence support from states that wish to curry favor or establish closer ties. At the same time, combat forces will be deployed abroad to defend friendly regimes and protect key

ports, pipelines, refineries, and other critical installations. (Klare 2012, 220–221)

Here Klare sees the cause for possible conflicts which might spin out of control. As the key *rival* for the United States Klare points to China where the competition includes all corners of the world where oil is being produced in big quantities: from the Gulf region over South America to the Caspian to Africa, but in particular in Africa.

2.1 Critical Geopolitics

But like realism, the concept of “geopolitics” has also experienced cycles of recognition and dismissal as a valuable analytical tool. With the emergence of globalization in the 1980s and 1990s, theories with a focus on the role of economics in international relations seemed to be more apt to explain the new reality. Apart from mainstream theories which clustered around the school of neo-liberalism, an interesting school called “critical geopolitics” developed as an alternative method of analyzing geopolitics and global change. Scholars of this approach recognized that “along with the changing ways in which the international political economy operates (new patterns of flows, transfers and interactions) come new representations of the division and patterning of global space.” (Agnew and Corbridge 1995, 7) In this transforming world of the 1990s Agnew and Corbridge identified a process of “deterritorialization” (Agnew and Corbridge 1995, 100) in which “geography” and “territory” cannot be attributed any meaning and in which “relative economic power has begun to displace military force and conquest as an important feature of international relations.” (Agnew and Corbridge 1995, 3)

For the purposes of our discussion, we use Gearóid Ó Tuathail’s and John Agnew’s definition of “geopolitics” as a “discursive practice by which intellectuals of statecraft ‘spatialize’ international politics in such a way as to represent it as a ‘world’ characterized by particular types of places, peoples and dramas.”³ For pursuing geopolitics these intellectuals have to take recourse to a “geo-strategization” which Tuathail defines as “the making of a discursive claim that a particular foreign policy crisis or challenge has the locational and transcendent material national interest qualities that make it ‘strategic’.” (Tuathail 2004, 96) This might apply to conflict over a particular material resource or might have an impact on consensual national security interests, but in any event an inventory of these dimensions is constructed and represented as part of the material self interest of the state” (Tuathail 2004, 96). This is at the core of our interest in this analysis: to determine whether after a long phase of globalization

states are again refocusing their attention to spatialize international politics according to their national interests and “securitize” energy relations. A geo-strategization is understood in this context as not excluding military measures as part of a comprehensive concept.⁴

2.2 Energy Cycles and Corresponding Theoretical Views

Like “geopolitics”, “energy security” has experienced certain cyclical ups and downs following oil price developments. In very broad terms, “energy security” is defined as stable and secure supplies at affordable prices. The attention of governments to energy security follows the fundamental situation in the respective oil and gas markets: In the 1980s and 1990s, thanks to a vigorous diversification strategy from the Middle East on part of the OECD countries and later the dissolution of the Eastern Bloc the precious resource oil was abundant again and available for very low prices. Energy was starting to be seen as a “commodity” and no longer as a trophy in a geopolitical great game. Consequently, energy was defined as a commodity or a service (electricity).

Ups and downs in the supply situation are part of the raw materials’ market features: physical availability and consequently price developments are closely intertwined with the issue of appropriate and sufficient investments. The raw materials investment cycle is characterized by the fact that projects in the energy sector have remarkable lead times until they are fully developed and on stream, e.g. the respective pipeline is being filled. A cycle can unfold: price volatility and uncertainty discourage investment, as a consequence producing country governments under-invest in productive capacity, a behavior that is constraining the capacity over time. With the increase in demand, e.g. oil prices rise thereby resulting in a tightening of the supply/demand balance. Both sides take actions: in the face of high prices, consuming country governments take action to curb oil-demand growth. Oil demand slows with a lag. At the same time the investment rebounds in producing countries, boosting capacity with a lag. Together this is leading to over-capacity and causing prices to fall back again (IEA 2010, 141) The (vicious) cycle starts again. These cyclic investment swings are known as the “pig-cycle” and are reinforced by intransparent markets and very limited price elasticity of both demand and supply.

After having being treated like a commodity for two decades with the beginning of the 2000s energy seemed to be back on the agenda of politicians (Yergin 2006). We saw prices skyrocketing and the ever alarming term “peak oil” made it for the first time into mainstream analyses of oil supply.⁵ The first articles appeared indicating that energy security would be a very dominant subject again in the future, and back were articles

which interpreted “energy security” not as a matter which could be solved by the “markets and institutions”, but rather by pursuing “geopolitics” and “geo-strategy”. For those arguing in this line the Iraq War was telling evidence of this new trend.

But, first we start with an analysis of the geopolitical implications of today’s supply issues which are characterized by unprecedented risks and uncertainties.

