The Hague Centre for Strategic Studies

NO BLOOD FOR OIL?

Economic Security, Energy Security and the Military

The Hague Centre for Strategic Studies

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The Hague Centre for Strategic Studies (HCSS)

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Cover image The BP natural gas plant in In Amenas/Tiguentourine, Algeria, two weeks after the attacks by al Qaeda-linked terrorists, on 16 January 2013. (Polaris Images / Hollandse Hoogte)

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ECONOMIC SECURITY, ENERGY SECURITY AND THE MILITARY

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EXECUTIVE SUMMARY

Goal, Context and Scope of the Study

This report was commissioned by the Dutch Ministry of Defense (MOD) with the aim of strengthening Dutch policy on economic security. It specifically investigates ways in which the Dutch armed forces can contribute to resolving economic security challenges for the Netherlands.

There are a number of reasons as to why this study is particularly relevant for today's security environment. First and foremost, competition over access to energy and natural resources (oil, gas, metals, minerals, food and water) is increasing due to population growth and industrialization in emerging economies. At the same time this causes producing countries to exhibit state-capitalist tendencies and install export quotas and other protectionist measures, thereby undermining free trade. This, in turn, increasingly causes consumer states to resort to pro-active resource acquisition abroad. China's forays into Africa in search of energy and minerals are well-documented, as is the longstanding commitment of the United States (US) to guarantee the free flow of oil from the Middle East.

Against this backdrop, economic security warrants the protection of trade routes, critical infrastructure and vital sectors of the economy, coupled with keeping a competitive edge in industry. It is precisely this competitive position that is currently being threatened by the advent of abundantly available, inexpensive, unconventional energy resources (shale gas and oil) in the US. It is here that economic security can spill over into traditional geopolitical concerns, because, in a longer term perspective, massive domestic shale gas and oil production enables the US to rebalance its foreign policy from being oriented largely towards the Middle East to addressing the Far East and Pacific regions in greater depth. This could mean that stability in the Middle East and North Africa will increasingly demand European engagement – at a time of shrinking defense and foreign development budgets and tough austerity measures throughout the EU.

This report explores one issue of economic security in particular: the geopolitical influences on Dutch energy security, in particular the various security issues related to oil and gas. The reason for doing so is that oil and natural gas stand out from other natural resources when it comes to the potential for geopolitical tension that is associated with their acquisition. Moreover, as a natural gas exporter and home to oil major Royal Dutch Shell, the Netherlands is a key energy player who is affected by changes in the global energy landscape and geopolitical tension in oil

and gas markets. Nevertheless, we acknowledge that economic security pertains to a multitude of issues, not limited to energy security alone. Therefore, we discuss these issues within the context of the wider debate on Dutch economic security, and explore a possible role for the Dutch Ministry of Defense to contribute to this issue, realizing that any response should fit within a comprehensive approach and international context.

The Evolution of the Concept of Economic Security in the Dutch Security Policy Context

Economic security is in the first place about having a strong and resilient economy that generates prosperity for the citizens of a country. This implies that the mitigation of any threat to the economy becomes part of a state's thinking and policy on economic security. This makes economic security a multi-dimensional concept.

Since the early 2000s, Dutch thinking on security and foreign policy became based less on normative values, such as the international rule of law, and more on national interests. Safeguarding Dutch economic assets became a policy priority. This coincided with an increased awareness that Dutch assets have become increasingly vulnerable due to an increase in interconnectedness of the world and of economic and infrastructural nodes within the Netherlands itself.

In 2007, the Dutch government issued the National Security Strategy (*Strategie Nationale Veiligheid*, or SNV), which was followed by the International Security Strategy (*Internationale Veiligheidsstrategie*, or IVS) in 2013. With these two documents the concept of economic security has become anchored into Dutch security policy. The SNV defines economic security as 'the undisturbed functioning of the Netherlands as an effective and efficient economy.' Economic security can be compromised when, for example, trade with an important foreign trade partner collapses. The SNV also mentions the opposite of economic security, namely economic insecurity, which may be caused by extreme shortages of energy or other raw materials.

This last point was further developed by the IVS in 2013, which stresses that as an open economy, international developments have a direct or indirect impact on Dutch economic security. It emphasizes the vulnerability of the Netherlands due to its import dependence of raw materials and energy. As a consequence, securing international trade routes and supply chains against the threats of piracy is an important Dutch

interest. The Netherlands also has a stake in assuring a level playing field in energy and natural resources markets, including more transparency, integrated reporting and abiding by the rules, enabling Dutch companies to compete fairly worldwide.

The impact of the IVS on the overall evolution of the concept of economic security has been that it has become even clearer that the Dutch national interests both in terms of national security and economic security are heavily influenced by international developments. As a result, public global goods, such as maritime security and free trade, have become part of the so called extended national interests.

A consequence of the heightened attention for economic security since 2007 is that many different government agencies started to develop a vision of this topic. Each of these organizations developed their own approach with a slightly different focus; although there is also significant overlap in the dimensions they consider part of economic security. The government, including the MOD, also has collaborated with the private sector and involved civil society. As a consequence, economic security has become a topic that, paradoxically, concerns everybody but is 'owned' by nobody within the government. This highlights the importance of a comprehensive, all-of-government approach, including the Ministry of Defense. This is, nonetheless, not self-evident, as diversity of stakeholders also comes with potential tensions between those in favor and those against more government intervention for economic security.

Energy Security

The high degree to which important oil- and natural gas-producing countries are prone to instability poses a risk of interruptions to their energy exports. Such interruptions often lead to a rise in the price of energy products, notably oil. For an open economy such as the Netherlands, upward energy price swings are damaging to economic growth. Countries which warrant specific attention given the presence of Royal Dutch Shell are Egypt, Algeria and Nigeria. Past and ongoing instability in these countries has frequently led to a (temporary) disruption of business operations, raising costs of production.

The issue of internal instability is even more problematic in countries which flank strategic maritime energy arteries. Particularly problematic areas are the seas around Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca. The presence of piracy activity around these strategic waterways cannot be viewed independently from the circumstances in neighboring countries. The situation in Somalia and Yemen clearly illustrates this problem.

Internationally, the US' shale gas revolution is beginning to leave its mark on energy markets in Europe as well. Furthermore, bolstered by projected energy self-sufficiency, the US' Asia rebalancing is opening up space for emerging economies to become more active in Middle Eastern energy affairs. However, with few countries currently able and/or willing to lay down a military presence comparable to that of the US, increased competition between India and China in fact runs the risk of destabilizing an already volatile region.

Shale gas acts as a catalyst for oil substitution in certain energy-intensive economic sectors which, when coupled with increased fuel efficiency, could lead to a slowdown in oil demand growth in the long term. This observation is particularly problematic for energy-exporting countries that to a large extent rely on the revenue generated by oil sales and are poorly equipped to deal with a declining oil price. Countries most at risk are those of an anocratic regime type, which suffer from high youth unemployment and possess limited financial buffers (sovereign wealth funds); notably Russia, Algeria and Venezuela. The EU could thus face heightened instability in two of its most important suppliers of natural gas. For the Netherlands specifically, the presence of Russia in this list is problematic given the deepening trade relationship between the Netherlands and Russia and the dominance of Russian oil trade in the port of Rotterdam. Worsening economic conditions in Russia are thus likely to adversely affect the economic security of the Netherlands, notably the energy security partnership. Finally, instability in Venezuela could affect the security of the Dutch Antilles which are located in close proximity.

Economic Security, Energy Security and the Role for the Military

More than is the case now, protecting Dutch economic security, and in particular energy security, could go hand in hand with other policy goals of the government, such as promoting the international rule of law and tackling state fragility. Addressing the problems of fragile states and their intrastate instability requires a comprehensive approach, addressing security, governance and development. For the military, this indicates a stronger emphasis on the 'strategic functions' that precede actual conflict, namely anticipation and prevention.

Anticipation comprises preparations for foreseen and unforeseen developments and incidents that may affect the interests of the Kingdom of the Netherlands or the international rule of law. The developments analyzed in this study call for the increasing relevance of anticipation, and a focus on specific topics and areas. Anticipation should be aimed at Algeria, Russia, and Venezuela, from the perspective of shale gas as a

catalyst for instability. Second, from the perspective of the countries which are particularly prone to internal instability, combined with the presence of Dutch companies, Egypt, Algeria and Nigeria stand out. Third, from the perspective of chokepoints, the countries around Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca are especially important, including the respective sea streets themselves.

Prevention includes taking active steps to prevent a threat from having a negative impact on Dutch interests or the international rule of law. Prevention of these issues could include military presence (peacetime military engagement) in or around the countries or chokepoints at stake, or military assistance to foreign security organizations, in order to enhance internal stability and security. In particular Algeria, Russia, Venezuela, Egypt, and Nigeria could be candidates to engage with military presence and Security Sector Reform (SSR) activities. The same applies to states along Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca. Finally, preventive deployment, for instance in SSR missions, could also serve as a source of intelligence in support of the strategic function anticipation.

Further, the upcoming threat of anti-access/area denial (A2/AD) capabilities means that protection and deterrence become of increasing relevance, as such emerging capabilities could facilitate countries or non state actors in closing off specific chokepoints or threatening sea lines of communication (SLOCs). This does not only require updated operation concepts among the armed forces, but, more importantly, also reinforces the need for European expeditionary full-spectrum forces. Furthermore, the latter argument is reinforced by the increased risk of interventions in specific regions and countries.

Further Implications for Policy

A matter for further consideration is the link between policy which relates to national security as a whole and policy that impacts subdomains of security – including economic security. Many of the policy debates that influence the latter are not directly linked to this policy in particular or national security policy in general. For instance, governments make myriad economic decisions that also have security implications. Examples may include various forms of protectionism (e.g. agricultural) that have a direct impact on the livelihoods in potentially troubled parts of Europe's neighborhood or regulatory regimes for FDI that may impact national security. The MOD and the Ministry of Foreign Affairs could jointly act as *strategic custodians for national security*. In this capacity, the two ministries take it upon them to promote consistency in policy-

making across government, from the perspective of national security as a integrated domain.

Furthermore, economic security is one of the five vital national interests defined in the Dutch National Security Strategy. In itself, the lessons learned from the development of this strategy could be used as a model to implement a whole-of-government process regarding the policy and capability issues particular to promoting Dutch *economic* security. In the absence of a strong – in terms of mandate and assets – General Affairs department, this would assign custodianship of the whole-of-government process to a particular ministry to coordinate (but not integrate) policy across various government stakeholders. The most apt ministry for such a coordinating and facilitating role seems to be the Ministry of Economic Affairs, possible in close association with the Ministries of Development Aid and Foreign Trade.

1 INTRODUCTION

INTRODUCTION

Competition over access to energy and natural resources (oil, gas, metals, minerals, food and water) is increasing, in particular due to strong population growth, industrialization and the rise of an increasingly affluent middle class in emerging economies. This in turn fuels a sharp increase in demand for energy and natural resources which – in order to satisfy this demand – are increasingly considered strategic assets by consumer states. At the same time, the surge in demand for energy and natural resources causes producing countries to exhibit state-capitalist tendencies and install export quotas and other protectionist measures, thereby undermining free trade. This, in turn, increasingly causes consumer states to resort to pro-active resource acquisition abroad. China's forays into Africa in search of energy and minerals are well-documented, as is the longstanding commitment of the United States (US) to guarantee the free flow of oil from the Middle East.

Against this backdrop, economic security warrants the protection of trade routes, critical infrastructure and vital sectors of the economy, coupled with keeping a competitive edge in industry. It is this competitive position that is currently being threatened by the advent of abundantly available inexpensive unconventional energy resources (shale gas and oil) in the US. It is here that economic security can spill over into traditional geopolitical concerns. In a longer term perspective, massive domestic shale gas and oil production enables the US to rebalance its foreign policy from being oriented largely towards the Middle East to addressing the Far East and Pacific regions in more depth. This suggests that stability in the Middle East and North Africa will increasingly demand European engagement – at a time of shrinking defence and foreign development budgets and tough austerity measures throughout the EU. The January 2013 attack by al Qaeda-linked terrorists on the BP natural gas plant at In Amenas/Tiguentourine (see cover image), which left dozens dead, highlighted the risk of intrastate instability to the lives of workers, as well as to business operations of Western companies in this part of the world.

These dynamics have caused the Dutch government to consider strengthening its economic security. Economic security is indeed a broad topic that includes various different security challenges such as economic espionage, cyber security, numerous resource-related issues, energy security, reliable investor relations with foreign countries, and a healthy national economy.

This report explores one of these issues: the geopolitical influences on Dutch energy security, in particular the various security issues related to oil and gas. The reason for doing so is that oil and natural gas stand out from other natural resources when it comes to the potential for geopolitical tension that is associated with their acquisition. Moreover, as a natural gas exporter and home to oil major Royal Dutch Shell, the Netherlands is a key energy player who is affected by changes in the global energy landscape and geopolitical tensions in oil and gas markets. Nevertheless, we acknowledge that economic security pertains to a multitude of issues, not limited to energy security alone. Therefore, we discuss these issues within the context of the wider debate on Dutch economic security, and explore a possible role for the Dutch Ministry of Defense (MOD) to contribute to this issue, realizing that any response should fit within a comprehensive approach and international context.

This report is structured in the way that we first address the evolution of the concept of economic security in the Dutch security policy context (chapter 2). Then, we discuss the role of energy supplies and energy security in an economic security context (chapter 3). Subsequently, we explore possibilities for the Dutch MOD to contribute to resolving economic security challenges for the Netherlands (chapter 4). The final chapter includes conclusions and a discussion on the broader energy security debate, as well as an elaboration of a possible role for the MOD.

The title of this report refers to one of the two opposing views on the use of force to secure access to or control energy sources, which argues that resource wars will become obsolete in the 21st century, because of a combination of the increasing number of powers that would likely become involved, the immense costs, and the mutual interest in stability. The opposing view, however, argues that, with increased global competition over access to energy, the militarization of energy security by the world's superpowers is a harbinger of military conflict, and that the militarization of energy policy increases the risk of resource wars.

To conclude, this report provides new insights into the challenge of providing economic security for the Netherlands in a context of resource scarcity, trade restrictions and protectionist tendencies. More specifically, the study explores which response options exist to tackle the serious security implications that these developments pose to the Netherlands.

2 THE EVOLUTION OF THE CONCEPT OF ECONOMIC SECURITY IN THE DUTCH SECURITY POLICY CONTEXT

2 THE EVOLUTION OF THE CONCEPT OF ECONOMIC SECURITY IN THE DUTCH SECURITY POLICY CONTEXT

Introduction

This chapter analyzes the evolution of the concept of economic security in the context of Dutch security policy. Before looking at the case of energy in Chapter 3 and the possible role for the Ministry of Defense in Chapter 4, this chapter aims to clarify the meaning of economic security. It focuses on economic security at the level of the state. Therefore, it examines economic security in the broadest sense: it does not only look at energy security but also at other dimensions of economic security; it does not only look at the relevance for the Ministry of Defense but also at its relevance for other Ministries; it does not only look at the Netherlands but also at how other European countries and international organizations look at this issue. The methods used for this chapter were desk research and expert interviews.[1]

The objectives of this chapter are multiple. Overall, the chapter aims to provide a conceptual framework for evaluating economic security in the following chapters of this report. It does so in the following way. First, the chapter gives an overview of the different conceptualizations of economic security in the academic literature. Section 2.1 shows that economic security can be conceptualized as comprising various dimensions that contribute to a properly functioning, strong and resilient economy.

Second, the chapter aims to highlight the relevance of economic security for the Netherlands as an open economy, trade nation, large foreign investor and recipient of large foreign investment. Section 2.1 sketches the importance of economic security for the Netherlands and the reason why it is currently on the national policy agenda.

Third, the chapter posits that economic security has been increasingly considered an important topic. Several global trends, such as globalization and digitization, have blurred the frontier between the national and the international, creating new vulnerabilities. Section 2.3 explains how a change in the conceptualization of the

national interest contributed to the first National Security Strategy followed by the International Security Strategy. The publication of these documents – which will be discussed in section 2.4 – marks an important milestone, as they anchored economic security into Dutch policy. Finally, some debates on how to best safeguard the Netherlands' economic security will be discussed in section 2.5, and the instruments that were developed to do so in section 2.6.

2.1 Conceptualizations of Economic Security in the Academic Literature

Definitions of economic security vary widely and are continuously developing. In the academic literature, economic security means different things in different disciplines. Most commonly, it is used in the socio-economic literature to refer to security of existence, employment, and income. This literature mainly focuses on the (social and) economic security of vulnerable groups in society. Another example is the use of economic security in the banking and investment literature, where economic security has been defined as 'an institutional framework that inspires the confidence of savers and investors and guarantees the physical security of individuals and the legal security of transactions.'[2] Most relevant to this report is the use of economic security in the field of security studies, which looks at economic security from the perspective of the state, and sometimes the military, and in the context of international relations.

Definitions in Security Studies

After the Cold War, researchers in this discipline became more interested in the intersection between hard security issues and political economy issues.[3] According to Vincent Cable, a British economist and politician, redefining security was an understandable consequence of the end of the Cold War. He warns however, that this increased attention to the intersection with political economy runs the risk of expanding the definition of security too far: 'There is … a danger that the debate is being hijacked by concepts like geo-economics which have little to do with security in any meaningful sense.'[4]

In the security literature, economic security is used in the context of the study of states, but often a clear definition is lacking. Cable reviews several definitions and approaches to economic security. In the first approach, economic security refers to:

> 'those aspects of trade and investment which directly affect a country's ability to defend itself: freedom to acquire weapons or related technology, reliability of supplies of military equipment, or threats of adversaries acquiring a technological advantage in weapons.'[5]

A second approach defines economic security in terms of economic policy instruments 'which are used for purposes of aggression (or defense): trade and investment boycotts; the restriction of energy supplies. Security needs have often been defined in terms of 'security of supply'.'[6] This approach is followed by Barnhart, who portrays economic security as an economic policy that is necessary to create an army that is strong enough to defeat all enemies during a long-lasting conflict. Investment, trade and security of supply of natural resources are mentioned as elements of such a policy.[7]

The third usage of economic security finds it origins in the current interest in geo-economics, which posits that the relations between leading countries are characterized by a state of economic warfare. In this kind of warfare adversaries do not engage each other in combat with weapons such as cruise missiles or stealth bombers. Instead, countering threats to national security involves economic policy measures, such as export restrictions, economic sanctions, or aggressive government support for domestic producers as opposed to foreign competitors (protectionism). Central to this approach to economic security is the idea that 'relative military capacity, or projection of power, may be undermined by relatively poor economic performance and requires an economic policy response.'[8] This idea is central to, for example, the fear of American declinism in the face of China's emerging economic power.

Multidimensional Issue

The common denominator between these three definitions is that economic security is in the first place about having a strong and resilient economy that generates prosperity for the citizens of a country. Anything that is required for a strong and resilient economy and the proper functioning of the economy could potentially be a dimension of economic security. Conversely, anything that can damage the economy could potentially be considered a threat to economic security. This implies that the mitigation of these threats becomes part of a state's thinking and policy on economic security. This makes economic security an issue with a virtually unending number of different dimensions. This multidimensionality is further enhanced by increased internationalization of almost all policy domains. Due to the acceleration of globalization since the end of the Cold War, the national economic security of countries can no longer be viewed separately from international security. Hence, transnational security issues, such as cyber security and maritime security have become associated with the concept of economic security. Figure 1 shows some of these dimensions of economic security. The question mark aims to indicate that economic security is not limited to only those dimensions.

