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The Global Oil Market and EU Energy Security

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1 Introduction

With both energy consumption and dependency on oil and gas imports growing and supplies becoming scarcer, the risk of supply failure is rising. Securing European energy supplies is therefore high on the EU's agenda¹

As this quote shows, in 2010 the EU prioritised energy security based on an observation of growing energy demand and scarcity of supply. In 2014 the European Commission based its assessment of oil security on superpower interdependence: "The interdependence between the EU, US, and Russia in relation to oil, the availability of oil stocks, and the ability to trade and transport oil globally, means that there is no immediate threat for the EU in relation to its oil supplies" (EC 2014: 10). Today, only 3 years later, one could wonder if the interdependence between the EU, the United States and Russia is still a solid basis for European secu-

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rity of oil supplies. EU sanctions following the Russian annexation of Crimea and the rhetorical nationalism of the newly elected US President, Donald Trump, suggest the need for an independent EU oil security strategy. However, as the EU imports almost 90 per cent of its crude oil consumption, it is hard to see how the organisation could gain the upper hand in grand-scale political oil bargains. It is also in line with fundamental tenets of the EU to rely on a market-based approach to oil security (CIEP 2004).

This chapter starts out by way of a historical exposition of how the governments of the United Kingdom and France played a vital part in designing the global oil regime of the early twentieth century and how this role was undermined—first by the dominant position of the International Oil Companies (IOC) and later by the Organization of Petroleum Exporting Countries (OPEC). There then follows a discussion of the fundamental challenges to European security of oil supplies stemming from the depletion of global oil resources. Finally, the EU oil security situation and strategic challenges are discussed. First, however, some remarks regarding the concept of energy security are necessary.

2 The Concept of Energy Security

The literature on energy security is largely derived from general energy studies and thus is not well-informed or related to general security studies in political science. A number of theoretical approaches to international political security could also be applied to the energy sector. As an illustration, the Copenhagen School emphasises the way an issue becomes a security issue, through a process of securitisation. Securitisation is defined as a successful speech act "through which an intersubjective understanding is constructed within a political community to treat something as an existential threat to a valued referent object, and to enable a call for urgent and exceptional measures to deal with the threat" (Buzan and Wæver 2003: 491). As Stritzel points out, this has immediate and significant implications for policy: "The articulation of 'security' entails the claim that something is held to pose a

threat to a valued referent object that is so existential that it is legitimate to move the issue beyond the established games of 'normal' politics to deal with it by exceptional, i.e. security, methods. This puts an actor in a very strong position to deal with an issue as he/she thinks is appropriate" (Stritzel 2007: 360). Following the Copenhagen School, by defining reliable and affordable energy supplies as a security issue, certain policy implications arise: in particular the kind of means that are available and-more importantly-which means are appropriate. Defining energy supplies as a security issue contradicts the presumption that oil consumers should rely on market mechanisms, international institutions or the goodwill of other actors (such as Arab allies). The economic and commercial elements of energy supply are far more prominent today than in the 1970s. The implication is obvious: "Energy interdependence and the growing scale of energy trade require continuing collaboration among both producers and consumers to ensure the security of the entire supply chain" (Yergin 2006: 78). Others have argued for a more sophisticated system of global governance of energy (Goldthau and Witte 2010). Such changes presuppose a de-securitisation of both the concept and the understanding of energy security. In fact, the well-established definition of energy security as: "adequate, reliable supplies of energy at reasonable prices in ways that do not jeopardize major national values and objectives" (Yergin 1988) would, in most cases, imply a de-securitisation in the Buzan/Wæver sense of the term. However, it is necessary to disentangle the various elements of the energy security concept in order to arrive at a more nuanced understanding of (a) how structural changes (both political and economic) create constraints and opportunities for achieving energy security, (b) the mechanisms involved and (c) the policy implications that follow. In brief, this suggests that oil supplies are insecure in a *physical sense* if global oil resources are actually depleted, insecure in an economic sense if the costs of producing oil increase beyond con-

sumers' ability to pay for it and insecure in a *political sense* if they are only attainable by jeopardising fundamental political values or objectives.

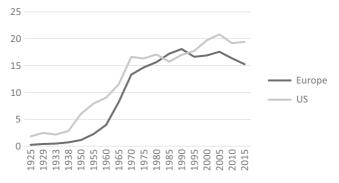


Fig. 12.1 European and US oil consumption, 1925–2015, million barrels per day (mbd) (Source: 1925–1960: Darmstadter et al. (1971): 622–630, 1965–2015: BP (2016))

3 The History of Securing Oil Supplies to Europe²

3.1 Increase in Consumption and Political Supply Control

This book is focused on Europe, a region with high oil consumption but one that has produced a significant amount of oil for only about the last 40 years. Historically, this has made oil supplies a matter of imminent concern for European state leaders. In the first half of the twentieth century, oil consumption grew dramatically (Fig. 12.1). As both military and commercial use of oil increased, the need for securing control over access to foreign oil became a pressing issue for Europe. This, in particular, contrasted with the situation in the United States, which up to the Second World War, was a net exporter of oil, while Europe hardly produced oil at all (Fig. 12.2).

