The South China Sea
A BREEDING GROUND FOR GEOPOLITICAL RIVALRY?
Table of Contents

Abbreviations 5

Executive summary 7

Introduction 11

The South China Sea as a maritime arena 17

The Philippines vs. China: UNCLOS and the arbitration case 23
The territorial and maritime dispute between the Philippines and China 24
The ruling and its implications for China 27

China’s assertiveness in the South China Sea 33
China’s expansion of its maritime power projection capacity 34
Asserting Chinese sovereignty in contested waters 37
Land reclamations and artificial islands in the Spratlys 39
Implications of China’s assertiveness in the South China Sea 41

Enter the US: strategic rebalance and freedom of navigation 45
The key components of the US rebalance to the Asia-Pacific region 47
Freedom of navigation operations in the South China Sea 50
Implications of the US rebalance: an emerging strategic rivalry with China? 53

Conclusions and some implications from a Danish perspective 57
As viewed from Copenhagen 59

References 62
ABBREVIATIONS

ADDM Plus: ASEAN Defense Minister's Meetings with dialogue partners
APEC: Asia-Pacific Economic Cooperation forum
ASEAN: Association of Southeast Asian Nations
CCG: China Coast Guard
DOC: Declaration on the Conduct of Parties in the South China Sea
EDCA: Enhanced Defense Cooperation Agreement (between the US and the Philippines)
EEZ: Exclusive Economic Zone
FONOP: Freedom of Navigation Operation
IR: International Relations
ISR: Intelligence, Surveillance and Reconnaissance
PCA: Permanent Court of International Arbitration in The Hague
PLA: People's Liberation Army (China's armed forces)
PLAN: Navy of the People's Liberation Army
PRC: People's Republic of China
SCS: South China Sea
SED: Strategic and Economic Dialogue (between the US and China)
TPP: Trans-Pacific Partnership
UN: United Nations
US: United States
US rebalance: (aka "pivot to Asia") The Obama administration's strategy for enhancing its presence in the Asia-Pacific region
This report, commissioned by the Danish Ministry of Defense, takes stock of recent development trends in the South China Sea, a semi-enclosed ocean in Southeast Asia. As an important commercial gateway for international shipping lines and a rich source of fisheries as well as other natural resources, the South China Sea holds great economic and strategic significance. While the coastal states have long staked overlapping maritime and territorial claims in the South China Sea, tensions have recently flared up, as China – by far the most powerful claimant state – has adopted a more assertive approach to the disputes. Meanwhile, the United States has pledged to engage itself more directly in the region in what is widely seen as an attempt to balance China’s growing power, particularly in the South China Sea. Hence, what we are currently witnessing in the South China Sea may be the early stage of a wider strategic rivalry between Beijing and Washington with serious potential implications for international order in the 21st century.

In focusing on the South China Sea as a maritime arena for geopolitical conflict, the report provides an overview of the various interests, claims and practices of the involved parties, notably China and the United States. Against this backdrop, three key development trends are singled out and analyzed in some detail, namely China’s growing assertiveness in the South China Sea, the rebalancing efforts of the United States in the region and the recently concluded legal arbitration case between the Philippines and China concerning their maritime dispute in the South China Sea.

More specifically, the report argues firstly that since the beginning of the present decade the People’s Republic of China has embarked on a new, more self-assertive strategy with respect to its territorial and maritime claims in the South China Sea. This strategy involves a rapid expansion of the power projection capacity of the Chinese navy as well as coast guard forces, massive land reclamation and construction projects to bolster China’s strategic position in the Spratly islands and an increased willingness to pursue maritime and territorial claims in a confrontational manner against rival claimant states. By undermining the existing status quo among the claimant states, Chinese assertiveness has been the main driver behind the heightened tensions and periodic clashes that have recently plagued the South China Sea. Other claimant states certainly bear some of the responsibility for the negative development, but the sheer scope of China’s assertiveness and its readiness to change the facts “on the ground” have been more disruptive to the existing order than anything else.