FIGURE 1: ECONOMIC SECURITY: A MULTIDIMENSIONAL ISSUE

Of the many dimensions of economic security shown in Figure 1, some are more developed in the Dutch policy context than others. This report looks at one specific sub-element of economic security, namely energy security. Before zooming in on energy, however, the remainder of this chapter will first discuss the relevance of the overall concept of economic security for the Netherlands, after which it will present an overview of how economic security has been defined and operationalized in the Dutch security policy context.

2.2 Relevance of Economic Security for the Dutch Economy

Achieving economic security in a globalized world is a highly strategic interest for the Netherlands, because the Dutch economy is highly integrated into the global economy. For centuries, international trade has been a significant source of wealth and economic growth in the Netherlands. The Dutch economy is strongly export-driven. Currently, the total value of exported goods and services is about 69% of GDP.[9] The Netherlands is for example the world´s second largest exporter of agricultural products. The

Netherlands also figures among the world's 10 largest foreign investors and recipients of foreign investment.[10] Many international companies have a subsidiary or their headquarters in the Netherlands.[11] About 50% of mergers and acquisitions in the Netherlands involve foreign companies, compared to a global average of only 25%.[12]

That the Netherlands is so well embedded into the global economy has many economic advantages. Foreign investment has a positive impact on the national economy by improving productivity, employment, export and the knowledge base. The downside, however, is that as an open economy in an increasingly globalized world, the Netherlands is also vulnerable to risks that originate elsewhere.

International trade is thus one of the cornerstones of Dutch economic security. The awareness that this represents opportunities as well as threats is a constant factor in the evolution of the Dutch interpretation of economic security, as will be illustrated in the following sections.

2.3 A Shift from Global Values to an Interest-Based Approach

Economic security is a relatively new concept in the Dutch policy context. Until 2007, economic security was not formally listed as a vital interest that is crucial to national security. This can be explained by the historic evolution of Dutch security policy and the way Dutch thinking on national interests has developed.

As recently as 2004, researchers observed that the Netherlands did not even have a formal security policy that specifically aimed to promote and protect Dutch national interests.[13] They explain the absence of a formal security policy by the lack of sufficient economic and military power of the Netherlands to defend its national interests. As a consequence of this limitation, the Netherlands abided by a neutrality policy until the Second World War. Thereafter, the Netherlands calibrated its security policy largely on the policy of the North Atlantic Treaty Organization (NATO) and its foreign policy increasingly on the European Union (EU).

Accordingly, a major constant in Dutch foreign policy has been the goal of promoting stable international relations based on the rule of law. This goal is even anchored in Article 97 of the Dutch constitution, which prescribes that the policies of the government contribute to the strengthening of the international legal order. As a result, the national interests of the Netherlands became closely associated with strengthening the international legal order and promoting the rule of law, rather than to national security.[14]

Gradually, the interpretation of the national interest has changed. Since the early 2000s, Dutch policy makers started to become increasingly aware of the economic assets of the Netherlands. Dutch thinking on security and foreign policy became based less on normative values, such as the international rule of law, and more on national interests. Safeguarding Dutch economic assets became a policy priority. This coincided with an increased awareness that Dutch assets have become increasingly vulnerable due to a two-fold increase in interconnectedness.

First, the interdependence of the Netherlands with the rest of the world has increased. As a result, the frontier between internal and external policy, or between national and foreign policy, has become increasingly blurred. It has become almost impossible to think about security in mere domestic terms and in isolation from what happens in the rest of the world. For example, the conflict in Syria – although geographically relatively remote – has led to challenges close to home. The General Intelligence and Security Service of the Netherlands (AIVD) has warned that Dutch radical Islamist movements play an active role in promoting the jihad in Syria among Dutch Muslims. Young people leaving the Netherlands to join the war against Syrian president Assad may return traumatized and possibly as radicalized Islamists.[15] Also the Dutch government's decision to participate in the international police training mission in Afghanistan has been informed by the negative implications of instability in Afghanistan for the Netherlands, such as terrorism and narcotics trafficking.

Second, interdependence between economic and infrastructural nodes within the country has increased, which has changed the internal security environment of the Netherlands and made Dutch society more vulnerable. Digitization and globalization have increased interdependence between firms, governments and citizens around the world, as a consequence of which disturbances in one part of a chain can cause consequences in other parts.[16] A single point-of-failure can have a big impact. For example, in April 2012 a fire in an adjacent warehouse shut down a network facility of telecom operator Vodafone. As a consequence, millions of users, including the national government, were unable to call, text or email. Also, navigation services such as TomTom and meteorological measurement instruments of the KNMI (the Royal Netherlands Meteorological Institute) were no longer operational.

The awareness that increased interconnectivity creates vulnerabilities reinforced the shift in Dutch thinking about security from a normative perspective based on global values towards a more interest-based approach. This transition resulted in a more strategic approach to Dutch foreign policy, as noted by the Scientific Council for

Government (Wetenschappelijk Raad voor Regeringsbeleid). Eventually, it also led to the development of a formal Dutch security policy, which has been lacking until then.[17]

2.4 Dutch National and International Security Strategies

In 2007, the Dutch government issued the National Security Strategy, which was followed by the International Security Strategy in 2013. With these two documents the concept of economic security has become anchored into Dutch security policy.

National Security Strategy (SNV)

The first National Security Strategy (*Strategie Nationale Veiligheid*, or SNV) catalogues various risks and helps prepare the Netherlands for different types of crisis. The SNV posits that national security is at stake when one or more vital interests of the Dutch state and/or society are threatened to the extent of potential societal disruption. It defines five vital interests: territorial security (threatened for example by military occupation or degradation of territory), economic security (threatened when trade and financial transactions are disturbed or costly), environmental security (threatened when the quality of environment is damaged), physical security (threatened by pandemics or global health risks), and social and political stability (threatened when the core values of democracy are undermined).[18]

The SNV defines economic security as 'the undisturbed functioning of the Netherlands as an effective and efficient economy.'[19] Economic security can be compromised when, for example, trade with an important foreign trade partner collapses.[20] The SNV also mentions the opposite of economic security, namely economic insecurity, which may be caused by extreme shortages of energy or other raw materials.[21]

International Security Strategy (IVS)

Since the publication of the National Security Strategy in 2007, the international security environment has further evolved. These changes in the international environment are captured well by the International Security Strategy (*Internationale Veiligheidsstrategie*, or IVS), which was published in June 2013 by the Ministry of Foreign Affairs. The IVS assesses the implications of recent developments in the international environment for the strategic interests of the Netherlands.[22] The strategy gives a prominent place to economic security, which is listed as one of the three strategic interests in the Dutch international security policy.[23]

The IVS stresses that, as an open economy, international developments have a direct or indirect impact on Dutch economic security. It emphasizes the vulnerability of the

Netherlands due to its import dependence of raw materials and energy.[24] This import dependence is a bottleneck for Dutch economic security. As a consequence, securing international trade routes and supply chains against the threats of piracy is an important Dutch interest. The Netherlands also has a stake in assuring a level playing field in energy and natural resources markets, including more transparency, integrated reporting and abiding by the rules, enabling Dutch companies to compete fairly worldwide.[25] The IVS also discusses the relationship between digital security and economic security. The strategy also puts greater emphasis on the shared responsibility for economic security between the public and private sectors and knowledge institutes.

Impact on Economic Security

The SNV was the first governmental attempt to proactively put economic security into policy. With the SNV, Dutch thinking on national interests has become more closely associated with the explicit interests of the Netherlands, rather than the international rule of law, which also promotes the Dutch interests but remains a more generic and global term. By explicitly defining a number of Dutch interests the SNV marked a policy shift. Besides conceptualizing economic security as one of the five vital interests for national security, the SNV also looks at other policy areas, such as foreign and defense policy, and stresses the interdependence between them.

The impact of the IVS on the overall evolution of the concept of economic security has been that it has become even more clear that the Dutch national interests both in terms of national security and economic security are heavily influenced by international developments. As a consequence, public global goods, such as maritime security and free trade, have become part of the so-called extended national interest.

With these policy documents, economic security came to be understood as part of the Dutch national interest, including national and international security interests (see Figure 2).

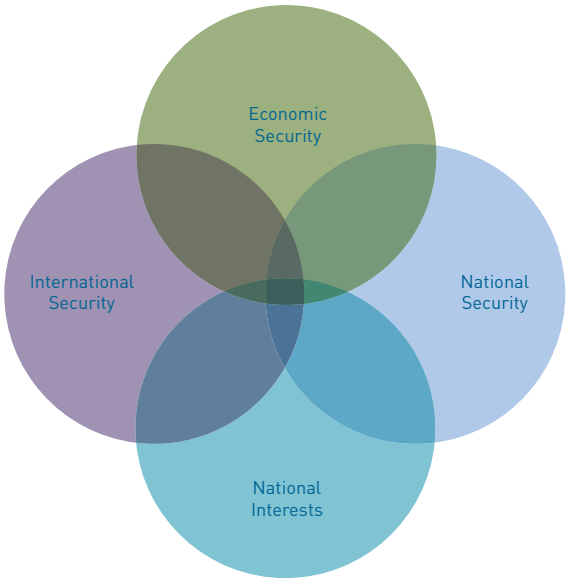

FIGURE 2: ECONOMIC SECURITY, NATIONAL INTERESTS AND INTERNATIONAL AND NATIONAL SECURITY

2.5 Economic Security Debates

The shift towards more interest-based thinking led to several debates on how to best safeguard Dutch economic security. The trend of growing interconnectedness brings new threats and opportunities for economic security. The economic security debates reflect the tension between, on the one hand, the need for economic openness as a driver of economic growth, and, on the other hand the need to protect Dutch economic assets against threats that may arise from that economic openness. This tension stands out especially in the debate on foreign investment, espionage, and cyber security.

Foreign Direct Investment (FDI)

Economic security in relation to foreign direct investment is the subject of topical debate. In September 2013, America Movil (owned by Mexican billionaire Carlos Slim), which owned close to 30% of Dutch telecom operator KPN, offered to buy the remaining 70 % stake in KPN. In October 2013 the negotiations stalled and the take-over did not happen. Nevertheless, the bid heightened the debate about the risk of foreign investment and acquisitions to national security and vital infrastructure. Opponents of the deal argued that the take-over would bring parts of critical Dutch

infrastructure under foreign control. This would make it much harder for the national government to mitigate risks (cyber attacks, for example). The ongoing debate on foreign investment touches upon the question of how the Netherlands can best safeguard its economic interests in a globalized world.

Before the debate over the take-over of KPN by America Movil, economic security was already at the heart of the 2009-2010 debate on the vulnerability of Dutch vital infrastructure to foreign takeovers and acquisitions. This debate heightened in the context of acquisitions of Dutch companies by state-owned enterprises (SOEs) and sovereign wealth funds (SWFs) from the Gulf region and Asia. For example, Saudi Arabian SABIC took over DSM Petrochemicals, Dubai Ports World and Temasek Holding from Singapore each acquired a 20% stake in the Maasvlakte terminal.[26]

These acquisitions triggered the question of whether vital Dutch economic security can be undermined by the economic activities of foreign actors. On the one hand, the Netherlands has an interest in creating an open investment climate for foreign investors and private companies that are motivated by purely business considerations. On the other hand, some investments may be motivated by the geopolitical interests of foreign governments. In this case, (semi)SOEs or SWFs involved in take-overs act as instruments of foreign governments. Such investments, which can be regarded as signs of the increased politicization of economic instruments, could potentially damage Dutch economic security.

In this ongoing debate over the risks and opportunities relating to foreign investment, two opposing sides can be distinguished. On the one hand, there are those, who believe that the Netherlands is not adequately equipped to deal with the increased politicization of economic instruments. Especially actors in the security field have argued that the existing institutional framework to review acquisitions by foreign actors does not adequately safeguard national security.[27] The AIVD has observed that market forces, profits, and short-term gains often prevail over national interests, and that – because of the Dutch tradition of liberalism, free trade and anti-protectionism – the sale of Dutch companies to foreign investors encounters little resistance.[28] Although sectoral legislation exists, there is a sense that the mandate to review risks of foreign investments to national security is unclearly defined. Existing instruments based on the prinicples of the liberal market economy may no longer suffice in a geopoliticized world, which is increasingly characterized by economic powers with state capitalist tendencies.

On the other side are those who argue that economic interdependence is in the long run the best guarantee for economic security and that Dutch interests are adequately safeguarded by the existing legislation. This has been the position taken by stakeholders from the private sector and the Ministries of Economic Affairs and Finance. The latter have argued that foreign direct investment creates opportunities for the Dutch economy in terms of wealth creation and employment and that protectionism could lead to a loss of revenue and wealth.[29] Opponents of an assessment framework for foreign take-overs and acquisitions argue that such a framework would add to increased administrative pressure, deteriorate the investment climate, decrease the revenue that the Netherlands collects from being an open economy, and could lead to retaliation, with similar barriers raised to Dutch investment in other countries. Another often-heard argument against an assessment framework is that currently no or very few economic transactions take place that harm national security.

Other Western countries, such as Canada and the US, have developed national assessment frameworks which approve or reject foreign takeovers on the basis of whether they serve or harm national security. In the US, acquisitions are evaluated on the basis of their effect on national security. Current laws in the EU complicate the implementation of such an assessment framework, as an assessment of intra-EU take-overs would be an infringement of the EU's rules on freedom of establishment and the free movement of capital.[30]

Nonetheless, the discussion of whether an assessment framework should be made possible in the Netherlands has continued. The increased politicization of economic instruments has led some, including the Social Economic Council, to conclude that it is worth investigating possibilities to broaden the existing assessment framework. This debate is expected to remain topical as the Dutch economy will continue to be affected by globalization.

Vulnerability Assessment (KWAS)

Meanwhile, a related debate was heightened in 2010 after a study by the AIVD on the vulnerability of the Netherlands to espionage and the leaking of knowledge. This vulnerability assessment (*Kwetsbaarheidanalyse*, or KWAS) stated that economic, strategic and technological-scientific espionage and the relative openness of the scientific domain posed a threat to Dutch national security.[31] The economic and financial damage caused by espionage has never been quantified, but there is

significant empirical evidence that the economic security of the Netherlands is threatened by espionage activities of foreign actors.[32]

The AIVD has warned that several foreign intelligence services are secretly gathering information in several strategic sectors that are considered as vital infrastructures, such as the telecommunications and energy sector. This may lead to client data getting into the wrong hands and infringements on the digital security of the private and public sector services. Intelligence services from other countries may as such threaten vital interests. Espionage might target datasets or blueprints and infringe upon intellectual property rights, especially in the fields of optics and optomechanics, mechatronics and robotics, radar technology, air and space technology, and water engineering and management; with the aim of gaining economic competitive advantages. Espionage activities that may damage the Dutch economy also target information about large international orders and intended mergers and acquisitions.[33]

Additionally, the leaking of sensitive scientific information could potentially threaten Dutch national security and cause economic damage. Openness and exchange in the scientific domain can contribute to innovation and increase economic competitiveness, but can also create vulnerabilities. Many foreign students are carrying out technical or scientific research in the Netherlands, including in the nuclear research discipline. When foreign students leave and go back to their countries of origin, taking with them the knowledge and skills gained in the Netherlands, strategic and economic knowledge developed with the aim of boosting the economic competitiveness of the Dutch economy may get into the hands of foreign competitors, which could damage the economic security of the Netherlands.[34] The AIVD therefore has started working more closely together with technical universities to detect incidents of espionage by foreign students.[35]

The main conclusion of KWAS was that both public and private organizations are unaware that they possess strategic or valuable economic assets and how vulnerable they are to the activities of outsiders, including foreign political and economic intelligence services, who want to access or acquire these assets. Means to access these assets can be subversive, such as espionage, or regular, such as through take-overs and collaboration. The loss of valuable economic assets can become a national security issue.

Cyber Security

At the same time, cyber security also emerged as a priority on the policy making agenda. Similarly to foreign investment and scientific openness, increased digitization and reliance on ICT can have both favorable and unfavorable consequences for economic security. On the one hand, digital infrastructure and technologies facilitate economic activities and can boost economic growth. On the other hand, cyber attacks can negatively affect the competiveness of the Netherlands' economy and cause a loss of revenue.[36] In comparison to the other issues, cyber security is less of a topic for debate in the sense that there seems to be a general consensus on the threats and opportunities that cyberspace represents. The contention is, however, whether the Netherlands is fully aware about its particular vulnerabilities and whether its response is adequate.

Within the Dutch government, cyber security issues are dealt with on the operational level by the AIVD, the Military Intelligence and Security Service (MIVD) and the National Cyber Security Centrum (NCSC).[37] These institutions have stressed the importance of cyber security for the Dutch state and its economic security on many occasions.[38] The AIVD has warned that some countries consider espionage an integral part of their foreign economic policy.[39] Digital espionage is an especially attractive way of information gathering because it is comparatively cheap. A great number of different targets can be approached and the risk of being detected is low.[40] Similarly, the MIVD has noted that the defense industry is a popular target of cyber espionage and that the cyber espionage threat also focuses on parties with whom the defense industry cooperates. In addition, the MIVD noticed malicious phishing activities towards Dutch military missions abroad.[41]

The increased awareness of ICT as a vulnerable asset for Dutch economic security resulted in the first Dutch National Cyber Security Strategy (NCSS1) in 2011. This document explicitly illustrates the existing link between economy and security. It highlights how a safe and reliable ICT infrastructure is a catalyst for economic growth and is of fundamental importance to prosperity and well-being in the Netherlands.[42] At the same time, the NCSS emphasizes the vulnerability that an increased reliance on ICT can create for society and the Dutch economy. Various cyber attacks on internet banking systems and online identification tools illustrate this vulnerability. For example, in 2011, DigiNotar, the company that provides the certificates used for DigiD, was attacked by hackers allegedly from Iran.[43] As a consequence of such incidents, cyber security has become a strong element in the Dutch thinking on economic security.

The cyber domain is characterized by rapid changes. In October 2013, the Dutch government therefore released a new cyber security strategy, NCSS2. The new strategy highlights the fact that the understanding of cyber threats has increased in the past years and that priority is now given to taking measures to adequately respond to these threats and the changes in the cyber domain. One of such measures is intensified collaboration between public and private actors through networks and strategic coalitions, both nationally and internationally. The NCSS2 also marks a shift from a generic to a risk-based approach, which seeks to find the right balance between the protection of interests against threats, and the level of risk that is acceptable to Dutch citizens.[44] This shift fits the aforementioned broader transition in Dutch security policy from a normative to a more interest-based approach (see section 2.3).

In sum, these debates show that since the framing of economic security in the SNV as one of the vital areas of interest for the Netherlands, Dutch thinking on economic security has evolved significantly. Since 2007, different parts of the government have picked up the topic and started to develop their own approaches to economic security. These government bodies have highlighted the threats that are most pertinent from their perspective. In the discussion over the risks of foreign investment and acquisitions, for example, the Ministries of Economic Affairs and Finance emphasize different threats to the AIVD. Although the government bodies developed a slightly different focus, there is also significant overlap in the dimensions they consider pertinent to economic security. The debates have led to the conceptual broadening of economic security and triggered questions about how the government should deal with this tension between economic openness and security that has arisen as a consequence of increased interconnectedness.

2.6 Policy Instruments

Since the government put economic security on its agenda, it has started to take measures to protect the assets and economic interests of the Netherlands. In addition to the SNV, the IVS, and the NCSS 1 and 2, several other policy instruments have been developed which will be discussed below. Although not explicitly focussing on the potential contribution of the military to these policy instruments, this section shows that military action may be part of preventive actions or supporting measures aimed at economic security.