The political importance of oil was demonstrated when Winston Churchill, as First Lord of the Admiralty prior to the First World War, changed from coal to oil as the power source for the Royal Navy. With the United Kingdom war machine dependent on Middle Eastern oil instead of British coal, securing oil supplies turned into a high-level foreign policy and security issue. The area to look for oil was the Middle

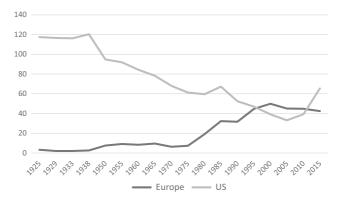


Fig. 12.2 European and US oil production as share of consumption (%) (Source: 1925–1960: Darmstadter et al. (1971): 622–630, 1965–2015: BP (2016); Note: 1925–1960 Western Europe, 1965–2015: Europe excl. Russia)

East. The United Kingdom made Mesopotamia a British mandate under the League of Nations. In connection with the San Remo agreement, an Anglo-French oil agreement was negotiated. "France would get 25 percent of the oil from Mesopotamia. ... the vehicle for oil development remained the Turkish Petroleum Company ... and the French acquired what had been the German share in it. ... the French gave up their territorial claim to Mosul. Britain, for its part, made absolutely clear that any private company developing the Mesopotamian oil fields would very definitely be under its control" (Yergin 1991: 189–190).

With the British/French dominance in the Middle East, access seemed closed to US interests. However, with the breakdown of the Ottoman Empire, the status of the Turkish Petroleum Company concession was unclear, and the oil companies started a long and bitter fight for influence in the formerly Turkish-dominated area. The US government responded by invoking "the open-door policy," which had three elements: (a) that the nationals of all nations be subject, in all mandated territories, to equal treatment in law, (b) that no economic concessions in any mandated region be so large as to be exclusive, and (c) that no monopolistic concession relating to any commodity be granted. The US government maintained that the war had been won by the Allied and Associated Powers fighting together and that, consequently, any benefit—whether in oil interests or otherwise—should be available to the nationals of all the Allied powers and should not be seized by those of any one particular power (FTC 1952: 51–52). After year-long negotiations, in 1928 the United States, the United Kingdom and France reached a compromise. American companies received about a quarter of the Iraq Petroleum Company (IPC, formerly the Turkish Petroleum Company) concession. It was additionally agreed that all parties (companies and authorities included) should work jointly—and only jointly—in the region (Yergin 1991: 204). The region included the Arabic peninsula (except Kuwait), Iraq and Turkey. This was the so-called Red Line Agreement. In the areas inside the red line, the companies would pursue joint concessions.

Up until the Second World War, the security of oil supplies was handled very much in line with the traditional colonial and imperialistic behaviour of powerful oil-consuming states. The governments controlled the trading companies by the granting of concessions or direct ownership. The governments competed and colluded in order to secure political control over the oil-rich areas of the Middle East. Underneath this political order, a parallel system emerged among the Western oil companies, one which was to become dominant after the Second World War.

3.2 Security of Supply in the Hands of Companies

The Second World War represented a demonstration of the importance of secure oil supplies. The lifeline of the war operations in Europe was based on the steady flow of oil from the United States in convoys across the Atlantic Ocean. The convoys came under heavy attack from German submarines, but in 1943, the submarine attacks were reduced, partly due to the capture and code-breaking of the German Enigma machine. The halt of the German advances towards the oil fields in the Caucasus was another crucial oil-related war event and likewise the weak supply lines for oil in the North African advances of Field Marshal Erwin Rommel. The importance of secure oil supplies could hardly have been demonstrated more vividly than in Europe and elsewhere during the Second World War.