Secondly, the report demonstrates how the United States, as part of its “rebalance” to the Asia-Pacific, has become involved in regional security matters in a way that raises the specter of a comprehensive strategic rivalry with China in the years to come. On the one hand, Washington’s rebalancing strategy has clearly succeeded in reassuring regional US partners and has also been instrumental in checking Beijing’s assertiveness in the South China Sea. However, America’s growing strategic presence in the region, as illustrated most plainly in the media-hyped US freedom of navigation operations in the South China Sea, tends to exacerbate existing tensions and lessen the chances of resolving the underlying disputes. As such, the US rebalance increasingly seems to reflect an underlying strategy to contain the rise of China as a regional great power.

Thirdly, the report sheds light on and ponders the implications of the legal arbitration case between the Philippines and China regarding their disputes in the South China Sea. Although the arbitration case was submitted by Manila to the permanent international court in The Hague against the will of Beijing, the tribunal subsequently asserted jurisdiction over the case. Hence, the case has become an important test of China’s adherence to the rule of international law in general and the international law of the sea in particular (i.e. UNCLOS). Given that the ruling from The Hague tribunal (in July 2016) dealt a serious blow to China’s maritime claims and practices in the South China Sea, Beijing has found itself in a highly delicate position as it firmly maintains its rejection of the arbitration case while seeking to avoid being stigmatized as a revisionist state.

At the end of the report, the findings are briefly discussed from a Danish perspective. It is argued that the development trends in the South China Sea are worrying and require close attention from the Danish government. Not only because the clash of interests may negatively affect specific elements of the existing international order, such as UNCLOS, but also because the emerging great power rivalry may harm Denmark’s privileged position as a close partner state of both Washington and Beijing.
INTRODUCTION
The second decade of the 21\textsuperscript{st} century has seen the South China Sea become a key maritime arena of international relations. Fueled by decades of rapid economic growth, the People’s Republic of China (PRC) has significantly enhanced its maritime power projection capacity and, more importantly, demonstrated a growing willingness to pursue its maritime and territorial claims in the South China Sea in an assertive manner. As several of China’s smaller Southeast Asian neighbors have voiced their concern, the United States has responded by carrying out its “rebalance” to the Asia-Pacific in an attempt to bolster its strategic presence in the region, including in the South China Sea. Consequently, Washington has not only strengthened its military-strategic relations with various states in the region, but also stepped up its efforts to promote the right to freedom of navigation in the South China Sea in a way that seems deliberately targeted at China’s maritime and territorial claims. What we are witnessing, in other words, is the emergence of a pattern of strategic rivalry in the South China Sea between the PRC and the United States with significant implications for international order in the 21\textsuperscript{st} century.

This report places the spotlight on the South China Sea as a maritime arena for geopolitical conflict in order to provide an overview of the various interests, claims and practices of the involved parties. The main focus lies on the United States and in particular China, whose meteoric rise is fundamentally changing the strategic dynamics of the region. It is claimed that the South China Sea constitutes a crucial arena for understanding the overall implications of China’s rise, notably in terms of the emerging pattern of strategic rivalry between Beijing and Washington. That is, insofar as China and the United States end up becoming so alienated from one another in the South China Sea that it spills over into other areas of their bilateral relationship, the two greatest powers in the world of today will find it much harder to reach a common ground on questions of international order. In fact, since China and the United States share few common denominators – with the partial exception of an interdependent trade relationship plagued by recurrent tensions – there might not be much to prevent the two countries from sliding into a full-blown geopolitical rivalry.

By mapping recent development trends in the South China Sea the report investigates the range of overlapping territorial claims, assertive practices and, even more alarmingly, conflicting great power interests that have stirred up troubled waters. While most of the report concentrates on depicting Beijing’s and Washington’s strategic positioning in the South China Sea, it also takes a closer look at one of the specific maritime disputes in the South China Sea, namely that between China and the Philippines concerning their respective claims to and practices in the waters and land features of the Spratly archipelago. This dispute is particularly interesting, not only because it highlights the nature of China’s sovereignty claims, but also because it is the first South China Sea dispute to have been subject to a legally binding process at the international court of arbitration in The Hague.