National Risk Assessment (NRB)

After the publication of the SNV, one of the first efforts of the government was aimed at making risks to national security operational and to develop a method that could help decision-makers in mitigating these risks. This was done in the National Risk

Assessment (*Nationale Risico Beoordeling,* or NRB). Between 2007 and 2011 the NRB assessed several scenarios, for which it calculated the likelihood and impact on the Dutch national security, economy, as well as social and political stability.

Figure 3 shows the scenarios, including those that are not directly relevant to economic security, from the 2011 NRB plotted on the basis of their likelihood (X-axis) and impact (Y-axis) scores. Analyzed incidents that are relevant to economic security include:

- Supply disruption of oil and gas
- Attacks on ICT infrastructure, cyber conflicts and cyber espionage
- Chemical and nuclear accidents
- Wildfires
- Criminal economic activities in the financial and construction sectors and in politics
- Influenza pandemics[45]

In some of the NRB scenarios, military deployment can be part of the solution. For example, the military can help prevent social disruption following chemical or nuclear emergencies, or offer logistical support for the culling of contaminated animals in case of a swine flu pandemic.

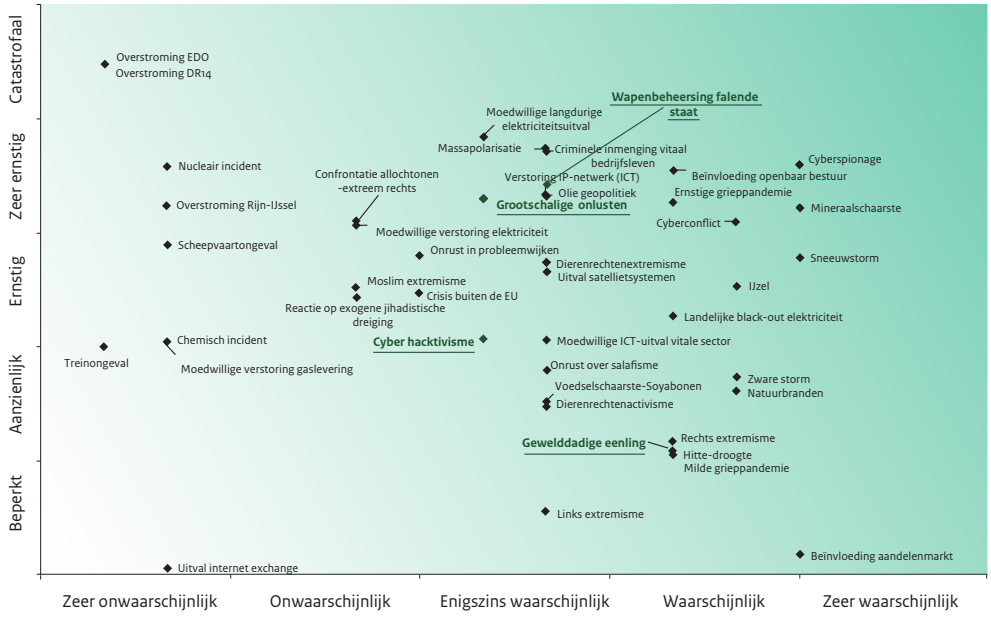

FIGURE 3: POSITIONS OF SCENARIOS IN RISK DIAGRAM (NRB 2011) THE NATIONAL INSTITUTE FOR PUBLIC HEALTH AND THE ENVIRONMENT (RIVM), MINISTRY OF HEALTH, WELFARE AND SPORT

Whereas the SNV broadly defines economic security as the uninterrupted functioning of the Netherlands as an effective and efficient economy, the definition was tightened by the NRB, which aimed to make the risks to economic security measurable. The NRB approached economic security in a rather narrow way, namely from a cost perspective. It distinguishes between costs for repairing damages, additional costs and loss of income.[46] In other words, the NRB operationalizes the risks to economic security in terms of economic damage.[47]

Within the overall evolution of the concept of economic security, the work of the NRB is especially noteworthy because of its contribution to the methodological approach to economic security. It helped make a broad issue operational so that it could be used to guide decision making on how to mitigate threats to economic security. The narrowing of the concept, however, can also be seen as a risk to the allocation and development of capabilities to mitigate threats to economic security.

While the approach to deal with economic security risks at a national level was narrowed down, the approach at the international level has been widened. In addition to the aforementioned IVS, the Dutch government also uses various instruments to secure its international trade relations and to access resources that are necessary for the Dutch economy, including economic diplomacy, raw materials policy, and international development cooperation.

Economic Diplomacy

The Dutch government actively engages in economic diplomacy, which serves economic security in two ways. First of all, the Dutch government uses economic diplomacy to increase opportunities for Dutch entrepreneurs in foreign markets. Economic diplomacy efforts have especially focused on promoting the interests of Dutch businesses in the top sectors of the Dutch economy: energy, the creative industry, life sciences, logistics, horticulture and propagation materials, high tech, water, agri-food and chemicals. The government uses various instruments to do so, including providing market information, advice and assistance, organizing trade missions, and promotion activities. The Dutch government also has an extensive international network of missions, including embassies, consulates, and the Netherlands Business Support Offices. They promote the interests of Dutch businesses abroad and address issues such as market access and restrictive rules and regulations in their contact with foreign governments. Second, economic diplomacy aims to encourage foreign companies to invest in the Dutch economy and to attract

top talent to the Netherlands, as the government recognizes that this provides stimulus to the Dutch government.[48]

Raw Materials Policy

The Dutch government also uses diplomacy in order to secure the supply of raw materials that are necessary for the Dutch economy. The Dutch economy is highly dependent on imported raw materials. In addition to energy, the Netherlands is also heavily dependent on imports of strategic abiotic resources (non-fuel resources, such as metals and minerals), most of which enter the Netherlands as semi-finished products. The Dutch agro-food sector is a major exporter but is also heavily reliant on imports, such as soy and cocoa beans. If such critical raw materials could no longer be imported due to scarcity or supply disruptions, this could hamper commercial and industrial activities and economic security would be weakened. Therefore, the Netherlands has placed resource security high on the agenda and has begun drafting a national raw materials strategy, which complements EU initiatives in this area.

The Dutch raw materials policy has a strong international focus. It focuses on strengthening market mechanisms, promoting free trade and banning anti-liberal trade practices through international institutions (such as the WTO and OECD), fostering international cooperation with other import-dependent countries, and forging strategic partnerships with raw materials-producing countries and suppliers of semi-finished products.[49] The Dutch government has appointed a Special Envoy for Natural Resources, who is charged with raw materials diplomacy and the international dimension of the Dutch policy.

While raw materials scarcity and supply disruptions present major threats to Dutch economic security, the Dutch government recognizes that they also offer opportunities for economic growth and job creation. Scarcity and supply risks may trigger the exploration of new reserves, and the development of new technologies to extract or collect resources, such as recycling. The Netherlands has a competitive advantage to capitalize on such developments due to its unique geographical position in the center of international lines of communication and its leading industries in this field. In addition, raw materials scarcity and supply risks trigger innovations aimed at substituting or reducing the consumption of raw materials. Such innovation can be a major driver for economic growth, for instance in the top sectors energy, high-tech, and chemicals.[50]

International Development Cooperation

Also in the area of development cooperation, the Dutch government increasingly aims to promote the economic interests of the Netherlands. In 2012-2013, the Netherlands has undertaken a fundamental review of its development policy, which has shifted from social to economic sectors, thus from aid to trade and investment. Its focus is on areas in which Dutch businesses, civil society organizations, and knowledge institutions can offer expertise and add special value.

The new development cooperation strategy reflects the cohesion between development cooperation and other policy areas that contribute to economic security, including foreign trade, foreign policy and international security. To start with, the Minister for Foreign Trade and Development Cooperation is part of the Ministry of Foreign Affairs. Next, the instruments that the government uses for development cooperation are established in close collaboration with the Dutch business community and include measures that will enlarge the scope for small and medium-sized enterprises to invest in developing countries, and the forging of new coalitions between companies, NGOs and individuals. In collaboration with the business community a revolving fund of €750 million financed in the years 2014-2016 has been established. This fund reflects the closer connection between foreign trade and development cooperation, as it will serve to support investments of Dutch businesses in developing countries, especially by small and medium-sized enterprises. Finally, another fund of €250 million will also be established for international security. This budget aims to promote peace and crisis management operations for developing countries.[51] As stated above, international stability is of great importance to Dutch economic security.

Cooperation with the Private Sector and Civil Society

As the concept of economic security evolved into a multidimensional issue with multiple stakeholders, it was increasingly framed as a shared responsibility between the central government, local governments, businesses, civil society organizations and citizens.

Cooperation between these parties is important, for example, to prevent scarcity of natural resources.[52] Although the government considers securing access to natural resources primarily the responsibility of the private sector, the government can facilitate resource security by using economic diplomacy and by developing strategic partnerships with resource-endowed countries. Cooperation between the private and public sector is also the basis of the Dutch policy on cyber security, which is considered

a public good that cannot be provided by the government alone.[53] The knowledge and technology from the private sector is key for a secure cyber infrastructure. Similarly, fighting piracy is also a shared responsibility between the government and the maritime sector. The Dutch government will provide the military means to safeguard the security of Dutch merchant ships, but the maritime sector will also have to call upon private security companies.

Besides being a multi-stakeholder issue, economic security is also multidimensional. This explains why economic security may be relevant to the Dutch MOD. It is illustrated by the above mentioned Dutch approach to cyber security, in which the government (including the MOD) works closely together with businesses, and military deployment in response to scenarios from the NRB. Internationally, we already see that other countries have also, to a greater or lesser degree, tied responsibilities for certain dimensions of economic security to the military.

2.7 Conclusion

This section has shown that there is an increased awareness amongst Dutch policy makers that, as an open economy, the national interests of the Netherlands are increasingly tied to national security and the broader international environment. Due to globalization and increased digitization, the economy of the Netherlands has become more vulnerable to certain threats, including risks that originate elsewhere. This awareness resulted in the subsequent development of a formal national and international security strategy. The concept of economic security was first introduced in the SNV in 2007, which identified it as one of five vital national interests. The concept was subsequently elaborated on by different governmental bodies, which define economic security in narrower or broader terms. The IVS of 2013 frames economic security as one of three strategic priorities for foreign security policy.

The analysis of the evolution of the concept of economic security in the Dutch policy context has revealed three things. First, the government considers economic security to be increasingly important. Since 2007, substantial resources have been allocated to further operationalize economic security, to raise awareness about vulnerabilities, and to anticipate and mitigate threats to the Dutch economic security. In addition to the national, international and cyber security strategies, the government has developed several instruments to actively promote Dutch economic interests abroad, including economic diplomacy.

Second, since the government put economic security on the policy agenda in 2007, many different government agencies have started to develop a vision of this topic. Each of these organizations developed their own approach with a slightly different focus, although there is also significant overlap in the dimensions they consider part of economic security. The government, including the MOD, also has collaborated with the private sector and involved civil society. As a consequence, economic security has become a topic that, paradoxically, concerns everybody but is 'owned' by nobody within the government. This is only natural, since economic security is such a broad concept that it is impossible to have a sole legitimate problem owner. This highlights the importance of a comprehensive, all-of-government approach. This is, nonetheless, not self-evident, as diversity of stakeholders also comes with tensions between those in favor and those against more government intervention for economic security. In the discussion on the risks of foreign investments and acquisitions, for example, the Ministries of Economic Affairs and Finance emphasize different threats than the AIVD.

Third, economic security is a multidimensional problem that brings together various different security challenges, ranging from cyber crime to terrorism and piracy. This means that a stove-piped approach to economic security will be inadequate and that it is indeed paramount to develop an approach to economic security that includes all departments, including the MOD. The overview showed that other European countries are also to a greater or lesser extent exploring the link between economic security and the military.

In conclusion, the SNV definition of economic security as 'the undisturbed functioning of the Netherlands as an effective and efficient economy' is appropriate but does not tell us anything about the various dimensions of economic security or whose task it is to safeguard economic security. At the same time, the definition's broadness is the logical result of a virtually infinite number of risks that could threaten the Netherlands' economic security and, as a consequence of which, the responsibility for economic security is shared between different government bodies, the private sector and civil society. On the basis of the analysis of the concept in the academic literature and in the Dutch and European security policy contexts, it can be concluded that economic security is hard to define. Nonetheless, economic security is about three things. First, it is about a country's national interest in having a strong and resilient economy. Second, it is affected by both the national and international security environment. And, finally, it requires efforts from a wide range of stakeholders to actively and passively protect the economy against a wide variety of threats. The report will now zoom in on one particular dimension of economic security, namely energy security.

3 ENERGY SECURITY

3 ENERGY SECURITY

Introduction

What role do energy supplies and energy security play within a context of economic security? As noted in the previous chapter, the Dutch National Security Strategy views (extreme) shortages in energy or other raw materials as a potential source of economic insecurity.[54] In this context, energy security revolves around what is known as security of supply, or the 'adequacy of [energy] supply at a reasonable price'.[55]

Out of the plethora of available energy sources (e.g. oil, natural gas, coal, nuclear, hydropower, photovoltaic, tidal, biofuels and so on), oil and natural gas stand out when it comes to the potential for geopolitical tension that is associated with their acquisition. It is for this reason that the analysis in this chapter focuses explicitly on the interplay between producers and consumers of these two fuel types, how this impacts the economic security of the Netherlands, and what the observed challenges mean for a possible role for the Dutch armed forces.

Interruptions in the supply of both oil and natural gas have frequently occurred throughout history. Examples include the oil crises of the 1970s, the 1990 invasion of Kuwait, the frequent gas crises between Russia and Ukraine in the second half of the 2000s and, most recently, the disruption in the supply of Libyan oil caused by the Arab uprisings in 2011. The occurrence of a shortage or interruption is grounded in external dependence, whereby one country is dependent on the supply of energy from another country or region. As a natural gas exporting state, the Netherlands does not depend on external natural gas supplies. This situation is not the same when it comes to oil, with over 90% of all oil consumed in the Netherlands having been imported (see section 3.1).[56]

Two major trends in global energy can be observed today. First, countries such as China, India and other emerging economies currently not members of the Organisation for Economic Co-operation and Development (OECD) are gradually attaining middle-income status with an equivalent rise in their appetite for energy (see Figure 4).[57]

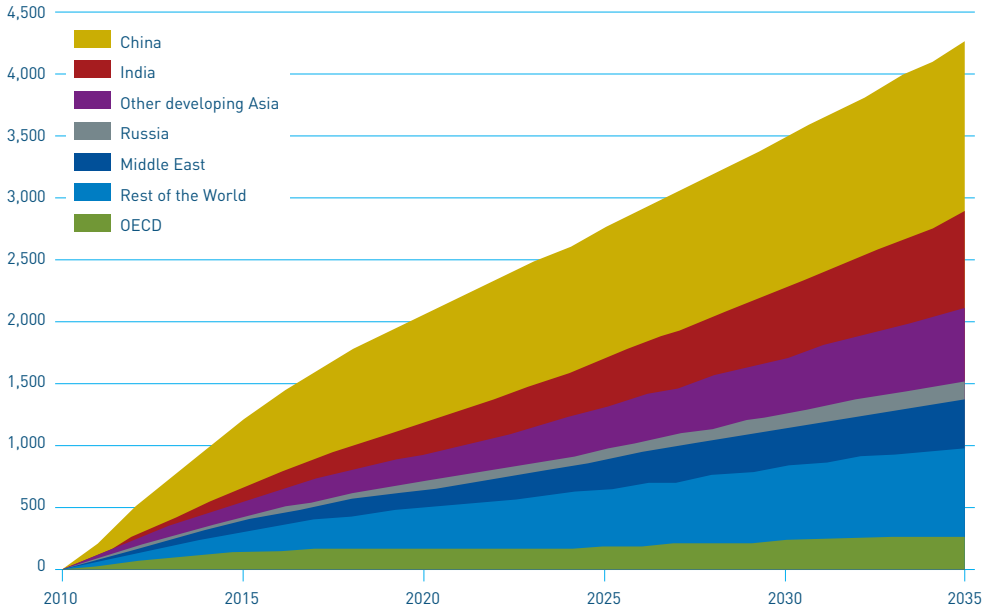

FIGURE 4: INTERNATIONAL ENERGY AGENCY (IEA) FORECAST FOR GROWTH IN PRIMARY ENERGY DEMAND BY REGION IN MILLION TONS OF OIL EQUIVALENT (MTOE)[58]

In relative terms, the non-OECD share of primary energy demand rose from 37% in 1973 to 55% in 2010. According to projections from the International Energy Agency (IEA), this share is set to grow further, to an average of 64% by 2035 across all of the scenarios put forward in the 2012 World Energy Outlook.[59]

Tied to this development is the fact that the pro-market ideology of the 1980s and 1990s has been giving way to a resurgence of state capitalism and a return of National Oil Companies (NOC).[60] Big NOCs now make up six of the ten largest oil producers in the world. As a consequence, licenses to drill in an NOC's backyard are increasingly difficult to obtain, leading Western oil majors such as Shell, BP, Statoil, Exxon Mobil and others to spend significant portions of their long-term capital on costly deep-water oilfields in unforgiving areas of the world.[61]

The second trend is that natural gas and oil production in countries not belonging to the Organization of the Petroleum Exporting Countries (OPEC) has seen a surge in recent years. The application of advanced drilling techniques that allow the unlocking of natural gas and oil resources trapped in so-called shale formations below the earth's surface have unleashed a true energy revolution in North America (see section 3.4).

These innovations have turned the US into a net exporter of natural gas and, according to the IEA, have put the country on course to overtake Saudi Arabia and – at least temporarily – become the world's largest oil producer by mid 2020 and a net oil exporter by 2030.[62] Also, Canada has seen a huge increase in its oil production coming from the country's oil sands.[63] Other countries around the world, notably China, Argentina, Poland and Ukraine, are assessing their own shale resources to see whether the US' experience can be replicated – thus possibly further enlarging the global supply of energy resources.[64] Although good news from a supply point of view, this development carries profound (geopolitical) consequences for traditional energy-producing countries in the Middle East, North Africa and the former Soviet Union who rely heavily on the income generated by energy exports.

This chapter analyzes the above developments in detail, with a particular focus on the implications for the economic security of the Netherlands and the possible role of the Dutch MOD therein. The chapter consists of four sections. Section 3.1 provides insight into the extent to which the Netherlands is dependent on external suppliers for its energy needs. Section 3.2 analyzes how geopolitical events have affected the supply of oil and natural gas in the Netherlands in the past and explains how foreign direct investment in energy infrastructure is viewed in security terms. Section 3.3 takes a specific look at the importance of maritime chokepoints and strategic waterways in securing energy supplies. Finally, section 3.4 assesses the development of unconventional energy in the US and elsewhere and explains its impact on traditional oil- and gas-exporting countries. The chapter ends with a number of conclusions.

3.1 Oil and Natural Gas Dependency in the Netherlands

Unlike renewable energy sources such as hydropower, wind and solar – which can often be locally produced – fossil fuel types such as oil and natural gas usually need to be imported. Given the limited number of countries that possess conventional oil and natural gas reserves, economic damage is likely to ensue in the event of a disruption to the supply of either one of these two fuel types.

The Netherlands relies on natural gas and oil for the majority of its energy consumption. In 2012, the share of natural gas in the total primary energy supply was slightly higher at 41.8% compared to 38.8% for oil (see Figure 5). Given that oil and natural gas make up almost 80% of the Dutch energy mix, the remainder of this chapter is limited to a discussion of these two types of energy.