3 THE UNPRECEDENTED UNCERTAINTY AND THE INTERNATIONAL LANDSCAPE OF SUPPLY

“Unprecedented uncertainty” (IEA 2010) is indeed the main feature of today’s energy system, as put forward by the International Energy Agency (IEA). This is equally true for the demand as well as for the supply side on which we focus.⁶ Unprecedented uncertainty characterizes the present energy system as the size of ultimately recoverable conventional and unconventional reserves is a major source of uncertainty for the long-term outlook (IEA 2010, 48). Equally unclear are demand developments in light of the economic crises but also of possible fuel switching and substitution effects.

A key issue for determining the quantity of reserves left is how progress in technology is evaluated against geological fundamentals. The “Peak Oil” discussion has raised public consciousness because hydrocarbons are exhaustive and non-recoverable. Estimates differ widely about when oil production has reached or will reach its plateau. The Association of Peak Oil (ASPO) argues that the peak of oil production was reached somewhere between 2005 and 2010; multinational companies are much more optimistic. BP estimates, that the known reserves are able to cover the demand for the next 40 years. Maugeri has predicted a new revolution in oil supply capacities and even an “oil glut” based on “deconventionalization” (Maugeri 2012). Other papers discuss the estimates on ultimately recoverable resources and price elasticities of supply and demand by bringing together the opposing approaches of geology and technology (Benes et al. 2012). The new dreams of resource endowment are fuelled by thoughts of unconventional resources. “Unexplored and untapped” areas such as deep waters, the Arctic, East Siberia as well as oil sands, tight oil and shale oil have contributed to increase the global reserve basis. However, a clear definition for *unconventional* is lacking, but is meant for resources that can only be exploited by new technologies and is unclear with respect to economical recovery. Exploring (un)conventional oil seems more a matter of costs and prices and of course is related to new environmental

risks. The above gives evidence that the time of cheap oil is over. And in our geopolitical context, the most important message is that the use of the unconventional hydrocarbon resources may change the landscape of energy relations.

The conventional picture is one of growing concentration in few world regions and in countries that are characterized by unstable and undemocratic regimes. One of the main particularities of conventional fossil fuels is their uneven global distribution: In the future, the world will have to rely to an ever larger extent on the energy-abundant countries of the “strategic ellipsis”: the geographical area stretching from Siberia to the Caspian Basin, the Persian Gulf to the Arabian Peninsula. The region contains 63.5 per cent of global oil reserves, compared to a 47 per cent share in overall production in 2009 (BP 2012, 6, 8). The future role of the Organization of Petroleum Exporting Countries (OPEC) and the implications for security of supply is among the geopolitical uncertainties. OPEC countries control more than 76 per cent of global reserves and 63 per cent are located in the Gulf region. The OECD disposes over only 6 per cent of global oil reserves (BGR 2009, 37) and conventional oil production in the OECD area has most likely achieved the plateau.

On a global scale the resource base of natural gas is abundant in comparison to those of oil. For gas, the share of conventional gas reserves in the strategic ellipsis is even higher with more than 70 per cent, while the bulk of almost 60 per cent is located in four countries: Russia, Qatar, Iran and Turkmenistan. The countries of the strategic ellipsis also dominate gas production with around 37.5 per cent (BP 2012, 20, 22). In a global perspective, most of the reserves are conventional gas. The OECD share is only about 10 per cent of the world total.

The Arab Spring is a case in point for the (geo)political impacts and has caused widespread fears about the prospect of oil (and gas) supply disruptions. Very closely related is the issue of internal reforms that may go hand in hand with new depletion strategies, a revisiting of existing Production Sharing Agreements, changes in the managements of National Oil Companies etc. This in turn, may affect the business conditions for IOCs and the access regime. Moreover, political and socio-economic reforms may affect the volumes and direction of exports and there are strong indications that necessary investment into new sites is on hold, funds are redirected and domestic price reforms are reversed.

The uprisings in the Arab world that unfolded in 2010 and 2011 question existing alliances. This is important from a geopolitical perspective and indeed, the movements mark a watershed (Darbouche and Fattouh 2011, 1). The OECD world had long depended on autocratic regimes because they seemed to provide stability. This proved to be an error: rather, it is

“stable societies(.) that hold the key to future reliance on MENA hydrocarbons.” (Roberts 2011, 3) Regionally, there is an immediate risk of contagion and changing balance of power. Iran and the Shiite minorities in the Gulf countries are a source of concern. This is particularly sensitive when it comes to the three countries of the Gulf Cooperation Council (GCC): Saudi Arabia, United Arab Emirates and Kuwait. Saudi Arabia’s strategic importance for world oil markets cannot be overstated. It is not just the sheer size of its production and exports, but its spare capacities to increase oil production at short notice. Saudi Arabia produces around 10 million barrels daily, and has another estimated 2.5 million barrel capacity,⁷ which gives the Kingdom the opportunity to act as a balancing swing producer. Even though the real potential has been questioned (Simmons 2005), there is no doubt about the relative market position: there is no significant spare capacity outside the Gulf region. Moreover, the region hosts some of the world’s famous chokepoints and transport arteries with the Strait of Hormuz, through which 20 per cent of all globally traded oil passes, the Bab-el Mandeb Strait, the Suez Canal and the Sumed pipeline.