After the Second World War, the commercial role of oil exploded with the motorisation of daily life. During the 1950s and 1960s, oil was perceived as abundant given the vast number of new discoveries-in the Middle East and North Africa in particular. Having secured access to foreign petroleum resources as a vital part of their war strategy, the parties did not see the peace settlement as any reason to relinquish their control over these resources. On the contrary, as consumption in industry and consumer markets increased, the companies had a substantial economic interest in maintaining control over the international oil market. Without the war, the need for governmental involvement was perceived as less immediate. Together with the overall establishment of a liberal international trade regime, direct political interference in the international oil market was reduced, and the oil market became dominated by a small group of Western companies, known as the Seven Sisters.³ The Seven Sisters accounted for virtually all the oil produced outside the United States and the Second World, and they controlled and dominated the entire production chain, from exploration to sale of the refined products. The Sisters also organised their operations in the Middle East through a consortium which ensured that all the major companies were engaged in at least two countries. In this way, the Sisters stood stronger against possible regulation by the producing countries, as none of them was totally dependent on the will of one government only. This created a stable and integrated structure, although in the hands of companies, not governments.

3.3 The OPEC Challenge

During the 1950s and 1960s, North African oil exploration, outside the Red Line defined in 1928, intensified. North African oil did not have to be transported through the conflict area around the Gulf and the Suez Canal. Libyan oil contained less sulphur than most Gulf oil qualities; thus, it was cheaper to refine and could be priced higher than the heavier crudes of the Gulf region. In 1969, a coup d'état Libya made Muammar al-Qaddafi president. A few months later, the new oil minister, Ezzedine Mabrouk, told the oil companies operating in Libya that the government wanted negotiations about a price rise. Libya was less dependent on the Sisters, as other Western companies were responsible for almost 52 per

cent of Libyan oil production. Libya was outside of the Red Line (see above). By playing the independent Occidental companies and the Sisters against each other, Libya managed to raise the posted prices and the take the government received from them. After the Libyan affair, Iran and Venezuela increased their share of profits and a "game of leapfrog began" (Yergin 1991: 580): Why should Libya get a better deal than the other producers? Two agreements between the companies and producing countries were concluded in the spring of 1971-the so-called Tehran agreement between the international oil companies and the OPEC members exporting through the Persian Gulf and a similar agreement for the OPEC members exporting through the Mediterranean, called the Tripoli agreement. The two agreements covered tax and price increases and inflation compensation and fixed such rates for future years. The effects of the agreements were a 21 per cent price increase for Saudi Arabian crude (from \$1.80 to \$2.18) and an increase in government revenue of almost 40 per cent. What was more important, however, was the fact that the producer countries had now gained control over the price setting. Although the physical availability of oil supply seemed secure, as the new discoveries were made both in North Africa and in the Middle East, the price of oil was now in the hands of the oil-producing countries. Soon, also the physical supply became a matter of the greatest political tension.

On October 6, 1973, Egypt and Syria launched an all-out war against Israel with the aim of liberating the Sinai Peninsula and the Golan Heights, territories that had been occupied by Israel 6 years earlier during the Six-Day War. On October 17, Arab oil-exporting countries announced their intention to reduce production by 5 per cent per month until Israel retreated from the occupied territories and the rights of the Palestinians were restored (Blair 1976: 264). On October 19, the United States announced a new military aid package to Israel. All Arab exporters embargoed the United States and US forces abroad, while Saudi Arabia and Kuwait increased their across-the-board cutbacks to 10 per cent compared to the September level (Evans 1990: 441). The Netherlands was embargoed later in October, due to their pro-Israeli policy, and Iraq nationalised US and Netherlands interests in the Iraq Petroleum Company. On November 4, the Conference of Arab Oil Ministers decided a uniform 25 per cent cutback compared to September level, to be followed by additional 5 per cent in December (ibid). Saudi Arabia's Sheik Yamani later called the embargo a legitimate political action: "We watched America and learned how they use one's economic power to meet political objectives. We studied this carefully" (Robinson 1988: 95). Saudi Arabia took a large portion of the cutbacks. However, the Kingdom cancelled cutbacks for December 1973, and on December 25, the Arab oil ministers ordered a 10 per cent increase in production for January 1974. By January, OPEC overall production had increased again. No physical shortage of oil emerged, but expectations that the future might lead to a supply shortage drove up prices: "Nobody knew how long the cutback would last or how much worse it would get" (Adelman 1995: 110). The official Arab light oil price increased from \$2.40 per barrel in March 1973 to \$10.95 in January 1974.