Following this introductory chapter, the report consists of four substantive chapters, the first of which, i.e. Chapter 1, offers a short introduction to the South China Sea as a maritime arena, including its central actors, territorial disputes and recent history. Chapter 2 zooms in on the Spratly archipelago in the South China Sea, parts of which are disputed by China and the Philippines. Apart from examining their conflicting claims and practices, the main part of the chapter is devoted to the legal arbitration case at the international court in The Hague, which recently probed the legality of China’s claims and practices in the South China Sea in terms of UNCLOS. Chapter 3 focuses on China’s increased assertiveness in the South China Sea, fleshing out three key aspects of this new strategic line and discussing its main implications. In particular, the chapter sheds light on the rapidly expanding power projection capacity of the Chinese navy and coast guard forces, the growing willingness of the PRC to exercise its alleged sovereignty in a confrontational manner against rival claimant states and the massive land reclamation and construction activities that China has undertaken in the Spratlys to bolster its sovereignty claims there. In Chapter 4, the report directs attention to the role of the
United States in the South China Sea. The main part of the chapter examines the various components of the US rebalance to the Asia-Pacific, as it provides an overarching strategic framework for increased American involvement in the South China Sea. Moreover, the chapter highlights what has become the most visible manifestation of increased US presence in the South China Sea, namely the freedom of navigation operations (FONOPs) that aim to challenge excessive maritime claims of the coastal states. Finally, the conclusion draws out the main points of the report and offers a specific Danish perspective on the South China Sea as a conflictual maritime arena.

The remainder of this introduction first offers a few lines on the theoretical understandings indirectly informing the report and then takes a brief look at the data material on which the analysis is based. In examining the political tensions, maritime conflicts and geopolitical rivalry in the South China Sea one might readily assume that the report is predicated on what is often referred to as a “realist” IR (International Relations) perspective. Yet, it would be simplistic to reduce the motivational drivers of the conflict-ridden political climate in the South China Sea to realist logics of power and security dynamics such as rising Chinese power and the anxiety it generates in neighboring states. Other sets of explanatory logics are certainly relevant as well. For instance, domestic interests in the shape of, say, bureaucratic actors of maritime law enforcement or a ruling party’s desire to bolster regime legitimacy by acting assertively abroad may also help explain why a more confrontational atmosphere in the South China Sea has taken hold. Conversely, economic incentives and institutional constraints, usually associated with a liberalist IR perspective, exert a dampening effect on the maritime disputes and geopolitical rivalry, thus far preventing the overall situation from escalating out of control. Yet another significant motivational driver is constituted by identity politics, which IR scholars tend to study from a constructivist approach. Indeed, one may argue that China’s change of behavior in the South China Sea has been brought about by the emergence of a new Chinese identity narrative enunciating China’s status as a great power in a more assertive manner. Let me stress from the outset, however, that this report is first of all concerned with describing and analyzing the recent development in the South China Sea, rather than seeking to account for its underlying causes.

With respect to the data material employed by this report, four methodological observations are in order. First, all the references are based on open, secondary, English language sources such as newspapers, magazines, government white papers, speeches, press briefings, institutional reports, journal articles and academic books, most of which have been accessed and downloaded on the internet from February to May 2016. Second, the report draws on a wide range of government-related sources (notably, Chinese and American reports, speeches and press briefings), which serve the purpose of uncovering the views and interests of the main actors and therefore naturally reflect more or less biased, country-specific perspectives. Third, the Chinese government makes most of its key policy positions and statements available in English, but in some respects — notably China’s military modernization — official Chinese sources are (deliberately) too vague to be of much use, which makes it necessary to reference American expertise instead. Fourth, the key observations and overall analysis of this report rest on various types of more or less independent sources. While most of these independent sources are derived from scholars and reporters based in research institutions and media located in Western countries, I take pains to balance them against Chinese-based sources whenever relevant.

Finally, the usual disclaimer applies, meaning that all the views, analyses and conclusions of this report are the sole responsibility of the author.
THE SOUTH CHINA SEA – A BREEDING GROUND FOR GEOPOLITICAL RIVALRY