What Saudi Arabia is for oil, Russia is for (conventional) gas. Russia has been the dominant gas player in the world and has built its regional (read: in the EU and the CIS) energy power on its pipeline network. Change is in the air or is even taking place already. The dominating geopolitical theme has been Europe’s (inter)dependency from Russian gas supplies. With respect to diversification, the Caspian Basin with its vast, partly unexplored, and untapped resources is one of the regions that could change the future pattern of resource development and exports (IEA 2010, 523). Moreover, the natural gas reserves in the MENA region represent some 45 per cent of the world’s total reserves, its marketed production amounts to 20 per cent of the world’s total output (Darbouche and Fattouh 2011, 21). Qatar is the major player on the world’s LNG market. Another trend observable in the landscape of supply or more precisely in supply *and* demand is the steeply rising demand in energy producing countries. The gas consumption in the MENA countries is a case in point with the growing indigenous demand. Most countries of the region, with the exception of Qatar, have faced supply shortages. Gas will be extensively used in the power sector: the North African countries will see a quadrupling of their electricity consumption till 2030, given annual growth rates of between 4 and 8 per cent. It will also serve as a feed stock for energy-intensive industries, whilst at the same time upstream production costs will increase as “easy gas resources” are depleting. Gas consumption in the Middle East is expected to grow by 3.9 per cent per annum between 2010 and 2030 (BP 2011, 51). The rising internal demand will most likely affect the disposable export volumes and constrain the region’s export capabilities.

Rising gas demand and antagonistic relations between neighboring countries are a threat to regional stability. After the Egyptian revolution in February 2011, the gas export contracts of the country with Israel and its other neighbors have been constantly questioned, and the pipeline through the Sinai has been blown up several times. This is a source of geopolitical instability in the region, as Israel gets 40 per cent of its imports from Egypt. The country will be forced to exploit disputed off-shore resources in the Eastern Mediterranean Sea. The Levant Basin has witnessed the world's largest deepwater gas discoveries in 2009 and 2010. This may lead to conflict between Israel, the Palestinian Authorities and the Lebanon. Moreover, these vast reserves have increasingly been a source of dispute between Cyprus and Turkey in 2011 (Popvici 2011).

The dominance of few exporters and the concentration of the conventional gas reserves have raised concerns over the creation of the Gas Exporting Countries Forum (GECF). Pipeline-dominated gas exports and the existence of oil price indexed contracts have since its creation been seen as hindering the formation of a cartel. However, since spot market transactions in Europe and global Liquefied Natural Gas (LNG) trade has increased, the room for maneuver for gas exporting countries to steer export volumes and directions has enlarged. As in OPEC, an effective cartelization is constrained by diverging (geo)political and commercial interests of the members. Nevertheless, the developments are a source of concern which consumer states should keep an eye on.

The shale gas revolution in the US has fundamentally changed the gas markets. Whether this boom can be reproduced in other parts of the world, namely in (Eastern) Europe and China is uncertain, though. The steep increase in shale gas production in the US resulted in a remarkable fall of LNG imports to the US. This LNG was then exported to Europe, helping to increase the liquidity of its gas hubs and spot markets significantly. The gas glut also unfolded because the economic crisis in 2008/2009 resulted in decreasing demand. Gas prices eroded in Continental Europe and consumers were able to buy gas at a much lower price than under the Long Term Contracts with its major Norwegian and Russian suppliers. As a consequence of these latest developments, the gas markets are in flux with respect to the marketing areas, the different price regimes and the relevant actors (Westphal 2012, 2013). At the time of writing three (or even four) regional gas markets exist with very different price levels. LNG trade has not led – as expected less than a decade ago – to a globalized gas market and converging prices. In the North American market, gas prices are very low due to the shale gas revolution. In the European market the price is more than three times higher than in North America, but still much lower than in the Asian-Pacific market.

Also the pricing mechanisms differ. South America is the fourth region but on a nascent stage.

The above described geopolitics around hydrocarbons will certainly change with a transformation toward a more sustainable energy system. Yet, a more renewable energy based system will not be free of geopolitics,⁸ because it shapes future regions through interconnecting infrastructure and new (inter)dependencies. Moreover, inter- and transnational cooperation is a key condition for the expansion of renewable energy and developing green electricity markets as reflected in the Seatec concept of large off-shore wind parks in the North Sea or envisioned in the Desert power concept linking the EU with the MENA region. Moreover, the case of bio-fuels or hydropower is closely related to the water and food usage. Energy is part of the water-energy-food nexus which itself displays the linkages between territory, access to resources, usage and distribution.