A number of political issues are related to the embargo in the autumn of 1973, internally among the OPEC members, in the relationship between oil producers and consumers in general, and for the foreign policies of the United States and European countries. The aim of reducing the dependency on foreign oil became a matter of highest political urgency: "Aside from our military defence, there is no project of more central importance to our national security and indeed our independence as a sovereign nation" (Kissinger 1982). In the context of this chapter, the reactions in consumer countries are most relevant, and here, the price increases were, to some extent, seen as a symptom of resource scarcity. It fitted well with a recent influential publication from the Club of Rome called *Limits to Growth* published in 1972. "Its arguments were a potent element in the fear and pessimism about impending shortages and resource constraints that became so pervasive in the 1970s, shaping policies and responses of both oil-importing and oil-exporting countries" (Yergin 1991: 569). Robert Pindyck (1978: 36) refers to a CIA report claiming that "a crisis is likely to occur in the early 1980s as world energy demand exceeds supply, resulting in shortages of energy, rapidly rising prices, and economic contraction in all of the industrialized countries. ... This view has had an important role in forming the rationale for the Carter administration's energy program." There was no shortage; the price increase was a result of OPEC exercising market power, not a lack of available resources. As Pindyck (1978: 51) concludes: "The kind of worldwide energy crisis of concern to the CIA and the Carter administration is unlikely to occur." Nevertheless, the oil price was to increase once again. In the autumn of 1978, opposition to the Shah of Iran intensified, including strikes in the Iranian oil industry, which almost brought production to a halt in January 1979. Despite the fact that the other OPEC countries easily compensated for the disappearance of Iranian oil, demand increased as the buyers scrambled to secure their access to crude oil in case of a future demand surplus. From December 1978 to October 1979, the spot price increased from \$13.80 per barrel to \$38.35.

After the 1973 price shock, European oil consumption soon picked up again and continued to increase, but the 1979 price shock represented the peak of European oil consumption. The new price level triggered conservation, increased efficiency and substitution away from oil. In hindsight, it is also easy to conclude that oil had become overpriced. OPEC entered hard times trying to sustain the price level, until the oil price collapsed in 1986. The low price that followed did not increase European oil consumption as many European governments took the opportunity to increase taxes, instead of transferring the low crude oil price through to the product prices (Claes 2001: 69–75).

On the political level, the 1973 oil shock triggered the establishment of the International Energy Agency (IEA). In 1974, the US Secretary of State, Henry Kissinger, convened a conference in Washington with the aim of creating an organisation to counter the market power of OPEC. Later the same year, IEA was established with broader and less anti-OPEC aims. The core aim of the IEA was to handle future oil supply disruptions using an emergency oil crisis management system, originally triggered by a 7 per cent reduction in daily oil supplies. But in 1979, a more flexible system of crisis cooperation was adopted, and this was used again in the Gulf War in 1991 and following Hurricane Katrina in 2005. The IEA has become a vital institution for providing information on international energy, and its agenda-setting role has increased in recent years. However, as a market-governing institution, it is safe to conclude that the IEA "has limited authority in rule creation and enforcement" (Kohl 2010: 198), although the organisation might contribute to coordinated consumer behaviour by other means, such as information and statements regarding the market situation and proposals for joint action by member states. Some European countries have tried to create a dialogue between oil producers and consuming countries. In 1991 ministers from oil-producing and oil-consuming countries met in Paris. Such meetings have continued every 2 years and morphed into an organisation called the International Energy Forum (IEF), which, since 2003, has had a permanent secretariat in Riyadh (Lesage et al. 2010: 61–63). The confrontation of 1973 is long gone, but its passing has not led to the emergence of an overall global energy regime complex (Colgan et al. 2012: 130–31).

4 Global Oil Scarcity

The security issues related to political conflicts in the Middle East are still prominent, but the direct connection to oil supplies is less so. However, the rise in oil prices from 2003 to 2008 was interpreted by some as a structural phenomenon indicating a fundamental shortage of oil reserves globally (Areklett et al. 2010; Campbell 2005; Deffeyes 2005). In particular, those belonging to the Peak Oil School predicted that oil prices were soon set to increase dramatically due to a lack of sufficient reserves to meet increasing oil demand. If the world ran out of oil, this would of course affect Europe as well as other regions of the world. If one believes that the world is on the verge of running out of oil, the perception of both commercial and political aspects of the market changes dramatically. No political decisions could change this geological fact, so political attention would turn to alternatives. Available alternatives and more uncertain infant energy industries would probably attract large public subsidies. The perception of a fundamental threat to the existence of the modern world would emerge. In addition, the market actors' assumption of the availability of resources in the future is important for the present market situation. A fundamental geological depletion of world oil resources would create a continuous and almost unlimited increase in prices as the probability of supply shortage increases. To run out of oil would be dramatic, the question is—is it likely to happen?