THE SOUTH CHINA SEA
AS A MARITIME ARENA
The South China Sea (SCS) connects the West Pacific with the Indian Ocean and is a partially enclosed sea bordered by Vietnam to the west, Malaysia, Singapore and Indonesia to the south, the Philippines and Brunei to the east and China as well as Taiwan to the north (see map 1). The geopolitical significance of the SCS stems not only from its lucrative fisheries and the vast gas and oil reserves that are believed to lie beneath its seabed, but also from the fact that around 1/3 of the world’s ship-based trade passes through its waters, including up to 80% of China’s oil imports (Buszynski, 2012: 141-144; Kaplan, 2014: 9-10). The South China Sea furthermore contains numerous tiny territorial features (mostly uninhabited) such as islets, atolls, shoals, rocks and sandbars, which spread out over three different archipelagos, i.e. the Spratlys, the Paracels and the Pratas, as well as two separate features, namely the Scarborough Shoal and the Macclesfield Bank. All these land features are subject to competing sovereignty claims by most of the littoral states, but this report will leave aside the Pratas and the Macclesfield Bank, since they are only claimed by China and Taiwan (Republic of China), who have come to hold increasingly parallel views on issues of sovereignty in the SCS. The Scarborough Shoal is controlled by China, but also claimed by the Philippines, while the entire Paracel archipelago is occupied and administered by China, but also claimed by Vietnam.

Since the beginning of the 2010s the situation in the South China Sea has taken a downward turn, ushering in the current climate of political tensions, assertive postures and confrontational behavior among the littoral states, notably Vietnam, the Philippines and China.

The currently most contentious territorial dispute concerns the Spratly archipelago whose numerous land features are claimed in full by Vietnam, China and Taiwan, and partially by the Philippines as well as Malaysia (see map 2). The biggest island, Taiping (or Itu Aba), has been administered by Taiwan since World War II, but the scramble for control of the Spratlys began in earnest during the 1970s when especially Vietnam and the Philippines took hold of most of the islets, rocks and reefs. The seizure and subsequent fortification of these land features was largely triggered by seismic surveys at the time indicating the presence of profitable offshore oil fields in the SCS (Samuels, 2005: 91-92; Fravel, 2008: 75). The PRC was a late arrival in this geopolitical positioning game because of the long distance from mainland China to the Spratlys, the rather primitive state of the PLA navy (the navy of China’s People’s Liberation Army) back in the 1970s and the fact that the PRC was still bogged down in the Taiwan Strait, preparing for battle with the Kuomintang-regime in Taipei. Instead, since the late 1950s China concentrated on consolidating its position in the Paracels, whose two main island groups, the Amphitrite and the Crescent, were back then occupied by China and (South) Vietnam respectively (Samuels, 2005: 86-89; Fravel, 2008: 73-74).
In the past, the South China Sea has seen several military clashes involving the claimant states. One of the most bloody and strategically important ones occurred in 1974, when the PLA Navy succeeded in driving away South Vietnamese forces from the Crescent group in the Paracels (at the cost of 70 Vietnamese lives), thereby rendering Beijing in total control of the Paracels since then (Garver, 1992: 1000-1005). Another serious incident erupted in 1988 around the Johnson South Reef (in the Spratlys), as the PLA Navy and Vietnamese naval forces for a second time found themselves clashing militarily over several territorial features in the area, once again leaving around 70 soldiers dead on the Vietnamese side and none on the Chinese side (ibid.: 1010-14). Subsequent episodes have occasionally involved casualties, but on a smaller scale and mostly inflicted on fishermen who have (allegedly) violated sovereignty rights.

From the late 1990s and throughout the 2000s, the South China Sea entered a period marked by geopolitical restraint as well as constructive political dialogue among the principle parties (see e.g. Gill, 2010; Storey, 2011: 64-98). Facilitated by intensified cooperation among the ASEAN countries (Association of Southeast Asian States), by plans for launching a China-ASEAN free trade area and by China’s emerging identity profile as a responsible great power (first demonstrated during the Asian financial crisis in 1997), the claimant states began to adopt a number of confidence-building measures aimed at lowering tensions in the South China Sea. In this cooperative atmosphere, in 2002 the PRC accepted not only to sign the so-called DOC (“Declaration on the Conduct of Parties in the South China Sea”) with the ASEAN states, but also to start negotiations on the establishment of a binding Code of Conduct in the SCS. Furthermore, in 2003 Beijing became the first state outside ASEAN to sign the Treaty of Amity and Cooperation with the Southeast Asian states, committing the signature states to respect each other’s sovereignty, to avoid interfering in the internal affairs of one another, to renounce the threat or use of force and thus to settle any disputes by peaceful means (ASEAN, 1976: TAC). In 2005, Vietnam, the Philippines and the PRC even launched a collaborative seismic survey project to prepare the ground for exploiting the underwater resources jointly (PD, 2005).