The unknown level and the future structure of energy demand is another uncertainty. However, the preconditions are very different around the world: the industrialized countries have almost reached their peak in energy consumption, but the emerging countries and the developing countries have to cope with a (sharp) increase in demand. This can be described as the global energy dilemmas (Bradshaw 2010) that complicate the search for new global energy solutions at a time when we observe a general retreat of globalization.

4 RETREAT OF GLOBALIZATION – EFFECTS ON ENERGY SECTOR

The following section will try to shed light on certain trends that provide evidence for a “retreat of globalization”.

The energy world will soon become much more differentiated in terms of energy production, consumption paths and the landscape of actors. Major uncertainty relates to the different development paths and their effective implementation. Depending on the locational prerequisites needed for renewable energies, storage facilities etc., the energy production and consumption map will become much more diversified being tailored to local circumstances. Moreover, oil, gas and coal will likely each share a third of the hydrocarbon energy mix. This brings about many uncertainties with respect to the development of costs and winning technologies.

A retreat of globalization also occurred as oil (and even indirectly gas and coal) markets became global because of the price mechanism. However, this has always been less true for the physical flow of oil. The recent price developments as seen in the remarkable gap between West

Texas Intermediate Oil and Brent Oil prices are illustrative. The US has managed to become increasingly independent from the MENA region. Europe has proved to be much more vulnerable, in particular from trade disruptions in North Africa. Yet, the bulk of GCC crude oil exports go to the Asia-Pacific region.⁹ What do the physical oil trade flows tell us? In the future, the North American oil markets may become less interconnected depending on the amount of deep water off shore exploration in the Mexican Gulf, unconventional (shale) oil production in the US and Canada, and the prospected off-shore production in Brazil. The US and the North American market have taken significant steps to become largely self-suppliers. The US has become a self supplier, most likely also with (shale and offshore) oil. This may have geopolitical implications as it results in less immediate interest in the Middle East. This may result geopolitically in a more isolationist attitude towards issues of supply security, in particular with regard to securing oil and LNG flows through the major chokepoints. More than 40 per cent of global oil exports originate in the Gulf Region. One-third of all sea-based oil trade transits through the Strait of Hormuz. The revolution in Egypt in February 2011 has raised concerns over the SUMED pipeline and the Suez Channel through which the LNG exports from Qatar to Europe cross. Will Europe and China step in? Also as yet unknown is how China as a major consumer of oil and gas flows from the Middle East will behave as “*Ordnungsmacht*”. So far, consumer countries’ cooperation is limited by the institutional landscape of international governance. Neither China nor India are members of the IEA. However, it is common sense that it will be the emerging consuming countries that will make the difference.

Another question is whether the US will become a gas exporter and challenge Russia in that respect. It has already overtaken the Cold War antagonist in production. If the two clash on market shares in the energy trade that could mean a qualitatively new situation with regard to already sensitive international energy relations. Whether Europe will still see an increased availability of LNG (redirected from the US) depends on the level of demand increase in the Pacific region. For Europe, the major challenges to be faced are the strategic partnership with Russia to be developed further and the energy relationship with China. Both regions are looking to the same resources in the Caspian region and in Central Asia.

Second, the cyclical development of oil prices has implications for the national governance of access, use and distribution of hydrocarbons, and subsequently for the redistribution of rents. Oil prices are the lead currency for most of the other raw materials. Oil prices are the major reference point for investment into oil exploration, production and infrastructure, and they are the major incentive to reduce oil consumption. Moreover,

they determine the income to the state budget of oil producing states. Last but not least, oil prices are set in a complex interplay of the market fundamentals, market expectations and financial transactions and speculation.

Third, with respect to globalization in retreat is “resource nationalism” and the renationalization and creation of national oil companies (NOCs). At the beginning of the 2000s, when a steep increase in demand drove oil prices to record levels, many oil (and gas) producing states took a more assertive stance towards foreign investments in these strategic sectors. In particular, the policies of Russia and Kazakhstan to reconsolidate the state’s (read: the elites’) grab and control over resources has deeply shaken up the market. It was the dissolution of the Soviet Union, the new volumes of Russian (privatized) oil companies and the prospect for new super/giant fields that fuelled the dreams of the International Oil Companies (IOCs) but also resulted in plummeting oil prices. By that time, also under the neo-liberal market paradigm Western consuming countries and their IOCs achieved significant inroads into energy-abundant countries (Mommer 2002).