Whenever oil prices are high, doomsayers predict the end of oil because the price increase is interpreted as signalling scarcity. A prospect of a future lack of available reserves increases demand in order to secure supplies in the present. This increased demand further raises prices, which again are interpreted as indicating oil scarcity. What is forgotten is that the oil market is a so-called cyclical market. When prices are low, oil consumption increases and the development of new reserves is put on hold. This combination of increased demand and reduced supply makes prices increase. When prices become high enough, demand is reduced and more reserves are profitable to develop, and therefore prices decline. The market psychology, institutional constraints and political factors can either reduce or enhance the volatility of this cyclical movement of the oil price. Interpreting price increases as being caused by scarcity would imply a continuous increase in prices, which, so far, has never been seen in the history of oil.

The true signal of scarcity is a sustained increase in the costs of replacing the oil produced with new reserves. A large portion of the world's oil reserves are, in fact, located in countries with falling replacement costs (Adelman 1993b). There is unarguably a fixed amount of physical oil resources in the world. However, the number of economically defined reserves we are able to profitably extract is increasing over time, due to technological advances and increased efficiency in the oil industry. Thus, whatever "is left in the ground is unknown, probably unknowable but surely unimportant; a geological fact of no economic interest" (Adelman 1993a: 220). When the oil price increases, production costs also tend to increase, but this is not due to any lack of available reserves or the development of more remote or complicated oil provinces. The production costs increase due to the absence of cost control in the oil industry when profit increases.

Breakdown of total costs show wide variations in the cost structure of oil production. Large producers in the Middle East, like Iran, Iraq and Saudi Arabia, have low production costs and taxes, but higher transportation costs. Russia has a high tax share of the total costs. Figures presented by *The Wall Street Journal* in 2016 show a sample of countries producing a third of the world's total oil production have total costs of less than \$20 per barrel. The actual production costs, excluding taxes, capital spending and transportation, are around \$5 per barrel for the United States, around \$4 for Norway, about \$3 for Saudi Arabia and Russia and around \$2 per

barrel in the case of Iran and Iraq.⁴ Thus, it is possible to produce large quantities of oil at very low cost. In some of these countries, the geology is very favourable. In other cases, like US shale and Norwegian offshore, technological advances and efficiency gains have turned resources into profitable reserves. Such advances are likely to continue. There are no signs today that overall replacement costs are increasing, nor does the present production level seem to be depleting world oil reserves. The so-called R/P ratio divides the total proven oil reserves by the production level can be sustained given the proven reserves. In 1980, the world's R/P ratio was 25 years. In 2015, the figure was 52.5 years.⁵ Not only have the world oil reserves been sustained, they have increased even relative to higher production levels. The claim that the world is "running into oil, not out of oil" still holds (Odell 1994).

5 EU Oil Security Situation

From the perspective of the consuming countries, the 1970s was a period of a highly politicised oil market and in certain situations, as in 1973, clearly securitised. Oil was in general physically available, although it was perceived both as scarce and as a potential political weapon in the hands of the producers. Following the oil price fall of 1986, this perception changed dramatically. With slower growth in demand and a low price, oil was abundant and affordable—just like any other ordinary commodity. Furthermore, the low price motivated the oil producers to introduce trading methods which removed price setting from their control and placed it in the hands of the oil traders (Mabro 1987). The increased competition for outlets in the mid-1980s created various instruments for discounts and hedging.

Over the years, a 24-hour, free-trading oil market has emerged, replete with spot prices, instant price references and internet-based oil exchanges. The idea of a single producer, or group of producers, withholding oil from a particular consuming country or group of countries, is simply not conceivable in the present market. The other side of the coin is a spot price far more responsive to any kind of information which might affect

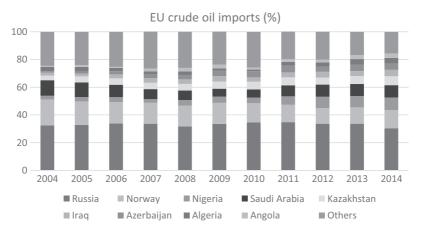


Fig. 12.3 Origin of EU-28 crude oil imports (%) (Source: Eurostat (2016))

its position. However, this is less of a challenge for political leaders aiming to secure physical supplies, as it is for the producing countries who want to control the oil price. This free-trading market structure does not preclude the consumers applying political means in order to improve their security of supply. The last part of this chapter is devoted to such efforts from the European Union, but first it is necessary to identify the origins of EU oil supplies (Fig. 12.3).

In 2004, Russia and Norway were responsible for more than half of the EU's crude oil imports. By 2014, the role of these two countries was slightly reduced to about 43 per cent, but Russia still constituted around 30 per cent. As indicated above, most of the oil from these suppliers takes the form of trade in a commercial free-trade market. On the political level, the EU faces very different suppliers—economically, politically and culturally. Thus, the Union will have to be flexible and responsive and able to enter into contrasting kinds of political dialogue with each supplier.