Since the beginning of the 2010s, however, the situation in the South China Sea has taken a downward turn, ushering in the current climate of political tensions, assertive postures and confrontational behavior among the littoral states, notably Vietnam, the Philippines and China. Most observers have linked the observed changes to the emergence of a new strategic outlook among the Chinese leadership, which in the academic literature is often described in terms of China’s “new assertiveness” on the international stage (see Chapter 3). Some of the most controversial examples of Chinese assertiveness in the SCS include China’s seizure of control over the Scarborough Shoal in 2012, its heavy-handed deployment in 2014 of an oil rig within the Exclusive Economic Zone (EEZ) of Vietnam and its recent land reclamation projects and building activities in the Spratlys. Further complicating the situation is the emergence of an increasingly manifest pattern of geopolitical rivalry between China and the United States in the South China Sea. In late 2011, the Obama administration launched its so-called “pivot to Asia and the Pacific”, pledging to expand Washington’s strategic presence in the region politically, economically and militarily. Although not targeting China officially, “the pivot” has been widely seen as a rebalancing act in response to the rise of China, meant to reassure existing American allies as well as to cultivate new strategic partnerships in the region. Most recently, Washington has started to conduct a series of high-profile FONOPs in the SCS to challenge what it views as excessive maritime demands in the area, especially by China.

In the following three chapters, this report takes a closer look at some of the major flashpoints in the South China Sea: the international arbitration case between the PRC and the Philippines (Chapter 2), the assertiveness of China in the SCS (Chapter 3) and America’s growing strategic presence and interference in the SCS (Chapter 4).
The Philippines versus China
UNCLOS AND THE ARBITRATION CASE
At the beginning of 2013, the Philippines initiated an international arbitration case against the People's Republic of China at the Permanent Court of Arbitration (PCA) in The Hague, the Netherlands. The case concerned the two countries’ maritime disputes in the South China Sea, which are regulated by the United Nations Convention on the Law of the Sea (UNCLOS) that both countries have signed and ratified. From the outset, the PRC rejected the case and refused to take any part in the legal process, claiming that the Philippines’ specific submissions fall outside the jurisdiction of the court. Instead, the Chinese government issued a so-called position paper in late 2014, providing a detailed justification for its rejection of the arbitration case (PCA, 2014: paragraphs 1-93). The basic thrust of the Chinese argument is, first, that in its essence the case is about sovereignty issues, on which the PCA is explicitly precluded from making any verdict; second, that China is exempted from legal arbitration processes on the delimitation of maritime boundaries owing to a specific opt-out clause in UNCLOS invoked by China in 2006 and, third, that the Philippines, by unilaterally submitting the case to the tribunal, has violated existing agreements about how to handle the dispute. However, in October 2015 the court announced, after careful consideration of all the main points in the Chinese position paper, that the court was still entitled to make a ruling on at least seven of the fifteen legal submissions, which constituted the case (PCA, 2015). Hence, the PCA found that both “the Philippines and China are parties to the Convention and bound by its provisions on the settlement of disputes”. Finally, on 12 July 2016, the tribunal published its long-awaited award on the arbitration case.

THE TERRITORIAL AND MARITIME DISPUTE BETWEEN THE PHILIPPINES AND CHINA

Before considering the broader implications of the arbitration case, it is helpful to take a brief look at the underlying territorial dispute between the PRC and the Philippines. As already noted, both countries lay claim to the Scarborough Shoal and the Spratlys (or some of them in the Philippine case), and Manila has, decades ago, established a foothold on nine of the land features, which are permanently above the sea line. In the present decade, however, Beijing has started to challenge Manila’s position not only by building artificial islands in the area, but also by using its rapidly expanding fleet of coast guard and naval vessels to assert “Chinese sovereignty” far more actively than previously (see Chapter 3). One of the most notable examples of Chinese assertiveness was the takeover of the Scarborough Shoal in 2012 after a prolonged standoff. It was against this backdrop of increased Chinese assertiveness that in January 2013 the Philippines unilaterally decided to pursue a legal lawsuit at the Permanent Court of Arbitration (Poling, 2013; Batongbacal, 2015).

It should be stressed that there is little evidence that China has historically exercised sovereignty in any meaningful sense over the South China Sea, or that the controversial nine-dash line enjoys a clear and well-established history in the China's official communication with the outside world.