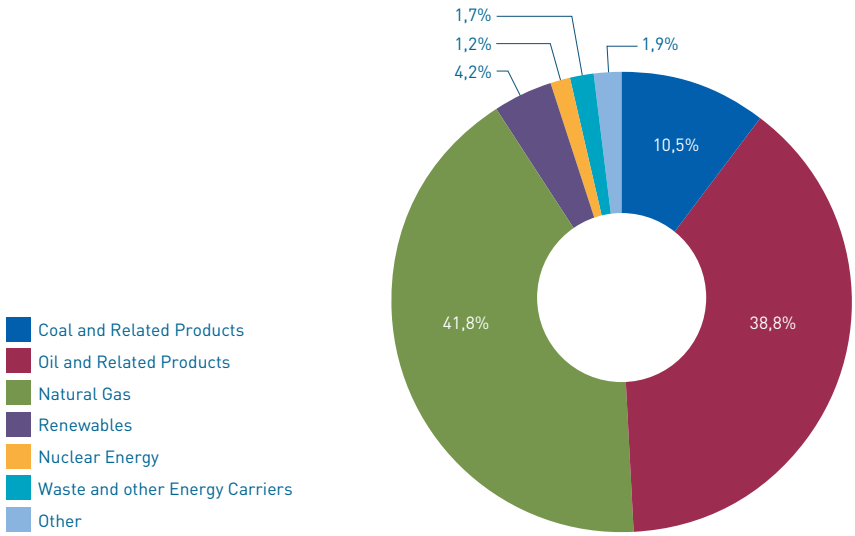

FIGURE 5: ENERGY MIX OF THE NETHERLANDS, 2012[65]

The economic impact of a supply disruption depends on the extent to which a country's primary energy supply is dependent on imported fuel. Figure 6 gives an overview of the extent to which a number of EU Member States are dependent on the import of oil and related petroleum products.

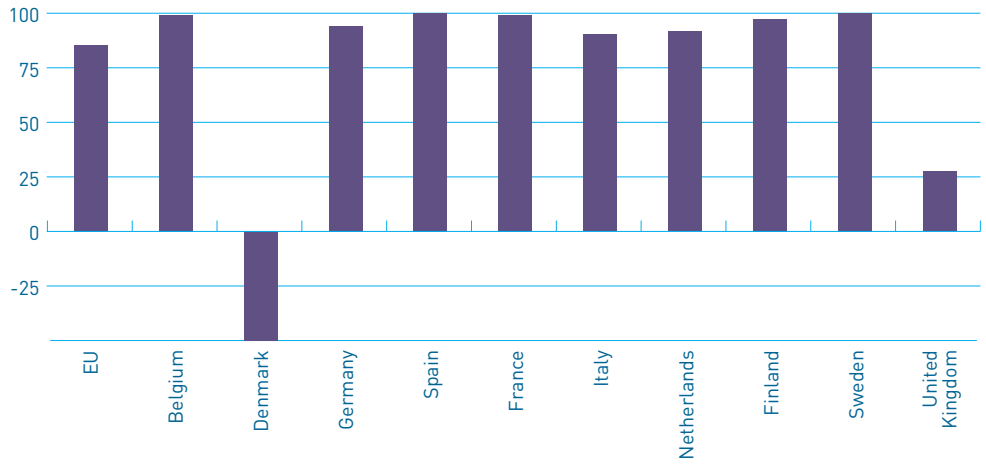

FIGURE 6: OIL IMPORT DEPENDENCE OF SELECTED COUNTRIES (2011)[66]

What stands out is that most countries in the EU are heavily dependent on imported oil products. Compared to the EU average (84.9%), the Netherlands has a higher level of oil import dependence, at 91.5%. Such a high level of dependence carries with it significant exposure to potential supply disruptions. As an OECD member state, the Netherlands possesses a stock of petroleum supplies equal to 90 days of the prior year's net oil imports, as is mandatory under IEA membership. In 2013, this amounted to approximately 4 million tons of oil which is largely stored in the regions of Rotterdam-Europoort and Amsterdam. Part of these supplies is stored in underground facilities in Germany.[67] Looking at the dominant supplier of oil passing through Rotterdam, it becomes clear that the Netherlands has a strong energy partnership with Russia; 30% of all crude oil and 45% of all oil products are of Russian origin. In April 2013 Dutch company VVTI and the Russian Summa Group announced the construction of an oil terminal in Rotterdam.[68]

While the Netherlands is highly dependent on imported oil, this situation is very different with respect to natural gas. Figure 7 shows the extent to which the Netherlands and a selected number of other EU Member States are dependent on the import of natural gas.

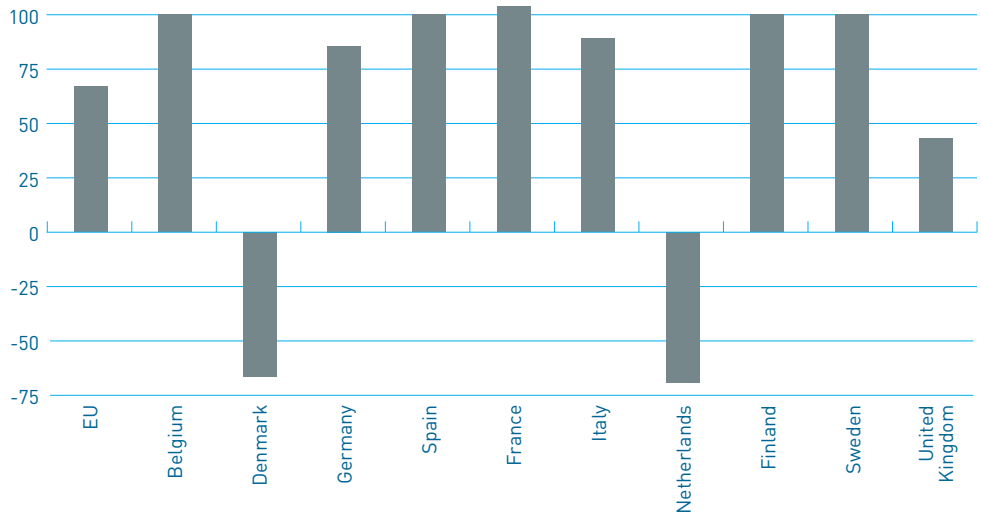

FIGURE 7: NATURAL GAS IMPORT DEPENDENCE OF SELECTED COUNTRIES (2011)[69]

On average, EU countries are 67% dependent on natural gas imports. As net exporters, both the Netherlands and Denmark have a surplus of natural gas. Other EU Member States are not so well endowed and at times have an import dependency of up to 100%. Not included in this graph are Central and Eastern European Member States which are often also near 100% dependent on natural gas imports, from just one or only a small number of suppliers. The extent to which the Netherlands finds itself exposed to an interruption of natural gas imports is negligible.

Dutch trade in natural gas has shown a steady increase over the past decade. The bulk of natural gas is shipped to Germany. Other important export destinations include Belgium, the UK, Italy and France. Despite being a natural gas producer in its own right, the Netherlands has also seen a steady increase in its share of imports, mainly coming from Norway, the UK and Russia. On the one hand, this is done in order to prevent a depletion of domestic natural gas reserves. However, purely commercial reasons are also said to play a major role.[70]

In 2005, the Dutch government expressed the ambition to become the 'gas roundabout' of Europe. This meant that the Netherlands was to become the gas junction of Northwest Europe to which gas is transported, partly stored, and exported to clients abroad.[71] To that effect, a new terminal for the throughput of Liquefied Natural Gas (LNG) was opened in the port of Rotterdam in September 2011.[72] The Netherlands is also home to the Title Transfer Facility (TTF), a virtual trading point for natural gas similar to the National Balancing Point in the UK. The TTF offers market parties the opportunity to trade natural gas within the Dutch network.[73]

3.2 Energy Markets and Geopolitics

Geopolitical events play a major role in influencing the dependencies assessed above. Up front it should be stressed that oil and natural gas prices, owing to the fundamentally different characteristics of both markets, do not react to geopolitical turmoil in the same way. This section explains the differences between the two, with a particular focus on the extent to which Dutch business interests have been affected by geopolitical tension in energy markets in the past.

3.2.2 The Oil Market and Geopolitics

Oil does not require a physical link between producer and consumer and can be transported everywhere over the world. The oil market therefore constitutes a truly global market. This also means that unrest and disruptions in oil supply in one part of the world have potential global ramifications as prices fluctuate as a result of the

changing availability of oil. Figure 8 shows the evolution of the crude oil price (Western Texas Intermediate) in nominal US$ against the backdrop of key geopolitical events between 1970 and 2012.

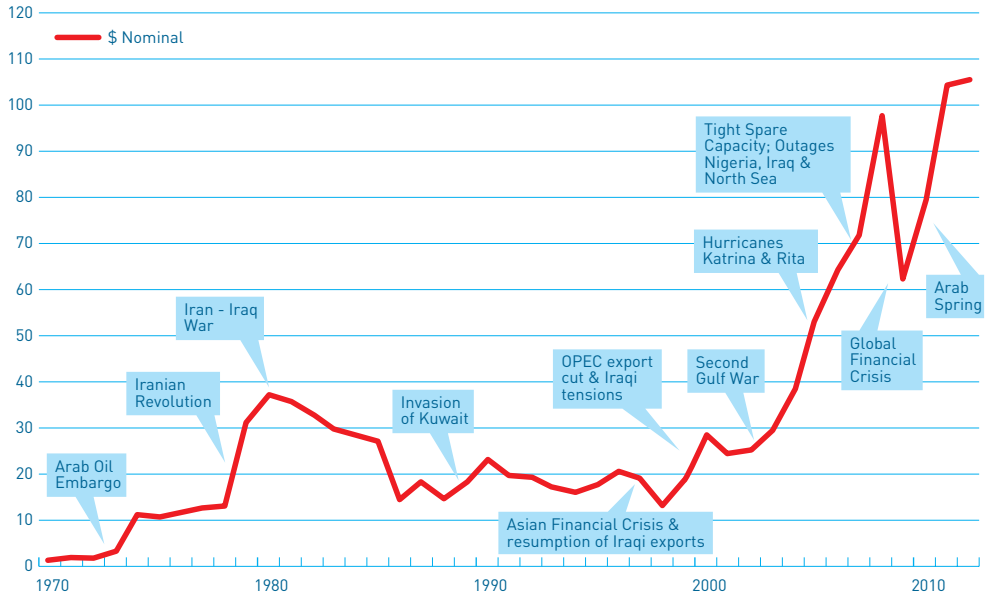

FIGURE 8: SPOT CRUDE OIL (WESTERN TEXAS INTERMEDIATE) PRICES (IN NOMINAL US$ PER BARREL) AND IMPORTANT (GEOPOLITICAL) EVENTS 1970-2012[74]

Noteworthy moments in history which influenced the price of oil included, *inter alia,* the 1973 oil crisis (see Annex: The Netherlands and Energy Crises for an analysis on the extent to which this event impacted the Dutch economy), the 1979 Iranian revolution, the first Gulf war in 1990, the second Gulf war in 2003 and the Arab uprisings in 2011. As this list makes clear, internal instability within important oil producing countries often impacts the price of oil.

Conversely, resource rents (the revenues earned from the sale of natural resources)[75] have been linked to the risk of conflict in a number of ways. First, through a perceived negative relationship between resource dependence and government corruption.[76] This assertion appears to hold true for oil in particular, which, according to some, presents the only robust relationship between resource income and violence.[77] Oil's particularly high value as a resource makes it an attractive 'prize' for a ruling power and

may make oil-rich economies particularly susceptible to power struggles and factionalism.[78] Second, a high level of dependence on primary exports is associated with an economy that is prone to price shocks. This could lead a country's economy to become destabilized, which has been linked to a heightened risk of conflict as dissent rises and the opportunity costs of rebellion fall (see also section 3.4.2).[79] That said, extra spending on state armed forces may lower the feasibility of forms of intrastate conflict that target the government.[80] Also, resource rents may provide the ruling powers with the coercive and appeasement means necessary to suppress violent conflict.

An interesting picture emerges when we build on the above observations and compare the world's top oil producing countries against the degree to which these countries are prone to internal instability (see Figure 9). Numerous oil producing countries emerge from Figure 9 as having a high degree of state fragility; notably Algeria, Libya, Nigeria, Angola, Iraq, Egypt, Venezuela, Saudi Arabia, Colombia and Ecuador.

When comparing Figure 9 with countries where Dutch energy companies have established operations, Nigeria and Egypt catch the eye. Royal Dutch Shell has a long history of operations in the delta area of Nigeria. However, long-standing disagreements over the distribution of resource rents between the government and the local populace, coupled with oil theft on a grand scale have led the company to announce a withdrawal of the majority share of its operations from the Niger Delta in August 2013.[81]

Oil theft is a major problem in Nigeria, with oil companies – on average – allegedly losing close to 100,000 barrels per day in the first quarter of 2013.[82] Out of all the oil super majors active in Nigeria, the Shell Petroleum Development Company of Nigeria (SPDC) and Nigerian Agip Oil Company (NAOC) – two joint ventures with the Nigeria National Petroleum Corporation (NNPC) – are most exposed operationally. According to data from the NNPC, the infrastructure from Shell and Italian energy company ENI suffered the bulk of recent sabotage, with ENI reporting 108 incidents between August 2011 and February 2012.[83] Peter Voser, CEO of Shell, claimed the problems of oil theft and sabotage of gas supplies are problems that Shell cannot solve alone, leaving aside whether the Nigerian government is doing enough to tackle the issue. The problematic operating environment is said to have cost the company US$ 250 million from its earnings between April to June 2013, slashing a considerable share of the profits emanating from Nigeria.[84] Some sources claim that the unit cost of production for one barrel of oil went up from US$ 4 at the beginning of the last decade, to US$ 15 today due to the necessary security and environmental measures.[85]

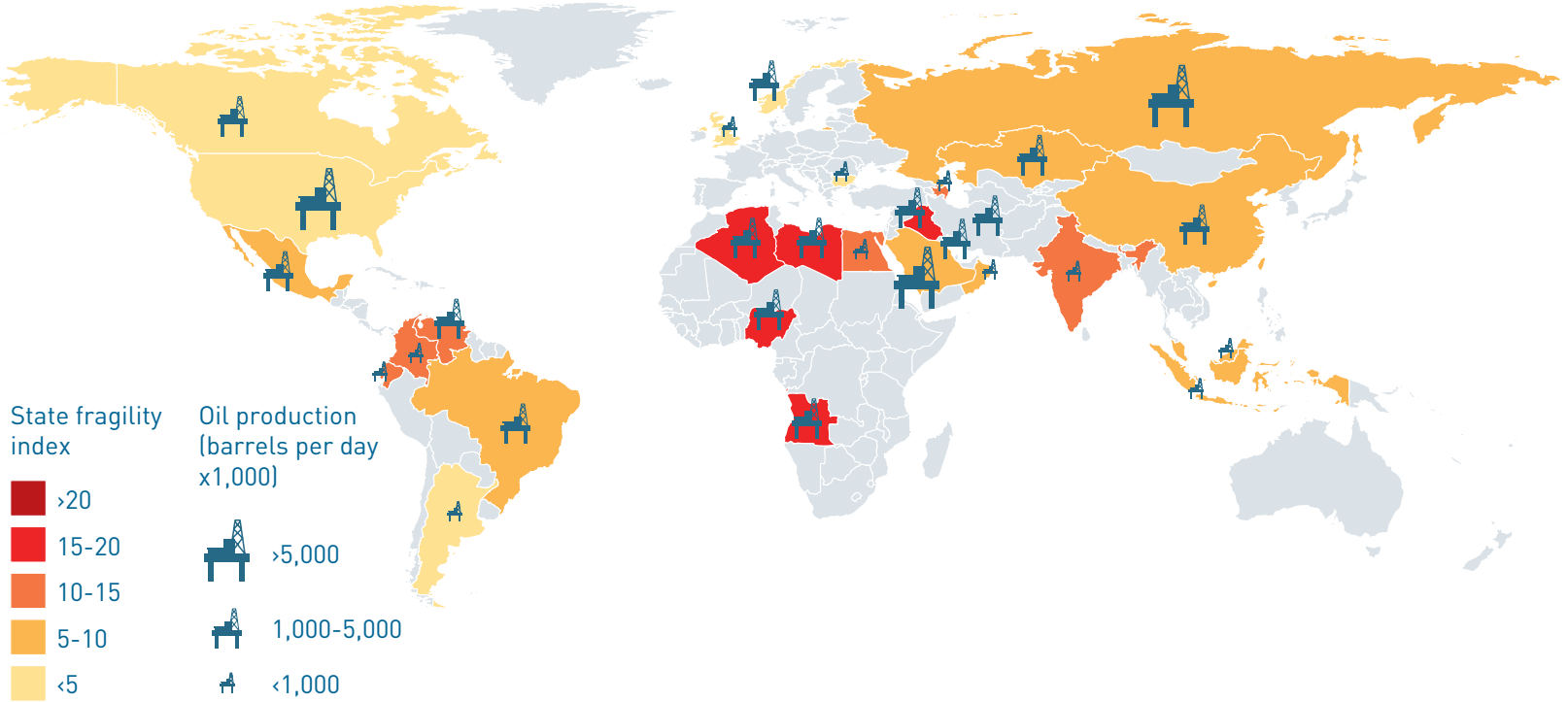

FIGURE 9: OIL PRODUCTION AND STATE FRAGILITY[86]

Egypt experienced serious social upheaval in 2013. The ousting by the Egyptian armed forces of elected President Mohamed Morsi in July 2013 sparked a wave of violent protest throughout Egypt's major cities. The unrest caused numerous energy companies active in Egypt, amongst which Royal Dutch Shell, to temporarily close their offices and repatriate part of their staff.[87] Moreover, the social unrest in Egypt sparked concerns that it could prompt a closure of the Suez Canal, an essential link for energy transport between the Mediterranean and the Red Sea, boosting the oil price to a four-month high (see also section 3.3).[88]

Although not directly related to Dutch business operations, Saudi Arabia's vulnerability to internal instability is nevertheless worth noting. As the world's premier oil producer and holder of spare capacity, decisions taken by Saudi Arabia have a major impact on the price of oil. Although having largely escaped the turmoil of the Arab uprisings in 2011, Saudi Arabia experienced a bout of sectarian violence in late 2012 after police shot a Shia protester.[89] An example of a more direct threat to energy infrastructure was the February 2006 attempted car-bomb attack on the Abqaiq oil-processing facility. Although unsuccessful, the attack placed the vulnerability of critical energy infrastructure under the spotlight. Abqaiq is the most important refining hub in the kingdom with as much as 5-7 million barrels of oil refined each day.[90]

3.2.2 Natural Gas Markets and Geopolitics

Natural gas markets are not influenced by geopolitical unrest in the same way as the market for oil. Compared to oil, the transport of natural gas is a more costly undertaking and often requires pipeline infrastructure to be shipped from producer to consumer. LNG is changing this situation to some degree, given the ability for it to be transported to any location which is equipped with regasification facilities.