In the early 2000s, Russia and Kazakhstan alarmed energy investors: renationalization and wide scale corruption challenged fundamental rights guaranteed under production-sharing-agreements. The empirical bases for *Friedman’s* first law of petropolitics stating that the price of oil and the pace of freedom move in the opposite direction (Friedman 2006) unfolded. Whereas the 1990s witnessed a phase of significant inroads into producing countries, in the early 2000s the pendulum swung back. Re-nationalization of the oil industry or at least of its core parts (as exemplified by the Yukos oil company in Russia that was taken over by state company Rosneft after the arrest of the Yukos’ CEO Khodorkovsky) significantly changed the business environment for the multinational oil companies, who were the major instruments for OECD countries to secure timely, stable and affordable supply. Nowadays, it is the National Oil and Gas companies (NOC) that control over 80 per cent of the reserves (BGR 2009, 37). NOCs are subjected to political considerations and serve as a major instrument for the ruling elites to stay in power. “Resource nationalism” results in limited access for IOCs.

However, the motivation behind the waves of renationalization in the former Soviet Union and Latin America are different. But high oil prices have enabled these steps. When the oil price increased money was soaring into state budgets and enlarged the room for maneuver. Latin America, Ecuador and Bolivia for instance took the opportunity to revise and change unfavorable deals that had been agreed upon under different circumstances. Moreover, disputes among the old elite and leftist socialist/indigenous movements over the redistribution of rents drove renationalization in Latin America (Venezuela, Bolivia, Ecuador) as did diverging interests over depletion and exploitation strategies as in the case of Argentina.

For the OECD and its multinational oil (and gas) companies the time of cheap and easily accessible conventional oil is over. Because of restrictive policies in many energy-abundant states, but also because of depletion paths in the OECD world, the IOCs have to go to geologically and geographically ever more challenging areas. All this together, is driving oil (and energy) prices. The costs escalation is remarkable: in the 1990s, the costs for an oil field development from exploration until the start of production lay between US\$500 million and US\$1 billion; nowadays this amounts to US\$5–10 billion (Oldag 2011).

As a result of renationalization and state intervention we have seen fragmented markets developing. Whereas the EU has followed a path of markets, competition and integration based on clear rules and regulation to provide for a level playing field, other countries have gone in the opposite direction following a “regions and empires approach” (Clingendael International Energy Programme 2004).¹⁰

Last but not least, it has to be emphasized that oil price developments have not only been a source of conflict but have also driven remarkable achievements in international governance. When it comes to dealing with the well-known pig-cycles in raw materials and the shift in the supply and demand balances, 2008 has been a watershed that has brought energy governance further but not far enough: the peak in prices of about US\$147 per barrel (Brent) and the price decrease by almost US\$100 per barrel in less than six months raised the consciousness for mutual vulnerability. Both consumers and producers are exposed to the damage volatile prices can cause. Oil price levels and oil price volatility have been a constant source of concern for all relevant actors and have resulted in new or reinforced international governance initiatives such as the Joint Organisation Data Initiative (JODI) of the International Energy Forum. JODI has been built up as a major initiative to step up dialogue and cooperation between consuming and producing countries. The year 2008 has been a watershed for cooperation in the IEF because the decrease of oil prices by almost US\$100 per barrel proved to be equally damaging to producing and consuming countries. Since then, the world has witnessed intents to improve transparency on the oil markets as well as in the financial markets, both under the umbrella of the IEF as well as under the roof of the G20.

5 CONTROVERSIAL VIEWS ABOUT THE CAUSES OF AN UNSTABLE “ENERGY SECURITY”

Thus, as has been shown above, the more recent conversation about energy security has evinced consensus among researchers and analysts that

supply is no longer being guaranteed for the unforeseeable future. Import dependency of major consumer countries will grow – though for the mid-term future, the United States will be exempted from this competition. As early as 2004 the Clingendael “Study on Energy Supply Security and Geopolitics” concluded that energy will become a determining factor for international relations in the future and that “energy relations will become increasingly politicized” (Clingendael International Energy Programme 2004, 16). While gas and also renewable energy have some implications for energy security, there is also consensus that oil dominates the concern about energy security, that “(o)il plays a strategic role in both economic and social development and is one the greatest sources of world power” (Palazuelos 2012, 301). And, moreover, the question of oil will also determine whether we will see “cooperation (or conflict) in international relations” (Palazuelos 2012, 301). But that is where the consensus stops. As already evident from the discussion above, there are controversial views of the causes of this unstable situation, but they have different explanatory analytical power if applied to particular regions and case studies.

Michael T. Klare’s analysis of “Great Power Games” makes sense for two conflict areas, one of which threatens to result in open military conflict in the near future: the conflict over the East and South China Seas; the other is over the oil in the Arctic.¹¹ It is these areas where exploration and production open new frontiers, and where borders are unclear or disputed.