The counterparts of the EU differ widely with respect to their position on free trade. The one energy supplier that, in fact, is part of the Internal Energy Market is Norway. Norway appears to be of minor importance if one reads the energy strategy documents of the Commission, but this is probably a result simply of the perceived economic and political proximity between the EU and Norway. In fact, Norway is the second largest supplier of both oil (approx. 13 per cent) and gas (approx. 31 per cent)

to the EU. The energy relationship between the EU and Norway has, for most of the time, been cooperative and based on commercial principles, although there have been instances when even this relationship has had certain political and conflictive features. By far, the most important supplier of energy to the EU, however, is Russia. Energy relations with Russia are particularly important in the gas market, but oil supply from Russia is also given special attention by the EU, both in terms of Russian market strategies and internal concentration in the Russia oil industry (EC 2014: 10–12). Russian foreign economic policy has obviously changed, initially from an extremely low score on free trade during the Soviet era when the country was a prominent advocate for the planned economy. During the first decade after the break-up of the Soviet Union, it seemed as if Russia would rapidly enter the pool of market economies. However, the experience over the last two decades has weakened this assumption. When it comes to its energy relations with Russia, the EU will have to "shoot at a moving target" as some of the underlying features of Russia's economic system are subject to change. Since increased power is located in the hands of the president, the policy can easily shift in line with the personal ideas and the interests of the particular power base of different presidents. The importance of flexibility seems greater than ever. The latest conflicts over Russian annexation of the Crimean peninsula and the war in Ukraine obviously increase the securitisation of all energy relations with Russia (see chapters 9, 10 and 11). When it comes to other regions like the Caucasus, the Middle East and Africa, the market approach doesn't seem a feasible strategy for several decades, if ever. Thus, the strategies towards these regions imply more use of political instruments. In 1989 the Gulf Cooperation Council (GCC) and the EU signed a cooperation agreement, which prescribes future negotiations on a Free Trade Agreement (FTA) between the EU and the GCC. FTA negotiations started in 1990 but soon reached a deadlock. Despite the lack of an FTA, trade and economic exchange between both regions has increased. The GCC is currently the EU's fifth largest export market and the EU is the top trading partner for the GCC with an 18 per cent share of total GCC trade. As the (enormous) Eurogulf study shows, there are substantial gains to be made from energy integration between GCC and the EU (Luciani 2005). In the oil sector, the study argues that "80 per cent of conventional oil production, up to 104 million barrels per day, could be developed and operated at a cost of less than \$8 per barrel ... perhaps \$12–\$14/bbl" (Luciani 2005: 7).

6 EU Oil Security Challenges

There are two main challenges for the EU in order for it to become a global political force in the governance or diplomacy of the global oil market: Do the member states want to take on such a role, and do the EU institutions have the capacity to do so?

Political Will In the EU Commission's green paper, "A European Strategy for Sustainable, Competitive and Secure Energy" (EC 2006), the need for a coherent external policy is identified, and the member states are called upon to support such a position. A number of key goals are set out including a clear policy on securing and diversifying energy supplies, energy partnerships with producers, transit countries and other international actors, reacting effectively to external crisis situations and integrating energy into other policies with an external dimension. With the possible exception of the last goal, all these ambitions are dependent on other actors. In such political-economic negotiations the EU does have one valuable asset: the inclusion of energy into broader integration processes: "In line with the European Neighbourhood Policy and its Action Plans (and in addition to the current work undertaken through Partnership and Cooperation Agreements and Association Agreements), the EU has, for some time, been engaged in widening its energy market to include its neighbours and to bring them progressively closer to the EU's internal market. Creating a 'common regulatory space' around Europe, would imply progressively developing common trade, transit and environmental rules, market harmonisation and integration. This would create a predictable and transparent market to stimulate investment and growth, as well as security of supply, for the EU and its neighbours" (EC 2006). The potential for linking issues together increases, as more sectors are included in the negotiations and integration processes. In 2015, the EU Council concluded that EU Energy Diplomacy should

have less regulatory ambitions and place greater reliance on traditional diplomacy (EU Council 2015).