Notwithstanding this increase in flexibility, the bulk of natural gas worldwide is still transported via pipelines. In 2012, over 68% of all exported natural gas was shipped via fixed pipeline infrastructure.[91] This characteristic renders the market for natural gas regional in scope, rather than global. Gas development in a particular country or region is thus often isolated from other regions because of a lack of easy switching between supply routes. The regional impact of a gas pipeline disruption in supply notwithstanding, such an event does not necessarily have global ramifications (see Annex 1 The Netherlands and Energy Crises for a discussion on the 2009 Russian-Ukrainian gas crisis and how this interruption affected the Dutch economy).[92] This claim does not hold true however for LNG supply, which could be seriously affected by

a blockade of sea lanes (see also section 3.3 on maritime choke points). In 2012, roughly 32% of all natural gas exports were in the form of LNG.[93]

Similarly to oil production, the production of natural gas can also be adversely affected by internal instability. Figure 10 depicts the world's top natural gas producing countries, set against the degree to which these countries are prone to internal instability. Again, Egypt is a case in point. The Arab Gas Pipeline (AGP) which transports natural gas from Egypt to Jordan, Syria, Lebanon, and – until April 2012 – to Israel was sabotaged over a dozen times between 2011 and 2012. This resulted in large gas losses to recipient countries. Total exports via the AGP dropped to 19 billion cubic feet (Bcf) in 2012, of which the majority was sent to Jordan, with a smaller amount delivered to Israel before exports were terminated. This level is a substantial decrease from the gas volumes transported prior to the revolution, which totaled 193 Bcf in 2010.[94] The deteriorated security situation in the country following the coup of July 2013 is also harming Egypt's business climate, with energy sector investors wary about politically risky oil and gas investments.[95]

Of note also is the high vulnerability of Algeria; one of the most important natural gas supplying countries to the EU and also an important oil producer. The threats posed by internal instability were highlighted in January 2013, when militants attacked the BP natural gas plant at In Amenas/Tiguentourine. The incident left 29 insurgents and at least 37 hostages dead.[96] The event prompted security concerns about operating in Algeria's remote areas, notably in the southern part of the country. The attack also served to highlight the vulnerability of Southern Europe to interruptions in the supply of Algerian natural gas (see also section 3.4.2).[97]

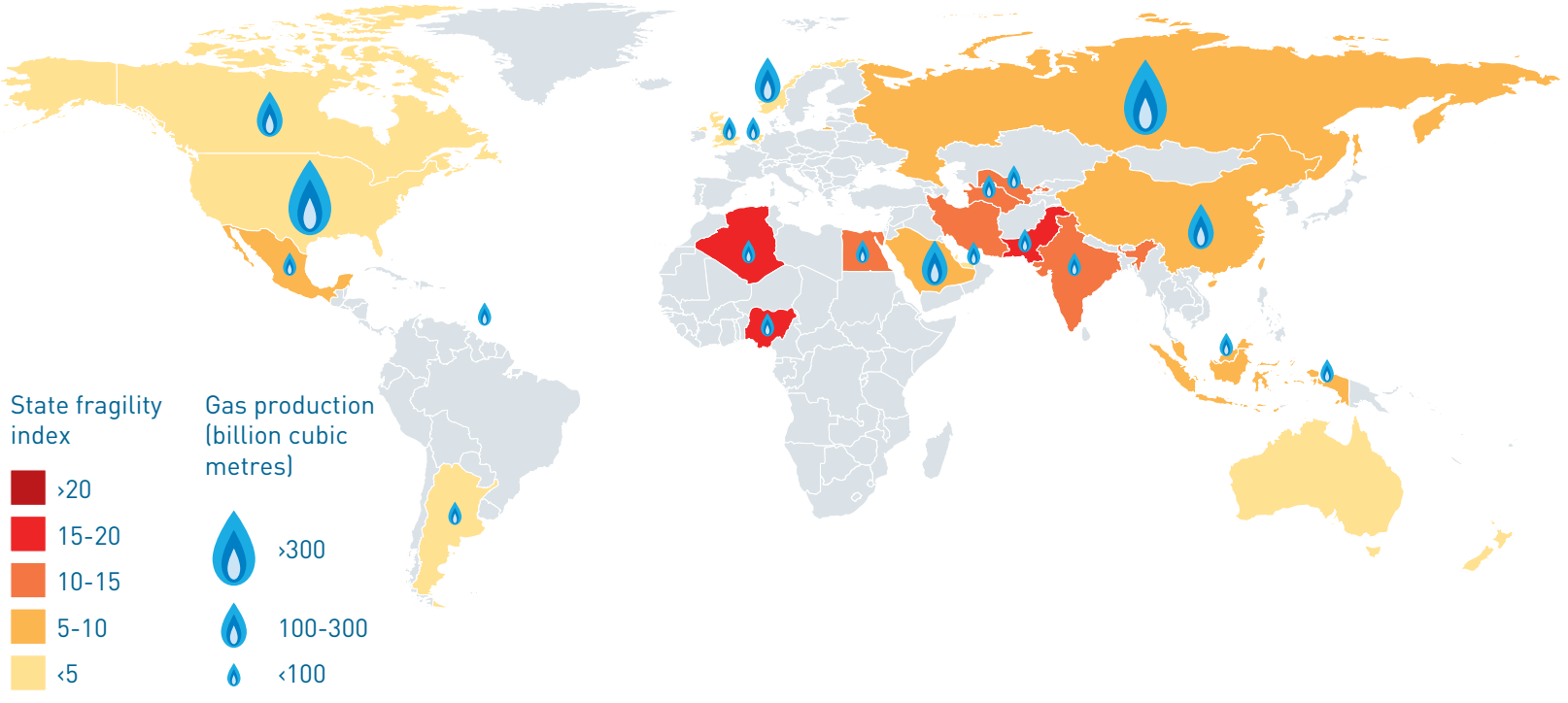

FIGURE 10: NATURAL GAS PRODUCTION AND STATE FRAGILITY[98]

Interim Conclusion

Based on the above two sections, we can – broadly speaking – state that threats to energy security manifest themselves in two ways. First, access to oil and natural gas supplies can be hampered due to internal instability. Additionally, a high share of energy resource rents in a country's GDP can make it more prone to instability, thus potentially affecting the energy security of its buyers. Second, energy insecurity can arise due to threats to energy infrastructure, particularly energy transportation infrastructure such as pipelines and oil tankers.

In 2011, over one half of the world's total oil production of 87 million barrels per day (bbl/d) was moved by tankers on fixed maritime routes.[99] Moreover, the importance of offshore drilling is growing. In 2010, offshore regions produced nearly 650 billion barrels of oil equivalent (Gboe), or 20% of the known remaining global oil reserves at the time. With respect to natural gas, these regions contained 25% of known reserves in 2010, and 28% of remaining reserves.[100] Currently, the top three largest offshore oil fields in the world are located in the Persian Gulf – two of them operated by Saudi Arabia and one by the United Arab Emirates.[101] This makes energy security also to a large extent a maritime issue.[102] The next section analyzes in detail the roles played by so-called 'choke points' and strategic waterways in modern day energy security, with a particular focus on the extent to which geopolitical tension in and around these waterways affects the Dutch economy.

3.3 Choke Points and Strategic Waterways

When it comes to maritime energy transport, most tankers are at some point during their journey forced to navigate narrow waterways, passages or straits, otherwise known as 'choke points'.[103] Since navigating these passages is often tricky and dense in maritime traffic, ships are forced to reduce speed, placing them at risk of attack.[104] Given the ease with which oil can be shipped worldwide, choke points are a prime nuisance for seaborne oil trade. Although LNG tankers are equally vulnerable to attacks, the low share of global LNG trade out of total natural gas trade worldwide, coupled with gas markets' regional nature (see section 3.2.2), means that this section focuses primarily on maritime oil traffic.

Figure 11 provides a list of the world's premier choke points. Based on the total volume of oil traffic passing through each choke point, the Strait of Hormuz, leading out of the Persian Gulf and the Strait of Malacca which links the Indian and Pacific Oceans, stand out as the two most strategic waterways worldwide. Bab el-Mandeb and the Suez Canal are two other vital energy arteries given their importance for oil supplies to

Southern Europe and the Mediterranean region. For this reason, the discussion in this section centers predominantly on these four choke points.

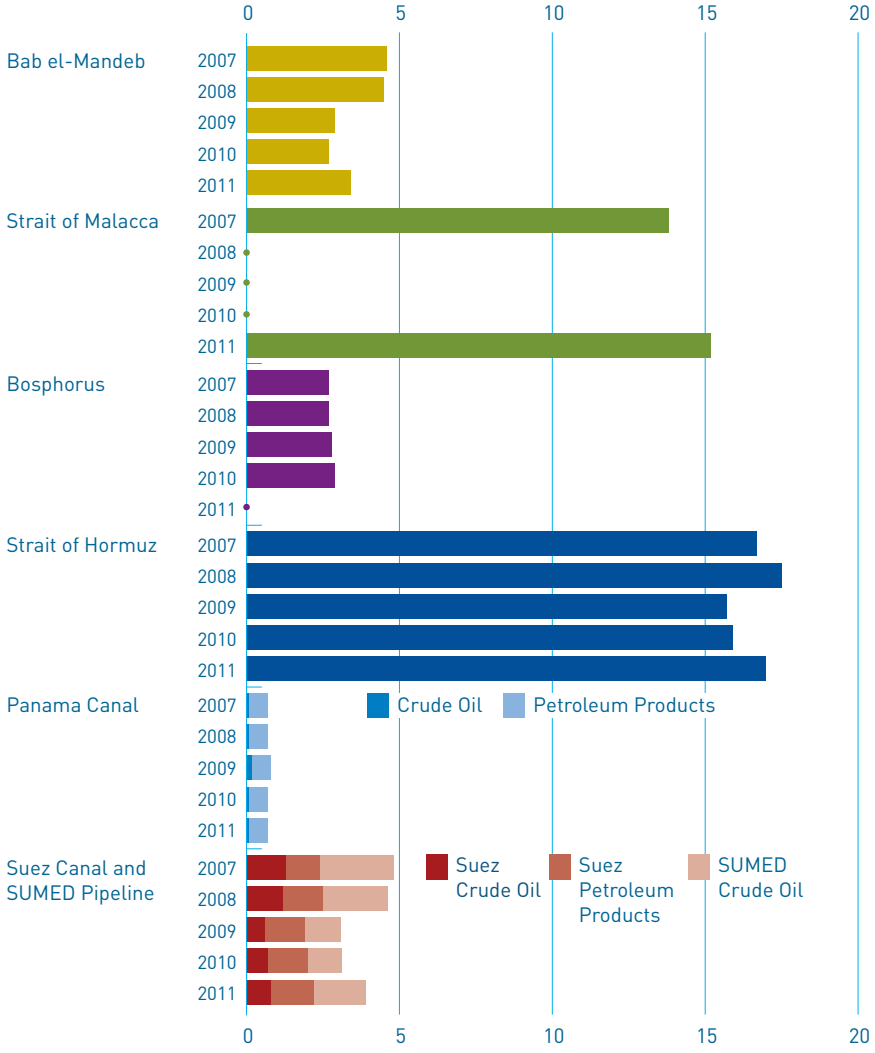

FIGURE 11: OIL TRAFFIC THROUGH WORLD'S MAIN CHOKE POINTS (MILLION BARRELS PER DAY)

SOURCE: WORLD OIL TRANSIT CHOKEPOINTS. SEE ENDNOTE 99.

In 2010, roughly one third of the world's oil supplies passed through the Strait of Hormuz.[105] The prime destination of the 17 million barrels of oil that flowed through the Strait in 2011 (over 77% thereof) were Asian markets, notably Japan, India, South

Korea and China. On top of this, Qatar exports nearly 2 trillion cubic feet of LNG through the Strait of Hormuz, amounting to almost 20% of the global trade in LNG.[106]

The Strait of Malacca represents the shortest sea route between the oil suppliers in the Persian Gulf and the markets in China, Japan and South Korea. At its narrowest point, the waterway is only 1.7 kilometers wide, making it a key bottleneck in international maritime energy traffic.[107] In order to alleviate this situation, China is constructing the Myanmar-China oil and gas pipeline from the Bay of Bengal all the way to China's Yunnan province. The first gas supplies started flowing to China in July 2013. The oil pipeline has a capacity of 440,000 barrels per day and went into full operation in October 2013.[108]

A closure of one of these two waterways, Hormuz especially, either as a result of an accident or a security incident, represents a serious risk to global oil prices and the energy security of oil importing nations such as the Netherlands. In this regard, it is important to emphasize that both an actual closure – and even a mere threat to do so – can have a significant impact on prices, as well as long-term stability.[109] Illustrative were a series of threats voiced by Iran to close the Strait of Hormuz in late 2011 and early 2012, which caused the oil price to rise by almost 4%.[110] If the Strait of Hormuz were actually closed, the subsequent effect on the oil price could be drastic as a mere fraction of the oil passing through the Strait can be replaced by pipeline or truck transport.[111] Research undertaken by the Netherlands Bureau for Economic Policy Analysis (CPB) indicates that a 20% increase in the price of oil causes economic growth in the Netherlands to drop by 0.4% within a one year period and 0.6% in a two year period.[112]

The risk of a security incident in and around some of the choke points mentioned in Figure 11 (notably Hormuz, Malacca and Bab-el Mandeb) becomes immediately clear when their locations are compared against the occurrence of piracy activity and the degree to which nearby countries are prone to internal instability (see Figure 12). Virtually all of the important oil choke points are flanked by countries highly prone to instability. It thus comes as no surprise that the outer ends of the Strait of Hormuz (Gulf of Oman) and Bab el-Mandeb Strait (Gulf of Aden) are rife with piracy activity. Indeed, attacks by Somali pirates on ships in the Gulf of Aden and southern Red Sea, including the Bab el-Mandeb, are frequent. In 2008, Somali pirates succeeded in capturing the Saudi-owned crude oil carrier Sirius Star which was carrying 2 million barrels of oil destined for the US market.[113] Other major piracy hotspots are the Gulf of Guinea off the coast of Nigeria and the Strait of Malacca.

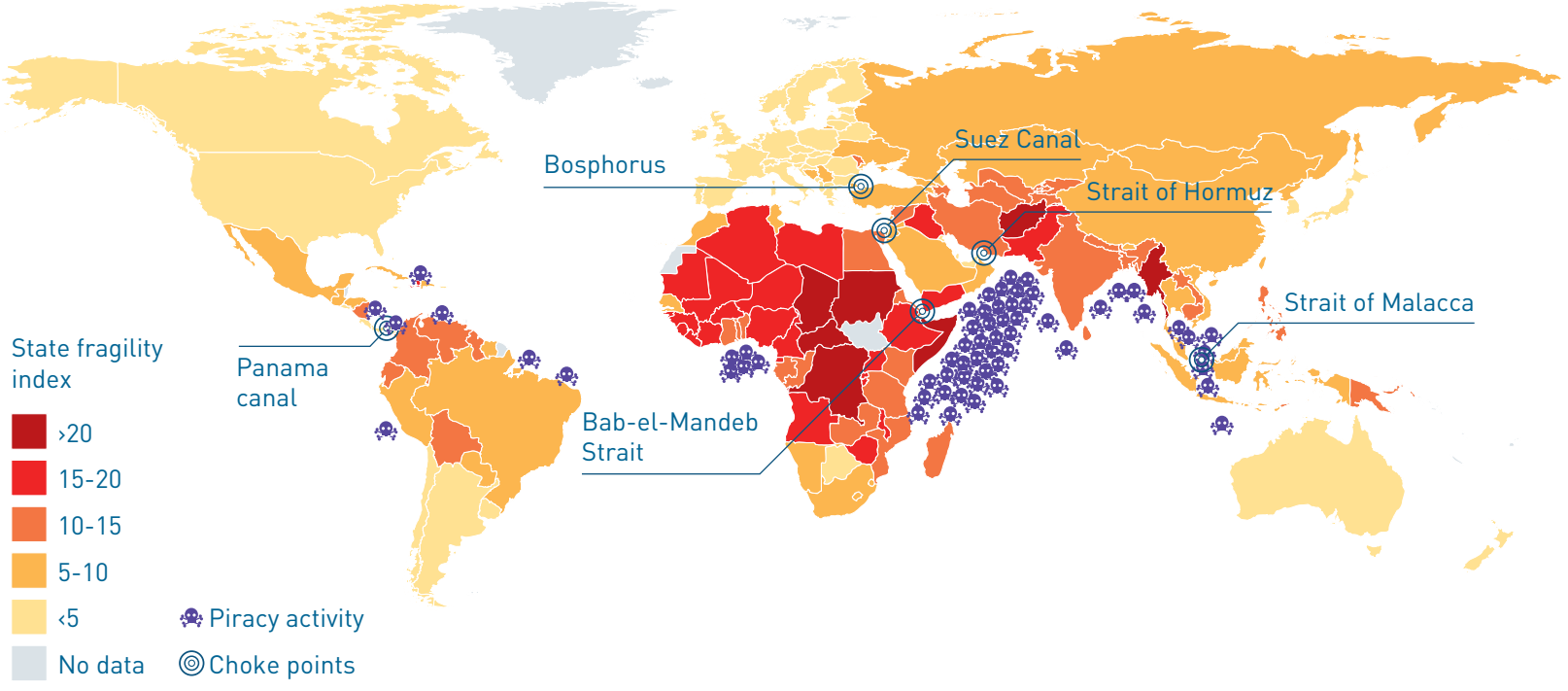

FIGURE 12: MARITIME CHOKE POINTS AND PIRACY ACTIVITY VS. STATE FRAGILITY[114]

Piracy is a direct threat to the Dutch economy. Not only do Dutch ships run the risk of being hijacked, piracy also threatens the transport of goods to and from Dutch ports; goods which the Dutch economy relies on to a large extent. The extra costs for a Dutch ship that sails via the Gulf of Aden are estimated at € 150,000 on average. This includes the increase in costs for anti-piracy insurance from US$ 500 to US$ 20,000. This may seem like a lot, yet insurance costs for an average-sized ship only amount to 10% of the total additional costs. The biggest cost constitutes the additional fuel consumption needed for sailing at a higher speed in order to avoid piracy attacks. In 2011 the total estimated cost of piracy worldwide amounted to US$ 7 billion, over 80% of which was incurred by shipping companies. Ultimately, shipping companies are forced to pass these additional costs on to their customers. A rise in the price of goods and fuel for the consumer can thus not be ruled out.[115]

Analysts have tied the incidence of piracy in the Gulf of Aden and Oman to the enduring instability in countries such as Somalia and Yemen and the practice of overfishing, which negatively impacts the livelihoods of local communities.[116] Aware of this link, oil majors Royal Dutch Shell and BP, together with the Japanese shipping industry, started an initiative in 2012 aimed at supporting community and job creation projects in the coastal regions of Somalia. Each company is said to contribute around US$ 500,000 over a period of two years. In 2013, the initiative was joined by the United Nations Development Programme (UNDP).[117]

The Strait of Hormuz and Malacca are also steadily becoming the stage of increased confrontation between India and China. After a series of pricing disputes between China and Iran prompted Beijing to reduce its imports of Iranian oil, India decided to substantially increase its imports of Iranian crude, thus effectively scooping up China's share.[118] Coinciding with the increase in India's energy-related investments in the region, the Indian government has already stepped up its military presence by inaugurating a new naval and air base in the southern tip of the Andaman and Nicobar Island in August 2012; in proximity of the Strait of Malacca. China similarly increased its presence through a string of ports and bases around India's southern periphery alongside oil supply routes which flow out of Hormuz and Malacca.[119] Finally, the event which really set alarm bells ringing in India was the decision by the government of Pakistan to transfer the management of the Pakistani port of Gwadar to China, a location en route to key Strait of Hormuz shipping lanes.[120] Meanwhile, India is eyeing the Iranian port of Chabahar for direct access to Central Asia, a mere 76km away from the Chinese-operated port in Gwadar.[121]

Finally, the ongoing social unrest in Egypt has prompted renewed concerns that the Suez canal may be attacked by militants, notably from the Sinai desert. Since the military coup of July 2013, there have been almost daily confrontations between the Egyptian security forces and supporters of the deposed President Morsi, as well as with extremists looking to exploit the volatile security situation. That the threat of an attack on energy traffic passing through the Suez canal is real, is evidenced by the August 2013 incident whereby the Cosco Asia – a large container vessel sailing under Panamanian flag en route to Rotterdam and Hamburg – was attacked with rocket propelled grenades. Although the ship escaped unharmed, the incident served to highlight the growing concern over Egypt's security situation.[122]

What is most apparent from the discussion in this section is the link between internal instability and the risk of security-related incidents in and around key maritime energy choke points. This observation points to a need to monitor and address the internal security situation of countries near important maritime energy traffic arteries. Whereas the analysis dealt chiefly with the roles played by conventional oil and natural gas supplies, shale gas and other unconventionals are causing a fundamental turnaround of global energy markets with profound geopolitical consequences for traditional energy-exporting countries. The next section analyzes the impact of this energy revolution in greater detail.