5.1 Great Power Game in the East and South China Seas

Three conflict lines are identifiable here: between China and the US, China and Japan and China and its neighbors to the South and East. All this reflects the territorially disputed areas of the East and South China Seas, the Gulf of Thailand and the waters surrounding Indonesia. The Obama Administration’s “pivot” from the Middle East to the Asian-Pacific region has to be seen in this context, manifesting itself by sending US Marines to Australia, combat ships to Singapore, the opening of a naval base in the Philippines and the redeployment of an aircraft carrier into the South China Sea¹² –leading Klare to suggest that “after a decade-long-hiatus-cum-debacle on the Eurasian continent, the Great Game v. China is back on”.¹³

It is obvious that several Southeast Asian countries have deepened their military ties with the US and Japan in response to the Chinese build up of its naval capabilities over the last 15 years and China’s public announcement in 2010 that its South China Sea claims were “among its ‘core interests’” (Chang 2012, 21). These military deployments to this region can certainly not directly be linked only and exclusively to energy, since the

issue is also about securing the Straits of Malacca against piracy and the terror of Islamic groups (Favennec 2011, 129).

But, in general, they can be understood as a commitment by the US to support its allies in the region. According to Klare “(b)ecause so many countries have advanced overlapping claims to all or part of these maritime regions – China, Japan, and Taiwan in the East China Sea; Brunei, China, Malaysia, the Philippines, Taiwan, and Vietnam in the South China Sea – it has proven nearly impossible to establish definitive offshore boundaries . . .” (Klare 2012, 67). The summer and fall of 2012 saw a conflict heating up between Japan and China over the Senkaku islands.¹⁴ As Japan’s ally, the US would be expected to come to her help, but so far the US has remained silent. Nor are there any regional organizations in place to mitigate any conflicts, hence Klare’s analysis seems legitimate.

5.2 Russia’s Hegemonic Policy in the Caspian Sea Basin and Central Asia

Even more than the East and South China Seas, it is Central Asia and the Caspian region which are generally regarded as the quintessential locus of inter-imperial rivalry¹⁵ and for Klare they are even the “cockpit for a twenty-first-century energy version of the imperial ‘Great Game’ of the nineteenth century” (Klare 2008, 115). But according to our analysis the picture is more of a mixed bag. A militarized “geo-strategization” is not identifiable in the case of Russia’s policy in the Caspian, rather a policy of a former hegemon that has tried to preserve its geopolitical influence in the “near abroad” and has aimed to monopolize the gas flows to Europe, thereby exerting influence on the Caspian Basin energy sector. Yet, this strategy has faced limitations by the United States and China.

The region is landlocked, which forms a decisive barrier to the development of the vast resources, notably because of the complexities of financing and constructing pipelines across several countries. Alternative pipelines that bypass Russian territory had to be built. This constitutes long-term relations. In the Caspian Sea Basin and in Central Asia geopolitics and geo-economics are at play amongst those territorial disputes, such as the Russia-Georgia conflict in August 2008, the unclear legal status of the Caspian Sea, policy reversals as regards depletion strategies, and upstream access, export routes and domestic energy use. Political risk in the region is considered high and these perceptions have preempted larger export projects. With the dissolution of the Soviet Union, and most visibly illustrated in Ukrainian-Russian gas disputes of 2006 and 2009, transit became one, if not *the* security of supply issue for Europe.

Russia’s priority from the very beginning has been to maintain the

monopoly for oil and gas flows from the region, and to trade and re-sell these hydrocarbons with high windfall profits. Transit issues have been prominently addressed in the Energy Charter Treaty (ECT) and its related Transit Protocol (Westphal 2011a). For that reason, Russia had never ratified the ECT as it stepped in as a trader of Central Asian gas and was not willing to offer free transit. The Russian gas company Gazprom feared the loss of its strategically important position as the narrow gateway to Central Asian gas. The decisive point here is that Gazprom has bought and resold Central Asian gas instead of simply providing transit services. Russia has put Turkmenistan in a position of a swing gas supplier, exposing the country twice to two sharp collapses in deliveries to Russia because of disputes over prices and volumes (1997–1998 and 2009). It has also instrumentalized the uncertain legal status of the Caspian Sea as well as the other littoral states for their own interest. This unclear legal status has so far prevented a Trans-Caspian pipeline and large scale off-shore projects of Turkmenistan. Russia has made significant windfall profits over the past 20 years in re-selling Central Asian gas. And more than that, it has pressured Kazakhstan and Turkmenistan into the situation of swing suppliers: with the falling gas demand in Europe, Russia passed the loss in volumes down to the Central Asian producers.