Institutional Capacity The European history of integration is an impressive story of the transformation of interstate cooperation into a polity in its own right, although with several shortcomings when unfairly compared to the polity of modern fully fledged national states. For the purpose of this chapter, it is of interest that a key element of this integration process is a combination of political bargaining between states and institution-building at the community level. Looking back at the recent history of the Internal Energy Market, these features are very clear. They are perfectly suited for what is known as "negative integration," where the purpose is to remove existing barriers between countries. When the ambition extends to building new policies at the community level, some additional features of the polity become essential. For instance, one needs the capability to formulate policy proposals and gain the support of stakeholders, different parts of the political elite and, preferably also, the public. A general observation concerning the European integration process over the last decades is new challenges arising from this shift from negative to positive integration (Scharpf 1999). Taking this even one step further, we can ask what kind of features are needed once the EU aims at developing a common policy towards other actors outside the community. One important factor in the literature on foreign policy is the importance of internal coherence. The minor role of the EU in the Iraq crisis was, of course, due to the strong interests of the United States, but the fact that the EU countries could not, or would not, agree on a common policy obviously weakened their power as critics or allies of the United States. In international relations, one also needs the willingness and ability to act and, in certain cases, to act with vigour (Baldwin 1979).

7 Conclusion

The disentangling of the concept energy security suggested in the introduction, taken together with the empirical observations made in this chapter, generates two different concluding remarks: a structural and a strategic one. The first refers to the physical sense of oil security and the second to the economic and political perception of oil security mentioned in the introduction.

Regarding the structural dimension, the fundamental question is to what extent the geologically defined fixed amount of oil has any significant economic or political implications. Presently, and for the foreseeable future, the geologically defined amount of oil resources in the ground is a geological fact of no economic or political importance (cf. Adelman 1993a). A widespread perception of a physical shortage of oil is unlikely and can only have the economic effect of increasing prices and the political effect of fomenting conflicts.

The strategic dimension captures what kind of policy or strategy most effectively increases the actors' perception of possessing a secure energy future—in this case the European countries and the EU. Here, we can see two very different paths presently available: the globalisation strategy of the liberal free market and free-trade policies and the mercantilist approach of trying to gain exclusive access to energy resources and reserving them for your own national consumption. As argued above, the EU is destined to follow the first path, although the fruitfulness of these two strategies depends on what is perceived as the most important element of energy security. If supply security is predominant, Churchill's conclusion-"safety and certainty in oil lie in variety and variety alone"-still holds.⁶ However, I would argue that in modern times the physical supply of oil has hardly ever been severely jeopardised. The important element of energy security today is related to the *price* of oil. Taken together with the fact that we do have a globally interconnected and fully liberalised market for oil trade, variety has no meaning, as the price will be same, and increase simultaneously, for oil delivered from all sources. In such a market, the old type of geopolitics comes across as very ineffective. However, the strengthened internal energy policy of the EU suggests that oil security can increase as a by-product of intensified efforts on the part of the EU member states to increase energy efficiency and de-carbonise the energy consumption of the Union at large. These efforts will most likely affect oil less radically and later than coal and natural gas, but even the oil sector will eventually feel the effect of the European energy transition. Alas, a topic beyond the scope of this chapter.

Notes

- http://ec.europa.eu/energy/security/index_en.htm. Accessed on August 29, 2010.
- 2. In this chapter, 'Europe' is an imprecise concept. In discussions of current oil-related political affairs, the focus is on the European Union. In current oil-related economic affairs, the focus is on European oil consumption, including all European countries. In the historical parts, the focus is mainly on Western European countries.
- 3. The designation "the Seven Sisters" was first used by the Italian oilman Enrico Mattei and was later used as the title of Anthony Sampson's book about the seven largest oil companies (Sampson 1975: 11). This group comprises Exxon, Mobil, Standard Oil of California, Texaco, Gulf (all American), British Petroleum (BP; 51 per cent of the shares were formerly held by the British government) and Royal Dutch/Shell (60 per cent Dutch and 40 per cent British). Compagnie Francaise des Pètroles (CFP) is sometimes included in this group, despite representing a minimal share of world production (approximately 1.2 per cent in 1950) (Schneider 1983: 39).
- 4. WSJ News Graphics, April 15, 2016, http://graphics.wsj.com/oil-barrelbreakdown/. Based on Rystad Energy Ucube.
- 5. BP Statistical Review of World Energy, 1980 and 2016.
- 6. Quoted in Yergin 2006: 69.

References

- Adelman, Morris A. 1993a. *The Economics of Petroleum Supply*. Cambridge, MA: MIT Press.
- . 1993b. Modelling World Oil Supply. *The Energy Journal* 4 (1): 1–33.
- ———. 1995. The Genie Out of the Bottle—World Oil since 1970. Cambridge, MA: MIT Press.
- Areklett, Kjell, et al. 2010. The Peak of the Oil Age—Analyzing the World Oil Production Reference Scenario in World Energy Outlook, 2008. *Energy Policy* 38: 1398–1414.
- Baldwin, David A. 1979. Power Analysis and World Power. *World Politics* 31 (2): 161–194.
- Blair, John M. 1976. The Control of Oil. New York: Vintage Books.