3.4 Shale Gas in the United States

Shale gas is named after the impermeable shale rock in which it is trapped below the earth's surface.[123] As noted in the introduction, the extraction of energy resources from shale has enabled the US to become a net exporter of natural gas and helped to greatly boost the nation's oil output. What this means for global energy markets and the position of traditional energy exporting countries is the focus of this section.

3.4.1 Shale Gas Resources Worldwide

In June 2013, the EIA published an assessment of shale gas deposits for 41 regions outside the US. The study provides an initial estimate of the possibility of the US' shale gas experience to be replicated elsewhere. The EIA report estimates globally available Technically Recoverable Shale Gas Resources (TRRs) at 7,299 Trillion Cubic Feet (Tcf). The world's conventional gas reserves, by comparison, were estimated at 6,839 Tcf.[124] Figure 13 graphically depicts the global distribution of TRRs on the basis of the data used in the 2013 EIA report.

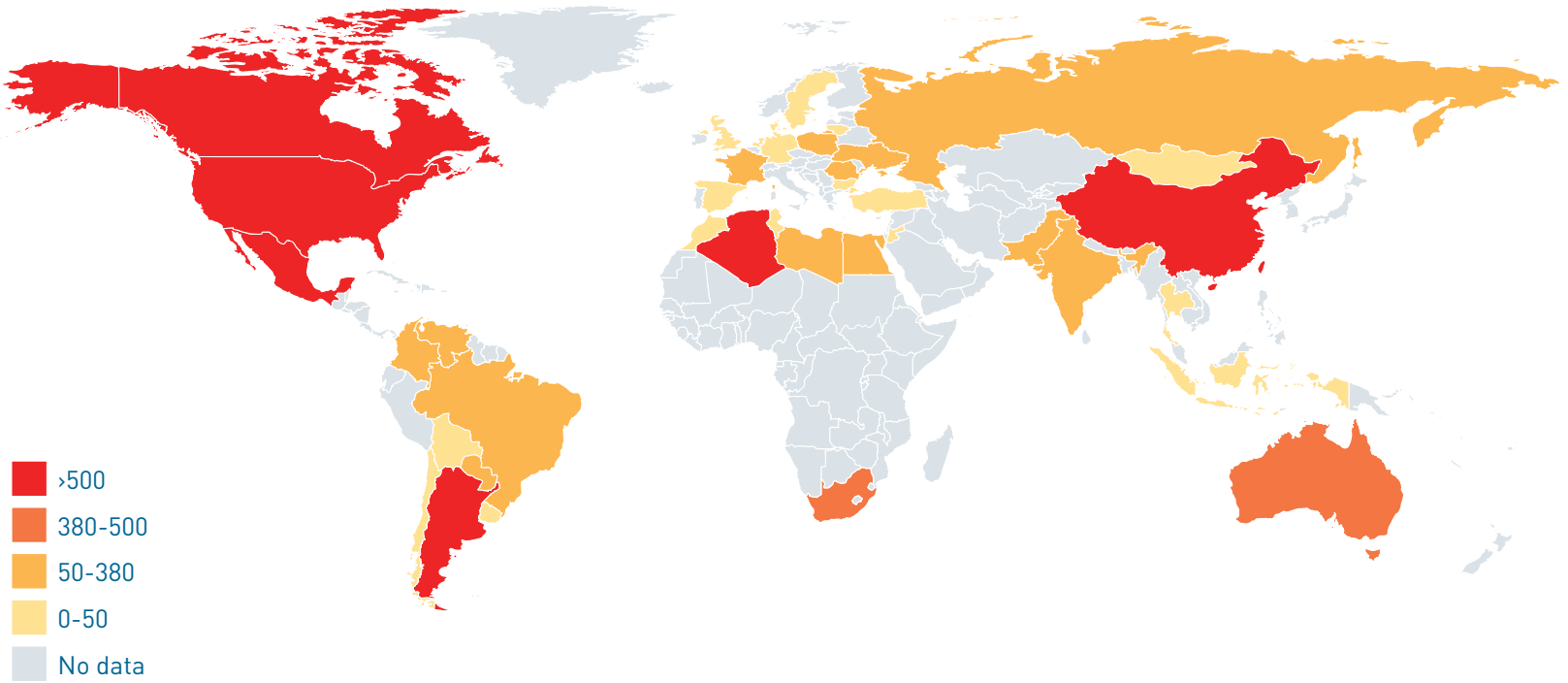

FIGURE 13: WORLDWIDE TECHNICALLY RECOVERABLE SHALE GAS RESOURCES (TRILLION CUBIC FEET, TCF).[125]

Notable shale gas deposits can be found in North America, China and Argentina. In Europe deposits in Poland, France and Ukraine are said to be promising.[126] Looking at traditional energy-exporting countries, Algeria has the biggest potential. Algeria is keen on importing hydraulic fracturing techniques to tap its shale gas resources, allowing the country to maximize export revenues whilst satisfying growing domestic demand. With its conventional production already having reached peak output, the opportunity lies in shale resources. Italian ENI and Royal Dutch Shell have already signed exploration accords with Algeria. That said, estimates are that Algeria will not be able to produce commercially viable unconventional gas before 2020.[127] At this moment in time, exact figures on globally available reserves of shale gas are not yet available; this would require the systematic drilling of exploration wells at all of the identified basins.

The extent to which the US' 'shale gas revolution' can thus be replicated in other parts of the world will depend to a great extent on the success of test drillings that are underway. In Europe for example many analysts believe that a full-scale replication will be difficult, *inter alia*, due to local opposition and environmental concerns, stricter regulatory and environmental standards, the often more challenging geology outside of the US and the long load times required for the assessment of commercially viable quantities of shale gas.[128]

3.4.2 Geopolitical Consequences

The possible extent to which the US' experience is replicated elsewhere set aside, the US shale gas revolution is already impacting international energy markets. LNG exports originally destined for the US have since been partly rerouted to Europe and notably Japan, who since the Fukushima incident was in great need of replacing lost nuclear power. The same can be seen for coal no longer needed in the US. These redirected energy flows caused natural gas prices on spot markets to drop significantly, causing Europe to become a buyers-market.[129]

This development has had two effects. One, major European utilities bound by long-term 'take-or-pay' contracts which oblige the purchase of a minimum amount of gas at a price pegged to the price of oil, came under stress. Because of slowing demand in Europe due to the financial crisis, it became difficult for importers to continue to abide by their side of the contract, prompting a desire to renegotiate the terms and conditions, opting for short-term spot purchases where the price is determined by supply and demand, in the anticipation that gas prices will fall further.[130] Second, a natural gas producer such as Gazprom saw its negotiating position vis-à-vis European

states worsen due to competition from LNG, causing uncertainty over long-term demand, cost margins and a decline in market share.[131] In February 2010, German energy company E.ON Ruhrgas stated that it had completed talks with Gazprom allowing a part of its contracted gas to be supplied at spot prices.[132] In June 2013, rumors emerged that E.ON would want to phase out its contracts with Gazprom altogether.[133] Forced to grant discounts to its key clients in Europe, the Russian government rightfully views this development as problematic.[134]

US' Rebalancing and Asian Energy Demand

On a strategic level, as US energy self-sufficiency is looming, the US' rebalancing from the Middle East to the Asia/Pacific is gaining pace.[135] It should be pointed out that complete US disengagement from the Middle East is unlikely, given the important relationship with Israel and that maintaining stable global energy prices will remain a priority for successive US administrations.[136] That said, a gradual US withdrawal could already impact Europe's energy security, as other countries may take the US' place within the region. Of the BRIC countries, China and India are most likely to try and fill this void.[137] A supply-side illustration of this is the attempt by Qatar to pursue new contracts with China and India now that US demands for LNG have dropped.[138]

It should be stressed that although the acquisition of foreign resources by either Chinese or Indian companies is at times viewed as potentially threatening to Europe's energy security, investments done by said companies will in effect enlarge worldwide oil production, and additional production capacity will not necessarily be diverted back to the company's 'home country'.[139] What is more important is whether China and India will also seek to gain a greater stake in regional security in order to protect their economic interests.[140] This could dampen fears of supply disruptions and potentially bring down oil prices.[141] However, as the discussion about the heightened Chinese and Indian military presence around strategic maritime energy corridors made clear (see section 3.3), it is not unimaginable that this increased competition between China and India could in fact destabilize the region instead.[142]

Potential for Instability

Important in a context of the US shale gas revolution is that it could lead to diminishing export earnings in traditional energy exporting countries as energy importing countries see the supply of energy increase. Of concern in this context is that in many energy exporting countries fuel, food, health, education, as well as other goods and services are traditionally heavily subsidized and form part of the 'social contract' that governs society.[143] With effectively no money made on domestic sales as these are sold below

market rates, these subsidies place an enormous drain on the revenues earned from exports.[144] For example, Russian Gazprom sells 60% of its natural gas on the domestic market at below market-prices.[145]

Subsidies also play a vital role in ensuring domestic stability. For example, during the Arab revolutions in 2011, many Gulf States heavily increased their social spending out of fear of a spillover of socio-political unrest from North Africa, including individual grants to inhabitants, free food staples, and large increases in minimal wages.[146] As a result, some analysts claim the threshold for active involvement in the international oil market now lies some US$ 20-25 higher than before the Arab Spring, thus lending support to an oil price of US$ 100 per barrel.[147] Steady export revenues are thus of vital concern to the long-term survival of governments in the region. These export revenues are placed under additional stress in light of continued population growth and an increase in domestic demand for energy in the Middle East and North Africa.[148]

A view held by several commentators is that this situation is untenable in the long run, simply because if world oil and gas prices were to decline, possibly as a result of shale gas and other unconventional fuels, this means that regimes dependent on oil and gas exports will no longer be able to abide by their side of this precarious 'social contract'. Put in other words, subsidies may have to be reduced and (partly) replaced by taxes, and oil- and gas-exporting countries may be forced to diversify their economies in order to balance their budgets. Failing to do so could result in popular resentment and instability.[149]

Although section 3.4.1 listed a number of reasons why the development of shale gas may not take off at a similar rate globally as witnessed in the US, shale gas is nevertheless likely to cause the globally available supply of natural gas to increase gradually over time, just as more extraction capacity for natural gas became available to the US. Taking into account that worldwide demand for natural gas is projected to increase strongly, the mix between natural gas and other fuels is thus set to change.[150]

This last point is particularly important. A recent study conducted by HCSS on the geopolitical implications of shale gas, taking the US shale gas revolution as a starting point, explored 'possible' worlds in which we could find ourselves as a result of the surge in shale gas and unconventional oil exploration in the US. Essentially we performed a 'stress test' of the robustness of the economies of a selected number of traditional oil and gas-exporting countries under extreme conditions. The scenarios point in particular to shifts in the European energy mix that displace oil in the medium-

to long-term (2020-2030) as a strong factor in determining whether instability occurs in oil and gas exporting countries near Europe.[151] This raises an important observation: the increase in the use of natural gas at the expense of oil which is gradually taking place in certain economic sectors. Similarly, coal no longer needed in the US is finding its way to other parts of the world, altering the energy mix.[152]

The greater availability of LNG worldwide has prompted transportation companies, as well as governments to look at ways in which LNG can be used in commercial transport. Similarly, natural gas could replace oil in power stations, petrochemical plants and domestic and industrial heating systems. Moreover, emerging economies are also moving step-by-step towards tougher fuel-efficiency standards on vehicles – although not (yet) up to the level of developed economies. The fuel-efficiency measures implemented by China in March 2013 are a good example of this, restricting average fuel consumption among passenger vehicles to 6.9 liters per 100 kilometers by 2015, with a further reduction to 5.0 liters by 2020.[153]

Although good news from an environmental and scarcity point of view, this development is problematic for many oil- and gas-exporting countries as they rely on high oil prices to balance their budgets. For example, in 2013 Algeria required a fiscal break-even price of almost US$ 125 a barrel; Russia's federal budget requires the international oil price to lie above US$ 100 a barrel; Saudi Arabia's fiscal break-even oil price was US$ 98 per barrel; and OPEC's weighted average fiscal break-even price increased from US$ 99 in 2012 to US$ 105 per barrel in 2013.[154] High oil prices curb demand growth, and a greater supply of natural gas – and increasingly unconventional oil supplies – could place the oil export revenues from these countries under even more pressure.[155]

Notwithstanding the continued growth of global energy demand, such developments are also likely to contribute to a slowdown in the projected demand for oil in the medium-long-term (2020-2030). The onset of shale gas thus acts as a catalyst for accelerating the shift from oil to natural gas in certain economic sectors. All this is likely to lessen demand for oil, placing additional pressure on the budgets of oil and gas exporters in Europe's neighborhood.[156]

This could potentially lead to situations in which reduced oil rents cause a worsening of national economic circumstances, leading to a rise in youth unemployment and strongly reducing the purchasing power of the population. When this happens, fuel and/or food subsidies often have to be lessened or halted, causing a sharp decline in

purchasing power and a steep increase in instability. Slashing subsidies thus acts as a major catalyst of social unrest.[157] In specific cases, a worsening of these variables has led to severe internal unrest, eventually leading to regime change. An interesting example thereof was the May 1998 decision by the Indonesian President Suharto to cut fuel subsidies, under pressure of the International Monetary Fund (IMF). The move added to ongoing unrest over inflation and food shortages. Eventually, by 12-13 March 1998, the situation had exploded and widespread rioting broke out, leading to an estimated 1,200 deaths in Indonesia. President Suharto stepped down on 21 March 1998.[158]

Another, more recent, example was the September 2013 decision by the Sudanese government to halt fuel subsidies in light of ongoing economic difficulties. This move resulted in widespread riots, killing and injuring dozens of civilians in what was seen as the worst unrest in years. Sudan was a country experiencing an oil-fuelled economic boom until South Sudan became independent, taking 75% of Sudan's oil reserves with it.[159]

Eyes on Russia, Algeria and Venezuela

The question is, which of the world's oil and gas exporting countries is more prone to instability than the others in the case of declining oil prices? Looking at trends in global conflict, research carried out by the Center for Systemic Peace points out that in the past fifty years, the chance of instability in an anocracy was ten times higher than the chance of instability in a democracy and five times higher than in an autocracy.[160]

The risk of unleashing causal mechanisms as described in the examples of Indonesia and Sudan is particularly high in countries of an anocratic regime-type, which experience high youth unemployment and possess limited financial reserves (sovereign wealth funds) to offset a decline in resource rents.[161] Typical cases of anocratic energy producers which correspond to these conditions are Russia, Algeria, Egypt and Venezuela.[162] In 2013 Egypt has already fallen victim to the instability-proneness of an anocracy, albeit for reasons other than a decline in oil prices. That said, the emergence of shale gas and other unconventionals is unlikely to lead to an improvement of the current situation. It should be stressed that Algeria, Russia and Venezuela, when faced with an oil price decrease – contrary to the countries in the Gulf region – do not possess financial buffers that can whither such a period easily.[163] This renders them particularly vulnerable if shale gas accelerates a transition towards a greater share of natural gas in the global energy mix.[164]

Much of the vulnerability of Russia, Algeria and Venezuela stems from the particular way in which resource rents are managed. Whereas in market economies the market corrects a misallocation of resource rents when the resource boom ends, this is not the case in 'resource rent-addicted' countries such as Russia, Algeria and Venezuela. The reason why is that misallocation in rent-addicted economies is difficult to detect due to the opaque nature in which the rents are misused.[165] During periods of windfall energy profits, these rents often disappear into inefficient production sectors, the pockets of the elite and serve to further expand an already bloated public sector.[166] This makes it extremely difficult to account for misallocated rents when economic conditions worsen, for example when oil prices decline.

Although a disproportional reduction in associated oil wealth as experienced in the example of Sudan is unlikely to take place in Russia, Algeria and Venezuela, the examples of Sudan, as well as Indonesia, make clear that oil and natural gas price decreases and/or worsening economic conditions are likely to trigger similar causal mechanisms. The onset of shale gas and other unconventionals may just do the trick.

For Europe this means that it could be confronted with heightened instability in Algeria and Russia; two important natural gas and oil-providing countries. For the Netherlands in particular this means potential disruptions to the business operations of Shell, as well as a blow to the increasingly interwoven energy partnership with Russia. Moreover, given the presence of the Dutch Antilles just off the coast of Venezuela, an increasingly unstable Venezuela could pose a direct risk to the security of the islands.

Need for a Comprehensive Approach

The analysis in this chapter highlights four issues which affect the economic security of the Netherlands, in particular its energy security.

First, the high degree to which important oil- and natural gas-producing countries are prone to instability poses a risk of interruptions to their energy exports. Such interruptions often lead to a rise in the price of energy products, notably oil. For an open economy such as the Netherlands, upward energy price swings are damaging to economic growth. Countries which warrant specific attention given the presence of Royal Dutch Shell are Egypt, Algeria and Nigeria. Past and ongoing instability in these countries has frequently led to a (temporary) disruption of business operations, raising costs of production.

Second, the issue of internal instability is even more problematic in countries which flank strategic maritime energy arteries. With the exception of the Bosphorus, all of the choke points mentioned in section 3.3 are surrounded by states which suffer from chronic instability. Particularly problematic areas are the seas around Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca. The presence of piracy activity around these strategic waterways cannot be viewed independently from the circumstances in neighboring countries. The combined community development initiative in Somalia pursued by Shell, BP, the Japanese shipping industry and the UNDP is a sign of the growing awareness that countries' internal problems lie at the basis of contemporary maritime insecurity.

Third, shale gas – and other forms of unconventional energy – are fundamentally changing the US' domestic energy market. Internationally, the US' shale gas revolution is beginning to leave its mark on energy markets in Europe. Furthermore, bolstered by projected energy self-sufficiency, the US' Asia pivot is opening up space for emerging economies to become more active in Middle Eastern energy affairs. However, with few countries currently able and/or willing to lay down a military presence comparable to that of the US, increased competition between India and China in fact runs the risk of destabilizing an already volatile region.