The US strategy of getting a hold in the Caspian energy sector was the set up of a pipeline system that allows for a substitute export route for West Caspian oil that does not pass through Russian territory, the Baku-Tbilisi-Ceyhan pipeline. Operational since 2006 this pipeline transports the oil directly from Baku in Azerbaijan to Ceyhan in Turkey.¹⁶ In addition, China started to tap into the Caspian resources since Central Asia's oil can be directly delivered to China by land and domestic pipelines, thus the vulnerability of the oil and gas's transportation can be curbed (Klare 2008, 133–135).

The export option to China is strategically of the utmost importance for the real independence of Kazakhstan and Turkmenistan from Moscow, and the Chinese presence has almost put an end to Russian dominance in price negotiations and play of volumes China is investing predominantly in Kazakhstan and Turkmenistan in oil and gas pipeline systems and upstream projects. With the commissioning of the Turkmenistan – China pipeline gas export has started to diversify.

For the EU, that has repeatedly claimed to diversify its imports, it seems very likely that gas exports from Shah Deniz Phase II will find its way through a Southern Corridor into Europe. This might not necessarily be realized through the Nabucco Pipeline but rather with a smaller project that is being developed first, and with the possibility of being upgraded later. In any case, however, these long, overland and multi-country

projects make the reliability of exports contingent on a long chain of political arrangements, frameworks and circumstances.

5.3 US Hegemony by a Militarized Globalization Strategy

In contrast to Klare's analysis of the "great power game", Doug Stokes and Sam Raphael argue – on the basis of neo-Gramscian theories – that the United States strives for global power and hegemony over the world's oil rich regions by coercing them to open up their oil wealth to a "free marketization" (Stokes and Raphael, 2010, 2).

But unlike Klare they interpret the hegemonic policy of the US government in the international oil system not as a result of US "resource nationalism", but rather as motivated by the intent to maintain a functioning global economic system based on free trade of oil from which all states, including non-Western ones, should profit. This capability on part of the US to control the conditions under which all core powers receive their oil from the South again contributes to the hegemonic power of the US. Throughout the world, the US secures control of the global oil supplies primarily through "transnationalizing" the elite of these oil rich countries of the South by buttressing their power through a strategy of "military coercion". Thus these coercive and military deployments in the "Global South" are not intended to threaten the big rivals, China and Russia, in these regions, but rather against the impoverished population in the oil rich areas who might demand a fair share of the oil wealth produced by their authoritarian governments. Since Stokes and Raphael believe that "rival centers of power opt primarily to work under the American strategic umbrella" their conclusion is distinct from that of Klare in that "overt competition for the world's oil stocks will continue to be overwhelmingly pacified" (Stokes and Raphael 2010, 51).

The Iraq war is also interpreted by Stokes and Raphael as the beginning of neo-liberalism in the Gulf region with IOCs starting to have a greater role to play. Thus by taking recourse to Robinson they argue that the US invasion cannot be interpreted as a "US imperialist plan to gain the upper hand over French, German, and Russian competition' by monopolizing Iraq's crucial oil reserves",¹⁷ but rather as an opening up to the "investment by global capital" (Stokes and Raphael 2010, 96). If we look at the result of the Iraq War, Stokes and Raphael seem to be right. Only two US companies gained a big share of the bid (ExxonMobil and California's Occidental Petroleum). Also five OECD, but non-US, companies (British BP, Dutch/British Shell, Italian ENI, Norwegian Statoil and the Korea Gas Corporation) became involved in Iraqi oil, but large shares of the attractive Iraqi energy sector also went to Chinese, Russian,

Malaysian and Angolan companies.¹⁸ The United States' tacit approval of Chinese and Russian companies' involvement supports strongly the thesis of the neo-Gramscian camp that the US interest was to bring the oil to the international market, and in the long run will profit from having re-strengthened its control of the international energy market.

6 CONCLUSION: REVISITING THE GEOPOLITICAL PARADIGM

It is impossible to deny that oil, given newly emerging energy insecurities, can (no longer) be purely seen as a “commodity”. Too many voices have warned that oil is getting scarce, from CEOs of big oil companies to the IEA, though with different levels of urgency. How you frame it depends on the lens you are looking through. But with the return of energy security, traditional geopolitical interpretations are very much in vogue and “sexy” again. Among all players analyzed here only China with its authoritarian governmental system might oblige the US to come to the support of its allies in the instable region of the East and South China seas.

But, while “China’s resource undertaking is global and among the most aggressive in history” (Moyo 2012, 3), it can still be interpreted as using “soft power”¹⁹ in its global search for control of energy – as long as the search is not in its own neighborhood.²⁰ As for Russia it “only” strives to maintain hegemony over the former Soviet republics and Eastern Europe. More importantly in energy terms it is a fact that this strategy has fallen together with the economically and commercially driven pursuit to preserve, retain or expand its market shares in the respective region. There are also no signs of a “geo-strategization” to achieve its goal.