BP. 2016. BP Statistical Review of World Energy. London: British Petroleum.

- Buzan, Barry, and Ola Wæver. 2003. *Regions and Powers*. Cambridge: Cambridge University Press.
- Campbell, Colin J. 2005. Oil Crisis. Brentwood: Multi-Science Publishing.
- CIEP. 2004. *Study on Energy Supply Security and Geopolitics*. Report Prepared for DGTREN. The Hague: Institute for International Relations. Clingendael International Energy Programme. Accessed from: http://ec.europa.eu/comm/energy_transport/doc/2004_lv_ciep_report_en.pdf.
- Claes, Dag Harald. 2001. *The Politics of Oil-Producer Cooperation*. Boulder: Westview Press.
- Colgan, Jeff D., Robert O. Keohane, and Thijs Van de Graaf. 2012. Punctuated Equilibrium in the Energy Regime Complex. *The Review of International Organizations* 7 (2): 117–143.
- Darmstadter, Joel, Perry D. Teitelbaum, and Jaroslav G. Polach. 1971. Energy in the World Economy—Statistical Review of Trends in Output, Trade, and Consumption Since 1925. Baltimore: Johns Hopkins Press.
- Deffeyes, Kenneth S. 2005. *Beyond Oil: The View from Hubbert's Peak*. New York: Macmillan—Hill and Wang.
- EC. 2014. European Energy Security Strategy, European Commission COM (2014) 330 final, 10.
- ——. 2006. A European Strategy for Sustainable, Competitive and Secure Energy. EU Commission Green Paper.
- EU Council. 2015. Outcome of Proceedings—Council Conclusions on Energy Diplomacy. Council of the European Union, Ref. 10995/15.
- Eurostat. 2016. Main Origin of Primary Energy Imports, EU-28, 2004–14 (% of Extra EU-28 Imports) YB16.png.
- Evans, John. 1990. OPEC and the World Energy Market: A Comprehensive Reference Guide. Essex: Longman.
- FTC. 1952. *The International Petroleum Cartel*. Washington, DC: Staff Report to the Federal Trade Commission.
- Goldthau, Andreas, and Jan M. Witte, eds. 2010. *Global Energy Governance— The New Rules of the Game*. Berlin: Global Public Policy Institute.
- Kissinger, Henry. 1982. Foreword. In *The Critical Link: Energy and National Security in the 1980s*, ed. Charles K. Ebinger. Cambridge: Ballinger.
- Kohl, Wilfrid L. 2010. Consumer Countries' Energy Cooperation: The International Energy Agency and the Global Energy Order. In *Global Energy Governance—The New Rules of the Game*, ed. Andreas Goldthau and Jan Martin Witte. Washington, DC: Brookings Institution.

- Lesage, Dries, Thijs Van de Graaf, and Kirsten Westphal. 2010. *Global Energy Governance in a Multipolar World*. Farnham: Ashgate Publishing.
- Luciani, Giacomo. 2005. EUROGULF—An EU-GCC Dialogue for Energy Stability and Sustainability. *Executive Summary and Policy Paper*. Florence: European University Institute. Accessed from: http://www.iue.it/RSCAS/etexts/200503EUROGULF_Summ&PP.pdf.
- Mabro, Robert. 1987. *Netback Pricing and the Oil Price Collapse of 1986*, Working paper WPM 10. Oxford Institute for Energy Studies.
- Odell, Peter R.1994. World Oil Resources, Reserves and Production. *Energy Journal* 15 (Special Issue on The Changing World Petroleum Market): 89–114.
- Pindyck, Robert. 1978. OPEC's Threat to the West. *Foreign Policy* 30 (Spring): 36–52.
- Robinson, Jeffrey. 1988. Yamani-The Inside Story. London: Simon & Schuster.
- Sampson, Anthony. 1975. The Seven Sisters: The Great Oil Companies and the World They Made. London: Hodder and Stoughton.
- Scharpf, Fritz. 1999. *Governing in Europe—Effective and Democratic?* Oxford: Oxford University Press.
- Schneider, Steven A. 1983. *The Oil Price Revolution*. Baltimore: Johns Hopkins University Press.
- Stritzel, Holger. 2007. Towards a Theory of Securitization: Copenhagen and Beyond. European Journal of International Relations 13 (3): 357–383.
- Yergin, Daniel. 1988. Energy Security in the 1990s. *Foreign Affairs* 67 (1): 110–132.
 - ——. 1991. *The Prize—The Epic Quest for Oil, Money and Power*. London: Simon & Schuster.

——. 2006. Ensuring Energy Security. Foreign Affairs 75 (2): 69–82.