Fourth, in the medium- to long-term shale gas acts as a catalyst for oil substitution in certain energy-intensive economic sectors which, when coupled with increased fuel efficiency, could lead to a slowdown in oil demand growth in the coming years, placing pressure on oil prices. This observation is particularly problematic for energy-exporting countries that for a large degree rely on the revenue generated by oil sales and are poorly equipped to deal with a declining oil price. Countries most at risk are those of an anocratic regime type, which suffer from high youth unemployment and possess limited financial buffers (sovereign wealth funds); notably Russia, Algeria and Venezuela. The EU could thus face heightened instability in two of its most important suppliers of natural gas and oil. For the Netherlands specifically, the presence of Russia in this list is problematic given the deepening trade relationship between the Netherlands and Russia and the dominance of Russian oil trade in the port of Rotterdam. Worsening economic conditions in Russia are thus likely to adversely affect the economic security of the Netherlands, notably the energy security partnership. Finally, instability in Venezuela could affect the security of the Dutch Antilles which are located in close proximity.

4 ECONOMIC SECURITY, ENERGY SECURITY, AND THE ROLE OF THE MOD

4 ECONOMIC SECURITY, ENERGY SECURITY, AND THE ROLE OF THE MOD

Introduction

In history, we have seen a myriad of examples of the use of force to secure access to or control over energy sources. There are two points of view on this. One perspective is that with increased global competition over access to energy, the militarization of energy security by the world's superpowers is a harbinger of military conflict. On the other hand, one could also argue that resource wars will become obsolete in the 21st century, because of the increasing number of powers that would likely become involved. However, even in the absence of military conflict, energy-importing countries align their national strategies in ways to improve their access to energy.[167]

This chapter explores the possibilities for the Dutch MOD to contribute to resolving economic security challenges for the Netherlands, and specifically the energy security issues addressed in the previous chapter. We discuss the role of the MOD rather than adopting a sole focus on the armed forces, because the MOD includes the MIVD as well. First, we address two sides of the debate on the feasibility of the use of force as an energy strategy. We also take a closer look at how other European countries perceive the role of the military in securing economic interests. Further, we will argue that energy security objectives are often closely related to or aligned with the wider security interests of the Netherlands and the Dutch ambition to promote the international rule of law. To conclude, we explore what the economic and energy security issues presented in the two previous chapters could mean for the MOD and the armed forces.

This chapter is *not* about gunboat diplomacy through the use or threat of force in order to secure a nation's interests. The challenges associated with energy security, and their impact on the security landscape, require political responses. Military means can *contribute*, but are neither sufficient nor always necessary to meet complex energy security challenges. An effective response calls for a comprehensive approach, involving a combination of public and private actors, of political, civilian, and military

instruments. Further, any military contribution will always be integrated on an international level, e.g. under the umbrella of the UN, EU or NATO, and within the context of other international policies and efforts.

4.1 Energy Security and National Security

'There will be blood'[168]

Countries address their energy security challenges differently. As said, two opposing views can be identified. The first assumes that the militarization of energy security by the world's superpowers is a harbinger of military conflict. In this perspective, the militarization of energy policy increases the risk of resource wars.[169] Over 60% of the world's primary energy supply still comes from oil and natural gas. Relying on the certainty that countries will remain dependent on these scarce resources, and in order to 'grease the wheels' of their economies, governments should fully understand the risks that are present and that might affect their supply. Five main risks can be identified to the supply of natural resources from resource-rich countries.

The first risk is the presence of insurgents. Nigeria, for instance, suffered a devastating decrease in oil production due to the actions of local rebel groups. In the last decade, rebels have performed attacks against foreign oil companies in Ethiopia, Sudan, Algeria and Angola. As a result, oil firms are more reluctant about investing in these regions and, in some instances, operations are even shut down until local governments can guarantee the safety of employees and foreign investors. Important reasons why rebels are trying to disrupt oil production (next to criminal behavior) are the uneven distribution of the resource rents, and the belief that national mineral resources should not be exploited either by what they believe are illegitimate regimes or by foreign companies. Lack of economic growth, and youth bulges further contribute to this.[170]

The second risk is known as the resource curse, the paradox that countries abundant in non-renewable resources experience less economic growth than countries without these resources. As seen in chapter 3, extensive research has shown that countries heavily dependent on the extraction of valuable resources, are also more likely to face intrastate conflict. Since the government exercises ownership over underground resources, this leads to a highly unstable system in resource-rich states, where powerful groups fight over the control of the government. Once in control of the government a faction will do whatever is necessary to remain in power, resulting in high levels of political violence and corruption.[171]

The third risk to the supply of natural resources is interstate conflict. Uncertainty about the future supply of key resources, such as oil and natural gas, also triggers conflict as states try either to ensure adequate supplies for themselves, or to earn rents from selling it. For instance, during the 80's Saddam Hussein initiated the Iran-Iraq war, which some believe to be partially motivated by the desire to gain control over Iran's key oil province of Khuzistan. Increasing Chinese demands for oil, combined with the decline of production in existing fields, may lead to shortages and price increases as well.[172] On the other hand, some positive examples also arise; after four years of dispute over the Chunxiao's natural gas field, which culminated in both Japanese aircraft and a Chinese submarine patrolling the region, China and Japan agreed to jointly develop the natural gas field, considerably improving the relations between both Asian nations. This represented a drastic turnaround for a situation which the government-backed newspaper China Daily already considered as leading to an inevitable conflict between the two states.[173]

The fourth risk relates to military aid. Usually provided by major importing states to resource-rich countries, military aid can be deployed during local or regional instability. Its main goal is to safeguard exports, either by direct or indirect actions. In some instances, this is also considered as a type of conflict that arises due to resource scarcity. For example, in 1945 the United States agreed to provide military aid to Saudi Arabia, in exchange for privileged access to Saudi oil.[174] Other major players were momentarily responsible for securing the Gulf Area, such as Great Britain and the Shah of Iran, but with the approach of the Soviet Union to the Indian Ocean in the 1980's, then President Jimmy Carter stated that 'any attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force.'[175] This principle, known since as the 'Carter Doctrine', has been largely adopted by following US Presidents.

The fifth risk is due to great power competition. The United States is no longer the only nation providing military assistance to secure access to scarce resources. Other nations, mainly China and India, are now highly active in providing military aid, hence some analysts are concerned that diverging interests or the competition over these resources could escalate to conflict. The very presence of China in Africa creates concerns among American officials, since Beijing is competing with Washington for a steady supply of oil and Chinese imports from Africa are expected to increase.[176]

'No blood for oil'[177]

The second perspective on the relation between energy security and national security offers a diametrically opposed view. It claims that traditional resource wars will not be more common in the 21st century.[178] There are three good reasons to believe that resource wars have become obsolete. In modern society, the closest event we have had to an interstate conflict due to resources was in the height of the 1973 Oil Crisis, when the United States had plans to undertake military actions to break the embargo imposed by OPEC.[179] In 1975 the US Congress commissioned a study '*Oil Fields as a Military Objectives: A Feasibility Study*, which stated that the high risks and costs associated with curbing the Soviet threat in the region were bigger than the benefits obtained from holding oil fields.[180]

The first reason why resource wars are not likely to happen in the future, lies in the fact that it is, as scholar Christopher Fettweis has stated, 'always better to buy oil than to seize it,' even in a scenario of increasing prices.[181] For example, the total US cost for the wars in Iraq, Afghanistan and Pakistan was at least US$ 3.2 trillion between 2003 and 2010.[182] Even though this conflict had a different background, these costs could be used as a proxy to understand how prohibitive a war over resources would be, not to mention the costs necessary to hold on to the conquered reserves indefinitely.

A second reason is that the interests of both consumers and producers are aligned, hence the interest in stability is mutual.[183] Even though producers desire a higher price while consumers seek a lower price, any war in a resource-rich region which would disrupt supply would be counterproductive, since no state is able to benefit from oil or gas until ownership issues are solved.[184] Since oil is traded in a global market, physically controlling a reserve is no longer necessary. Most countries are willing to sell everything they can, rather than leave their oil in the ground. A counter example is Venezuela, owner of the biggest proven oil reserve in the world.[185] In 2010, then president Hugo Chavez threatened to stop selling oil to the United States, mainly due to political reasons.[186] Subsequently, Venezuelan oil exports to the United States drastically dropped from 1,773 thousand barrels a day in 1997 to 960 thousand in 2012.[187]

A third reason why resource wars are not likely to happen in the future, is that wars are getting rarer anyway, as conflicts tend to be settled peacefully. In the last century, war has never broken out due to ownership disputes over oil deposits: in all cases agreements were made without escalating to conflict. For resource wars to happen,

the incentive for fighting must overcome all the substantial economic incentives for peace, not to mention breaking the pattern of conflict being solved peacefully.[188]

4.2 International Approaches

To put the Dutch government's approach to economic security into perspective, we examined how several other European countries view economic security and what the role of the respective MODs is in relation to economic security. We conducted research into the policies of the United Kingdom (UK), Germany, France, Denmark and Poland. In addition, we analyzed how several international organizations, namely the EU, NATO, the UN, the OECD and the WTO, conceptualize economic security.

Overview of other European countries

The most remarkable finding is that Poland is the only country that – like the Netherlands – refers to the concept of economic security in its national security strategy.[189] Despite the formal absence of the term 'economic security', most countries do refer to a number of common elements that may affect economic performance (see also Figure 1 in Chapter 2). Energy security, cyber security, resource security and maritime security figure particularly prominently. Also elements contributing to economic prosperity are consistently emphasized across the policy documents. Moreover, the most recent national policy documents tend to focus on the international nature of the economy, in particular following the global financial and economic crisis. In this context, most countries recognize a general degradation of economic security due to the interconnected, systematic and global nature of economic risks.

When focusing on the role of the MOD in promoting economic security, all countries make its role quite explicit in the development of cyber security capabilities. Policy documents from all countries under study emphasize the increased necessity to invest in cyber and IT security. The UK, France and Denmark are setting up cyber security programs under the direct command of their defense ministries.[190] However, cyber security is a broad term. It should be noted that the MOD is not the only governmental body dealing with this issue and that the development of cyber security capabilities is not always primarily driven by economic security concerns.

The involvement of the MOD in the other areas is more difficult to gauge. Denmark is the only country that explicitly links its economic interests to the possibility of deploying armed forces to protect these interests. Denmark justifies its involvement in military anti-piracy missions abroad by stating the importance of maritime shipping for its economy.[191] Other countries are much more reluctant to explicitly link the use of

armed forces to securing economic interests. Germany, for instance, justifies its presence in the Horn of Africa primarily in terms of humanitarian assistance.[192] By contrast, France and the UK explicitly state that their presence is aimed at the protection of choke points, which is in itself directly related to economic security.

Overview of International Organizations

International organizations mostly aim to achieve economic security at an international level. Of the organizations reviewed, the EU and NATO link economic security and military involvement explicitly, especially in the areas of cyber security, resource security and maritime security. Although diplomacy, multilateral cooperation, and trade are the preferred instruments of the EU, it also explicitly mentions the role of the military. The EU lists the development of cyber defense policies and capabilities related to the Common Security and Defense Policy (CSDP) as one of five strategic priorities.[193]

NATO has the most developed vision of economic security, as it considers 'the flow of economic resources comprising people, goods, and strategic commodities' as crucial to the security of the alliance.[194] NATO is active on many themes that are relevant to economic security, including cyber, maritime, energy and environmental security and the protection of critical infrastructure and trade routes.[195] NATO aims to serve as a platform for cooperation and information sharing on these issues.[196]

The link between the military and economic security is not self-evident for non-military organizations such as the OECD, the WTO, and the UN, that are nonetheless actively promoting conditions for economic security, such as economic development and free trade. The objective of the OECD is 'to achieve the highest sustainable economic growth, employment and a rising standard of living in member countries, while maintaining financial stability, and thus to contribute to the development of the world economy.'[197] The OECD provides a platform for information exchange between governments and helps them to understand what drives economic, social and environmental change. The OECD collects data on economic activity, such as trade flows and investment, and compares data to predict future trends. It also sets international standards on a wide range of things, from agriculture and tax to the safety of chemicals. In sum, the OECD deals with a wide range of topics that present threats and opportunities for economic security. Similarly, the WTO is promoting an international economic environment that contributes to the economic security of its member states. The goal of the WTO is to reduce obstacles to international trade and

to ensure a level playing field for all, thereby contributing to economic growth and development.

International organizations are made up of member states and consequently focus on threats and opportunities for economic security at the country level. Despite focusing primarily on the interests of states, international organizations seem to address economic security at the individual level, especially the UN. For the UN the concept of economic security is understood in a different way, namely in the traditional sense of job and income security and in terms of human security. Through various development programs, such as the Millennium Development Goals, the UN actively seeks to improve the economic conditions of individuals and communities in the world's poorest and developing countries. Indirectly, the efforts of the UN and other organizations to promote economic growth in developing countries can enhance the economic security of other countries, including the Netherlands. Economic development makes countries less prone to instability and creates new export and investment markets.

To summarize the overviews of other European countries and other organizations, the concept of economic security has not yet often been explicitly integrated in national security policies, but countries see a role for the MOD, especially in the areas of cyber and maritime security. International organizations are actively promoting conditions for economic security, both in military and non-military ways and both from the perspective of their member states and the individual, depending on the type of organization.

4.3 Overlapping Interests

The Dutch MOD has three core tasks: defending national and Allied territory, including the Netherlands Antilles and Aruba; protecting and promoting the international rule of law and international stability; and supporting civil authorities in upholding the law and providing disaster relief and humanitarian assistance, both nationally and internationally.

Historically, Dutch security policy has at all times been closely aligned with economic interests, although this has not always been stated explicitly. As discussed in Chapter 2, the concept of economic security has recently gained prominence in Dutch security policies. However, it is sometimes perceived that the recent emphasis on economic security conflicts with another task of the Dutch military, namely promoting the international rule of law and stability.

In some countries, employing the military for economic security purposes has even triggered a public debate. Germany is a prominent example. Almost seventy years after the end of the Second World War, the use of the armed forces in Germany is often still stigmatized, and remains a delicate issue in the public conscience. In May 2010, Horst Köhler, President of Germany at that time, learnt this lesson the hard way. In an interview during a surprise visit to *Bundeswehr* soldiers in Afghanistan, he made a remark that seemed to justify his country's military missions abroad with the need to protect economic interests. Although his office tried to limit the damage in the aftermath by assuring that the remark was related to Germany's contribution to the ATALANTA mission off the Horn of Africa, the controversy did not fade away and the opposition accused him for advocating 'gunboat diplomacy.' Jürgen Trittin, parliamentary party leader of the green opposition party at that time, was quoted: '*Wir brauchen weder Kanonenbootpolitik noch eine lose rhetorische Deckskanone an der Spitze des Staates.*'[198] (We neither need a gunboat policy nor a loose rhetorical deck gun at the top of the state). President Horst Köhler eventually resigned over the issue. In his final statement he said: 'My comments about foreign missions by the *Bundeswehr* on May 22 this year met with heavy criticism. I regret that my comments led to misunderstandings in a question so important and difficult for our nation.[199]

This example illustrates the sensitivity of the subject. The main point here is that Dutch economic security, including energy security, often goes hand in hand with other policy goals of the government, such as promoting the international rule of law and tackling state fragility. Addressing the problems of these fragile states and their intrastate instability requires a comprehensive approach, addressing security, governance and development. We will illustrate the overlap of interests with the energy security issues relevant for the Netherlands, as discussed in the previous chapter.

Chokepoints

We have argued that the world's important chokepoints, with the exception of the Bosporus, are all flanked by states highly prone to instability. Particularly problematic areas are the seas around Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca. The presence of piracy around these strategic waterways cannot be viewed independently from the circumstances in neighboring countries. The situation in Somalia and Yemen clearly illustrates this problem.

A prominent example of the overlap between these problems is the EU's current engagement in the Horn of Africa. In November 2013, three EU missions were

simultaneously deployed in this area. The EUTM Somalia trains Somali soldiers in Uganda and Somalia; EUCAP Nestor is a maritime capacity-building mission currently active in Djibouti, Kenya and the Seychelles; and EUNAVFOR Atalanta patrols the waters of the Horn of Africa.[200] These three missions cooperated closely and pursued the same dual objective. The EU is engaged in the Horn of Africa, because it had a 'desire to support the people of the Horn and to help lift them from poverty into self-sustaining economic growth.'[201] On the other hand, the deployment of missions in the Horn of Africa served the EU's economic security interests as well, because piracy off the coast of Somalia 'continues to negatively impact on international maritime security and regional and international economic activities.'[202]

The contribution of EUNAVFOR Atalanta to the EU's economic security is the most apparent. The mission's tasks include 'deterrence, prevention and repression of acts of piracy and armed robbery off the Somali coast', as well as 'the protection of vulnerable shipping off the Somali coast on a case by case basis.'[203] EUNAVFOR thus directly protects the economic interests of the member states by protecting merchant shipping. EUCAP Nestor and EUTM also serve the EU's economic interests, albeit more indirectly, but (in contrast with EUNAVFOR) focus more on the root causes of the piracy problem. EUNAVFOR closely cooperates with EUCAP and EUTM to contribute to 'the establishment of a peaceful, stable and democratic country, trigger sustainable development and eradicate the root causes of piracy.'[204] Further, both EUCAP Nestor and EUTM Somalia played important roles in 'the EU's comprehensive approach to fighting piracy as a particular form of organized crime.'[205] The EU aims to improve the lives of the people in the Horn of Africa, but its presence in the region is also motivated by economic interests. The 'administrative vacuum [which] has permitted piracy and terrorism' is regarded as a threat to the 'interests of the member states.'[206] Thus, clearly, the deployment of military and civilian EU operations contributes to EU economic security.

Instability in Oil- and Natural Gas-Producing Countries

In this report, we have shown the high degree to which important oil- and natural gas-producing countries are prone to instability. This poses a potential risk to their energy exports. Such interruptions could lead to a rise in the price of energy products, notably oil. For the Netherlands, these price changes are damaging to economic growth. Also given the presence of Royal Dutch Shell, countries which require specific attention are Egypt, Algeria and Nigeria. In these countries, ongoing instability has frequently led to a (temporary) disruption of business operations, raising costs of production.

Shale Gas: a Catalyst for Instability

Further, we have seen that the emergence of shale gas acts as a catalyst of change in the global energy market. Scenarios are possible whereby it could lead to a decrease in oil demand in the medium to long term (2020-2030), putting pressure on oil prices. Energy-exporting countries which to a large extent rely on the revenue generated by oil sales, and are poorly equipped to deal with such a decline, face an increasing risk of instability. Countries most at risk of this are those of an anocratic regime-type, which suffer from high youth unemployment and possess limited financial buffers. We have identified three examples of these countries with particular relevance to the Netherlands. From a security perspective, all three countries are relevant to the security of The Kingdom of the Netherlands. The first is Algeria, which is also home to significant Shell operations. The next example is Russia, whose energy partnership with the Netherlands is growing. The dominant origin of oil passing through the port of Rotterdam is Russia. The third example is Venezuela, located near the Dutch Antilles: instability in Venezuela may affect these islands and The Kingdom of the Netherlands

All three examples clearly illustrate that the energy security issue of the Netherlands is closely related to other security and policy issues of the government, such as promoting the international rule of law, development, aid, and tackling state fragility. Addressing (possible) intrastate instability, in the future or today, serves all these interests simultaneously.

4.4 A Military Response to Energy Security?

In the pursuit of their economic interests, nations apply instruments of power that include economic, political and military means. In today's complex and interconnected world, there is a growing awareness that these means have to be employed in concert. Furthermore, this so-called comprehensive approach is very much aimed at building stability, avoiding conflict, or containing conflict at an early stage.