In general, these geopolitical narratives tend to ignore developments in exploration and production of unconventional resources. Moreover, they perceive the state as the main device and blind out the economic and corporate interests of private companies. Most importantly, the most probable possibility that the resource game is fought via pricing of fossil fuels is more or less ignored. The geopolitical storyline is about access, and tends to ignore the “rest” of the supply chain. Theoretical concepts inspired by institutional economics (North 1990) focus on other levels e.g. substate, transnational etc. and on other actors, such as companies. The analysis directs toward corporate strategies, price mechanisms and interdependencies. These theories help to understand that the energy supply chain in most cases stretches across borders: from the production (upstream), to transport and trade (midstream) to downstream (processing, retailing and marketing), sometimes this production chain is vertically-integrated,

in most cases it is not. Consequently, the analytical focus was not only on the supply side, but also on the demand side. Energy security is not only defined as supply security, but further takes into account interdependencies, vulnerability and sensitivity (Keohane and Nye 2001). Thus, resilience of a system plays a major role.

Apart from some select deviating views²¹ there still seems to be consensus among analysts that it is the European Union which is epitomizing the “markets and institutions”²² approach since it is very much embedded in the spirit of globalization and neo-liberalism, trusting exclusively the forces of the market and its institutions to provide energy security for its region. But with the US shale gas and oil revolution in full swing, it remains to be seen to what extent there will be an awakening among EU politicians that from now on they might themselves have to take care of the region’s “energy security”. As for the US we learnt that its “intellectuals of statecraft” pursue a three-pillar strategy: while pursuing autarky based on with their domestic shale gas and oil revolution, they are at the same time preserving its strategy of globalizing the international oil market without renouncing on a geo-strategization which takes recourse to military means if necessary. Since even with a scenario of autarky the US needs to watch global oil prices, the Europeans might be lucky and might not experience a situation in which they find themselves bewildered in front of a folded US “strategic umbrella”. Future research will have to analyze the implications and consequences of this new configuration in the new international energy system, in particular the effects on transatlantic relations.

NOTES

1. One prominent figure of the US inner circles who confirmed this kind of interpretation was Alan Greenspan, Former Chairman of the US Federal Reserve Bank, see Peter Beaumont and Joanna Walters, “Greenspan admits Iraq was about oil, as deaths put at 1.2m”, *The Observer*, 16 September 2007.
2. For the German case Klinke observes that the “debate is based on an unhelpful binary: the life or death of geopolitics”, 2011, p. 709.
3. Tuathail (2004, 93), quoting from Tuathail and Agnew (1992), “Geopolitics and Discourse: Practical Geopolitical Reasoning and American Foreign Policy”, *Political Geography*, 11: 190–204.
4. See also Peters (1999, 30–31).
5. See Moran and Russell (2009), who claim that “(t)he idea of peak oil is already becoming established as a subtext or unspoken assumption among strategists and policy-makers”, 4. For a detailed discussion of “peak oil” see Peters (2004).
6. See in more detail Westphal (2011b).
7. Own calculations based on EIA (2011) and BP (2012, 8).
8. See for example Smith Stegen (2012).
9. For Saudi-Arabia the figures are as follows: 57 per cent of the crude oil exports go to

- the Far East and 50 per cent of the refined product exports, too (Energy Information Administration 2011, 6).
10. See the 2004 Clingendael study which distinguishes between the “regions and empires” and “markets and institutions” approach (Clingendael International Energy Programme 2004, 84).
 11. See the chapter on the Arctic in Klare (2012, 70–99).
 12. *Spiegel* online, 17 October 2012.
 13. Klare, Michael (2012), “Oil Wars on the Horizon”, at *TomDispatch.com*, accessed at 19 September 2012.
 14. *Economist*, 22 September 2012.
 15. See also Kleveman (2003).
 16. See Klare (2008, 125) and Favenec (2011, 160).
 17. Robinson, William (2004), *A Theory of Global Capitalism: Production, Class and State in a Transnational World*, Baltimore, MD: John Hopkins University Press, p.140, quoted in Stokes and Raphael (2010, 96–97).
 18. *Aljazeera*, “Western Oil Firms remain as US exits Iraq”, 7 January 2012. For a more detailed analysis of the Iraq oil sector see Kadhim (2012).
 19. Kinchen, David (2012), “Book Review: ‘Winner Take All’: China uses ‘Soft Power’ to Gain Control of Mineral Resources, Other Valuable Commodities”, *HuffingtonNews.Net*, 26 June.
 20. For a balanced analysis see also Downs (2010).
 21. For a contrary view, see Bosse (2011).
 22. The 2004 Clingendael study sees the EU firmly embedded in the “markets and institutions” approach. See also McGowan (2011) who argues that the “debates and actions of European policy makers are better understood as being played out in a framework of politicization rather than securitization”, p.488.

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