In both chapters 2 and 3, we have already argued the need for a comprehensive policy, addressing the energy security problems of the Netherlands. A recent survey of Dutch Energy Security policies confirmed the strong and growing link between energy security, climate, international security, rule of law, and human rights. The report also concluded that the comprehensiveness of these policies is currently lacking.[207] Its recommendations were that the Dutch government should aim for a comprehensive approach with the Ministries of Economic Affairs, Infrastructure and Environment, Foreign Affairs, and Defense.[208] However, it is unclear whether these recommendations have been implemented yet.

For the military, this indicates a stronger emphasis on the 'strategic functions' that precede actual conflict, namely anticipation and prevention. In the 2010 Future Policy Survey, seven strategic functions have been developed. These functions clarify how the government provides for the security of the country and what the role of the armed forces is in a broader context.[209] Based on the issues presented previously, we will explore possible options for the Dutch government, and the MOD in particular, structured along these strategic functions.

Anticipation

Anticipation comprises preparations for foreseen and unforeseen developments and incidents that may affect the interests of the Kingdom of the Netherlands or the international rule of law. The developments analyzed in the previous chapter call for the increasing relevance of anticipation, and a focus on specific topics and areas.

First, from the perspective of shale gas as a catalyst for instability, three countries are of particular relevance to the Netherlands. These countries are Algeria, Russia, and Venezuela. Second, from the perspective of countries which are particularly vulnerable to shifts in the price of oil, combined with the presence of Dutch companies, Egypt, Algeria and Nigeria stand out. Third, from the perspective of chokepoints, the countries around Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca have been highlighted, including the respective waterways themselves. Fourth, the waning strategic importance of the Middle East to the US, combined with the fact that the largest portion of oil shipped through Hormuz and Malacca goes to Asia, has resulted in a heightened military presence of both India and China around these waterways. There is a risk of confrontation between the two. This calls for anticipation of this strategic development.

The MOD already has a number of existing capabilities that could be mobilized to address these calls for anticipation. Its surveillance and reconnaissance assets, as well as its ability to increase the monitoring in reaction to specific threats or trends in a security situation make its involvement in safeguarding economic security particularly relevant. It is important to note, however, that surveillance alone is unlikely to be sufficient in isolation from actual military presence, staff training and strengthened cooperation with target countries or surrounding states.

Prevention

Prevention includes the taking active steps to prevent a threat from having a negative impact on Dutch interests or the international rule of law. In this context, prevention

could include military presence in or around the countries or chokepoints at stake. Other types of prevention are military aid and military assistance to foreign security organizations, in order to build indigenous security capacity or enhance their internal stability and security. A prominent example is Security Sector Reform (SSR). This is the process of assessment, review and implementation as well as monitoring and evaluation of the security sector of a foreign country, led by its national authorities. SSR targets individual components of the sector such as the police, army, border control, coast guard and civil emergencies services, and enhances their effectiveness and professionalism. Its goal is the enhancement of effective and accountable security for the State and its peoples, without discrimination and with full respect of human rights and the rule of law.[210]

However, a recent UN report on SSR concluded that these efforts need to be linked to broader political reforms. These create the foundations for transformative processes such as national dialogues, reconciliation efforts or transitional justice initiatives. In absence of these foundations, security sector reform is neither sustainable nor transformative. This is illustrated by developments in the Central African Republic, Côte d'Ivoire, Liberia, Somalia and Timor-Leste.[211] This confirms our earlier point on the need for a comprehensive approach.

Based on energy security issues, Algeria, Venezuela, Egypt, and Nigeria in particular could be candidates to engage with military presence and SSR-activities. The same applies for nations along Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca.

A recent example of this strategic function is the Dutch participation in the multinational exercise African Winds 2013, in the framework of the Africa Partnership Station. This US-AFRICOM led program is an international security cooperation initiative. It aims at strengthening maritime partnerships through training and collaborative activities in order to improve maritime safety and security in Africa.[212]

Again, examples such as the United Kingdom offering Coast Guard Training to Nigeria, Sierra Leone and Cameroon, and the United States' project to build a radar network in Nigeria, illustrate that not all options in the maritime domain only include 'sending the navy'.[213] Another good illustration of this is Denmark's long-term initiative to secure trade routes, which focuses on enabling the countries along trade routes and choke points to meet the challenges of piracy themselves.[214]

This priority on prevention is also highlighted in the recent Dutch International Security Strategy, which focuses on insecurity and fragility, and centers on pre-conflict management. Further, this strategy calls for early warning and early action in emerging conflict zones as well.[215]

Finally, preventive deployment, for instance in SSR missions, could also serve as a source of intelligence in support of the strategic function of anticipation. It can also act as an entry point to step up focused protective measures in the case of actual threats to Dutch economic interests.

Deterrence and Protection

In the case of clear threats to Dutch assets and citizens, focused deterrence and protection come into play. Deterrence in the framework discussed here is quite different from the strategic deterrence used during the Cold War, which involved the stockpiling of weapons to act as a disincentive to aggression from enemy states. Here it is not so much aimed at states, but rather at non-state actors that may threaten Dutch economic interests in ungoverned spaces, in or near fragile and failing states.

The same goes for strategic protection, not of Dutch territory or ships against military attack, but focused on particular assets and sea lines of communication (SLOC), vulnerable to unchecked criminal and terrorist activities. For example, anti-piracy operations, deterrence and protection go hand in hand. Naval presence off the coast of Somalia is combined with the deployment of vessel protection detachments.

In particular, a relevant development related to deterrence and protection is the upcoming threat of anti-access/area denial (A2/AD) capabilities. Anti-ballistic ship missiles for example, have been described as a 'game changer' for the US and its naval forces.[216] A2/AD-capabilities could facilitate countries like Iran (or non-state actors) in closing off specific choke points (the Strait of Hormuz in particular) or threatening SLOCs. As a consequence, and in light of the US retrenchment, European armed forces should be able to counter A2/AD capabilities and reconsider their operational concepts. The US Air Sea Battle operation concept could be a source of inspiration for this. More importantly, the A2/AD debate also reinforces the requirement of European expeditionary full-spectrum forces.

Intervention

An intervention is defined as an enforced change in the behavior of one or more parties that threaten the interests of the Kingdom of The Netherlands or the

international rule of law. From an energy security perspective, increasing instability in or around the aforementioned countries and regions could directly threaten Dutch interests, and therefore, for example, demand a UN-sanctioned intervention by EU troops. However, in the case that an intervention is deemed necessary, whether the actions are couched in terms of economic or military concerns is unlikely to have a huge impact on outcomes. Therefore, the scope for military interventions on the basis of economic security alone are likely to be limited, besides the aforementioned focus on regions and countries. These developments also highlight the need for European expeditionary full-spectrum forces.

Stabilization and Normalization

The same argument, that whether the actions are couched in terms of economic concerns is unlikely to have a huge impact on outcomes, also applies to stabilization (establishing security in a current or former conflict zone to achieve political stability and economic and social development) and normalization (restoring normal living conditions after a conflict or disaster). In the long term, the root causes are more important, which calls for a comprehensive analysis of the root causes of the conflict and ways to address these.

However, the past two decades have given us many real world examples of stabilization and normalization, for better and for worse. For a variety of reasons, ambitious, long-lasting and expensive stabilization operations seem no longer feasible. In fact, the implementation of the defense budget cut in the Netherlands has preserved the 'breadth' of the military toolkit at the expensive of its 'depth': the ability to sustain large stabilization operations over many years. This could indicate that stabilization and normalization operations will be more focused in goal, time horizon and effort. On the other hand, economic interests and energy security concerns are considerations of growing importance, and could result in a wide focus on the countries and regions mentioned above.

4.5 Conclusion

More than it is the case now, protecting Dutch economic security, and in particular energy security, could go hand in hand with other policy goals of the government, such as protecting and promoting the international rule of law and tackling state fragility. Addressing the energy security issues discussed in this study, choke points, instability in oil- and natural-gas producing countries, and the instability caused by shale-gas developments, call for a comprehensive approach, addressing security,

governance and development. Such an approach should not only address the consequences of instability, but also its root causes.

In this approach, there is a clear role for the military, with a stronger emphasis on the 'strategic functions' that precede actual conflict, namely anticipation and prevention. The three developments analyzed in this study call for the increasing relevance of anticipation. First, this anticipation should be aimed at Algeria, Russia, and Venezuela, from the perspective of shale gas and other unconventionals as a catalyst for instability, Second, from the perspective of the countries which are particularly prone to internal instability, combined with the presence of Dutch companies, Egypt, Algeria and Nigeria stand out. Third, from the perspective of chokepoints, the countries around especially Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca have been highlighted, including the respective waterways themselves.

Further, prevention of these issues could include peacetime military engagement or (when applicable) military presence (peacetime military engagement) in or around the countries or chokepoints at stake. It could also mean military assistance to foreign security organizations, in order to enhance internal stability and security. In particular Algeria, Russia, Venezuela, Egypt, and Nigeria could be candidates to engage with military presence and SSR activities. The same applies to states along Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca. Finally, preventive deployment, for instance in SSR missions, could also serve as a source of intelligence in support of the strategic function anticipation.

Further, the upcoming threat of anti-access/area denial (A2/AD) capabilities means that protection and deterrence become of increasing relevance, as emerging A2/AD-capabilities could facilitate countries or non state actors in closing off specific choke points or threatening SLOCs. This does not only require updated operation concepts among the armed forces, but, more importantly, also reinforces the need for European expeditionary full-spectrum forces. Furthermore, the latter argument is reinforced by the increased risk of interventions in specific regions and countries.

5 CONCLUSIONS & DISCUSSION

5 CONCLUSIONS & DISCUSSION

5.1 Conclusions

There is an increased awareness that the national interests of the open economy of the Netherlands are increasingly tied to national security and the broader international environment. Due to globalization and increased digitization, the Dutch economy has become more vulnerable to certain threats, including risks that originate elsewhere.

Energy security, revolving around what is known as security of supply, or the 'adequacy of [energy] supply at a reasonable price', plays a central role in economic security. In particular oil and natural gas stand out when it comes to the potential for geopolitical tension that is associated with their acquisition. Especially the high degree to which important oil- and natural gas-producing countries are prone to instability poses a risk of interruptions to their energy exports. Such interruptions often lead to a rise in the price of energy products, notably oil. For an open economy such as the Netherlands, upward energy price swings are damaging to economic growth. Countries which warrant specific attention are Egypt, Algeria and Nigeria. The issue of intrastate instability is even more problematic in countries which flank strategic maritime energy arteries. Particularly problematic areas are the seas around Bab el-Mandeb, the Suez Canal, the Strait of Hormuz and the Strait of Malacca, and the surrounding states.

Furthermore, shale gas and other forms of unconventional energy are fundamentally changing the energy market. Bolstered by projected energy self-sufficiency, the perceived US' Asia pivot is opening up space for emerging economies to become more active in Middle Eastern energy affairs. However, with few countries currently able and/or willing to lay down a military presence comparable to that of the US, increased competition between India and China in fact runs the risk of destabilizing an already volatile region.

Also, shale gas, unused US' coal and the greater availability of LNG, act as a catalyst for oil substitution in certain energy-intensive economic sectors which – in the long term and when coupled with increased fuel efficiency, could lead to a slowdown in oil demand growth. This is particularly problematic for energy-exporting countries that to a large extent rely on the revenue generated by oil sales and which are poorly equipped to deal with a declining oil price. Countries most at risk are those of an anocratic regime type, which suffer from high youth unemployment and possess limited financial buffers, notably Russia, Algeria and Venezuela.

Therefore, the EU could face heightened instability in two of its most important suppliers of natural gas. For the Netherlands specifically, the presence of Russia in this list is problematic given the deepening trade relationship between the Netherlands and Russia and the dominance of Russian oil trade in the port of Rotterdam. Worsening economic conditions in Russia are thus likely to adversely affect the economic security of the Netherlands, notably the energy security partnership. Finally, instability in Venezuela could affect the security of the Dutch Antilles which are located in close proximity to Venezuela.

Dutch Economic Security has many different angles, concerning various government ministries. Furthermore, economic security policy is often closely related to other policy goals of the government, such as promoting the international rule of law and tackling state fragility. Addressing the problems of these fragile states and their intrastate instability requires a comprehensive approach, addressing security, governance and development.

In this comprehensive approach, here is a clear role for the MOD, with a stronger emphasis than before on the 'strategic functions' that precede actual conflict, namely anticipation and prevention. The three energy security developments analyzed in this report call for the increasing relevance of anticipation. Furthermore, prevention of these issues could include military presence in or around the countries or chokepoints at stake, or military assistance to foreign security organizations, in order to enhance internal stability and security. Finally, preventive deployment, for instance in SSR missions, could also serve in support of the strategic function anticipation. In addition to this, the increased risk of an intervention in the aforementioned countries, regions or choke-points, combined with the upcoming threat of anti-access/area denial (A2/AD) capabilities, reinforces the need for European expeditionary full-spectrum forces.

Finally, there is a situation of fragmentation within the Dutch government about how to approach economic security. It is a topic that, paradoxically, concerns everybody but is 'owned' by nobody within the government. This study concludes that it is paramount to develop an approach to economic security that includes all departments of government, including the MOD. The MOD should play an integral part in this whole of government approach.

5.2 Discussion

This report uses energy security as *pars pro toto* for the broader debate about the role of defense organizations embedded within the context of economic security. As stated before, economic security is a broad topic that includes various different security challenges. In this study, we focused in on a smaller subset of economic security: the topic of energy security, within which we opted for the subset of the various security issues relating to oil and gas. In this the final part of the report, however, when we return to the potential contribution of defense organizations, we will return to the broader canvass (see Figure 14).

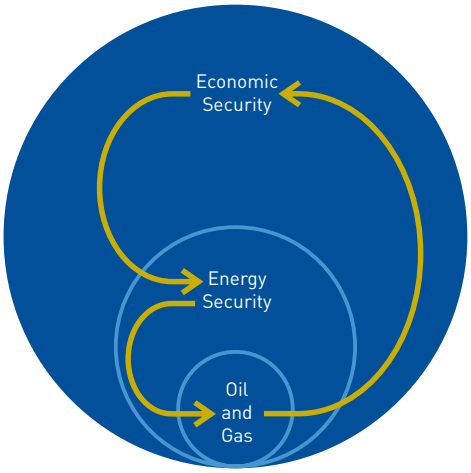

FIGURE 14: ENERGY SECURITY AS PARS PRO TOTO

We differentiate between what a defense organization itself may be able to contribute across different levels: defense as an economic agent in its own right, and then the contributions that defense can 'contribute' as a security actor at the tactical, operational and strategic levels.

In general, a defense organization's primary contribution to economic security is a better husbandry of the resources that are allocated to defense. Defense has been the principal 'loser' of the government-wide cavalier attitude towards defense expenditure, and so it has the greatest incentive to remedy this. This includes getting an accounting system that can match up inputs and outputs more accurately (and transparently). Second, it includes the development of a metric for 'security' that can be used for both ex ante and ex post value-for-money evaluations, and third, getting more insight into the medium- and long-term trade-offs that are inherent to most defense decisions. This applies to acquisition decisions, policy decisions and partnership-decisions.

Small-scale tactical contributions to economic security form the bulk of defense organization's current activities in this domain (for example coastal search and rescue, explosive ordnance disposal and emergency medical support), and have already been covered by this report. The same goes for what the military can do operationally to protect a nation's economic interests. For example, this includes securing sea lines of communication, addressing various threats to the various flows (of money, goods, ip-packets, etc.) on which our economies increasingly depend, and stabilizing fragile nations.

A matter for further consideration is the link between policy relating to national security as a whole and policy that impacts subdomains of security – including economic security. Many of the policy debates that influence the latter are not directly linked to the policy and decision making relating to national security policy in general. For example, governments make myriad economic decisions that also have security implications. Examples may include various forms of protectionism (e.g. agricultural) that have a direct impact on the livelihoods in potentially troubled parts of Europe's neighborhood and regulatory regimes for FDI that may impact national security. The MOD and the Ministry of Foreign Affairs could jointly act as *strategic custodians for national security*. In this capacity, the two ministries take it upon them to promote consistency in policymaking across government, from the perspective of national security as a integrated domain.

To conclude, economic security is one of the five vital national interests defined in the Dutch National Security Strategy. In itself, the lessons learned from the development of this strategy could be used as a model to implement a whole-of-government process regarding the policy and capability issues particular to promoting Dutch *economic* security. In the absence of a strong – in terms of mandate and assets –

General Affairs department, this would assign custodianship of the whole-of-government process to a particular ministry to coordinate (but not integrate) policy across various government stakeholders. The most apt ministry for such a coordinating and facilitating role seems to be the Ministry of Economic Affairs, possible in close association with the Ministries of Development Aid and Foreign Trade.

ANNEX : THE NETHERLANDS AND ENERGY CRISES

ANNEX 1
THE NETHERLANDS AND ENERGY CRISES

The 1973 Oil Crisis

The oil crisis of 1973 is a classic example of a case where the 'oil weapon' was put to use. Acting in reprisal to what they saw as the illegitimate (political and military) support for Israel during the 1973 Yom Kippur War, Arab oil producers in the Arab Oil Exporting Countries forum (OAPEC) instigated an oil embargo against Western nations. The move provoked a sharp increase in the price of oil.[217]

The Netherlands was among those countries targeted. It is however unlikely that this was done purely because of Dutch support for Israel. By striking at the Netherlands, oil transit through the port of Rotterdam would be affected – and with it – that for whole of Northwest Europe given the port's strategic importance in Europe's oil flow. Taking into account that at the time about 70% of Europe's oil supply came from OAPEC nations and roughly a quarter thereof was delivered to Rotterdam, there was widespread fear of economic damage.[218] Measures were taken to limit the consumption of oil and related products and a driving ban was installed for Sunday 4 November 1973.[219]

Notwithstanding the perceived necessity of these measures at the time, the overall effect of the embargo on the Netherlands was limited. Although production was largely concentrated in the hands of national oil companies, oil supplies were able to cope, as most of the trading and shipping at this time was handled by international oil companies. Indeed, Shell and BP played a particularly influential role in arranging a redistribution of the oil flows to Western Europe which meant that the oil supply to Western Europe as a whole was not much lower than in the same period a year before. That said, the unilateral price increases by the Arab oil producers did cause economic damage to the Netherlands, though no more than in any other country. Moreover, as a natural gas producing country, the Netherlands was to some extent able to offset higher oil expenses through higher natural gas earnings given the possibility to link the latter to the price of oil.[220]

The 2009 Russian-Ukrainian Gas Crisis

In January 2009, Russian natural gas supplies destined for the European market were halted due to failed negotiations on a new supply contract between Russian company Gazprom and the Ukrainian national gas company Naftogaz. Disagreement over late-payment fines and penalties on behalf of Naftogaz prompted Gazprom to cut off the gas supply on 1 January 2009. In a two-week span, in what was one of the coldest winter in decades, large parts of Southeastern Europe found themselves cut off from their only supply of natural gas. Three years earlier, a similar crisis between Russia and Ukraine had resulted in falling actual gas pressures in pipelines and non-delivery of gas reports by several European companies.[221] Given that the Netherlands is not domestically dependent on natural gas deliveries from Russia, the crisis did not affect the Dutch economy to any significant degree.

NOTES

NOTES

1 The sources that were used for the analysis of the Dutch policy context include publicly available policy documents. The international policy comparison is based on publicly available policy documents from the various countries available in the English, French and German language. For the quick-scan of the international organizations we consulted their websites and looked for results generated with the search term 'economic security'. In addition, we built on previous research by HCSS and the National Security Think Tank, especially for the analysis of national debate on the risks of foreign mergers and acquisitions to national and economic security. Finally, we integrated some of the elements that came up in several conversations with persons working in the Dutch intelligence community.

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