The crux of the underlying dispute between Beijing and Manila in the SCS concerns the question of sovereignty over the land features and their territorial status. The Philippines bases its claims on UNCLOS and the broader international law principle that “land dominates sea”. That is, “maritime zones can only be generated from land territory over which a state has sovereignty” (Beckman, 2013: 149-153). Importantly, UNCLOS stipulates that all sovereign land territory, including islands capable of sustaining human habitation or an economic life of their own, is entitled to a territorial sea (0-12 nm, i.e. nautical miles), a contiguous zone (12-24 nm), an exclusive economic zone (EEZ, 0-200 nm) and a continental shelf if it extends further out than the EEZ (0-350 nm) (UNCLOS, supra note 1, Art 121(2)). Given these principles, the Philippine government made the submission in the arbitration case that none of the disputed land features in the South China Sea are proper islands, but rather low-tide elevations or rocks, which at most generate a territorial sea zone (DFARP, 2013). Furthermore, Manila claimed that China’s assertion of exclusive “historic rights” to the South China Sea is without basis in the UNCLOS and that China’s maritime entitlements may not extend beyond those expressly permitted by UNCLOS. Hence, in the words of the Filipino government, “China has unlawfully interfered with the enjoyment and exercise of sovereign rights of the Philippines with respect to the living and non-living resources of its exclusive economic zone and continental shelf” (DFARP, 2013: 14).

Conversely, China is the only claimant state in the SCS disputes to justify its sovereignty claims by referring to “historic rights” or “historic title” in addition to the principles of the UNCLOS. From a Chinese perspective, the PRC has a deep-seated right to sovereignty over the South China Sea given China’s long-standing and dominant history of fishing, navigation and other maritime activities in the SCS (Gao and Jia, 2013: 100-102). Thus, China was “the first country to discover, name,
explore and exploit the resources of the South China Sea islands and the first to continuously exercise sovereign powers over them” (PRC, 2014: Paragraph 4). Indeed, the Chinese government has for decades declared that it holds indisputable (sic) sovereignty over the islands of the SCS and the adjacent waters (i.e. territorial sea) (Swaine and Fravel, 2011: 3-5). Since 2009, however, the PRC has officially defined its territorial claims in the SCS far more expansively in the form of a “nine-dash line” (see map 2) that seemingly encompasses around 80-90% of the waters in the SCS. So far, Beijing has refrained from clarifying whether the “nine-dash line” involves a claim to sovereignty over not only all the land features, but also all of the waters and maritime resources within the demarcation line; nor has Beijing specified the territorial status of the land features it lays claim to (islands, rocks or low-tide elevations)? Instead, the Chinese government has merely stated that it enjoys a continental shelf, EEZ, contiguous zone, territorial sea and even internal waters in the SCS based on its sovereignty over all of its islands (MFAPRC, 2016b). In fact, China seems to be deliberately maintaining a policy of “strategic ambiguity” with respect to its maritime claims in the SCS (Beckman, 2013: 153-154; Dupuy and Dupuy, 2013: 127-128; Stashwick, 2016).

It should be stressed that there is little evidence that China has historically exercised sovereignty in any meaningful sense over the SCS, or that the controversial nine-dash line enjoys a clear and well-established history in the PRC’s official communication with the outside world (Beckman, 2013; Dupuy and Dupuy, 2013; USDS, 2014; Kraska, 2015). Although China’s claims to “historic rights” could be said to predate the UNCLOS (1982), such rights were extinguished upon China’s accession to the convention, and they are at any rate neither strong nor clear enough in the Chinese case to warrant as expansive a demarcation as the one suggested by the “nine-dash line” (Dupuy and Dupuy, 2013: 136-38).

THE RULING AND ITS IMPLICATIONS FOR CHINA

On 12 July 2016, the PCA delivered a unanimous award on the arbitration case between the Philippines and China, which marks the first time one of the South China Sea disputes has been subject to a ruling from the PCA. The award consisted of three main conclusions that were highly favorable to the Philippines (PCA, 2016). Firstly, the tribunal ruled that China’s claim to “historic rights to resources was incompatible with the detailed allocation of rights and maritime zones in the Convention” and “were extinguished by the entry into force of the Convention”. It further added “there was no evidence that China had historically exercised exclusive control over the waters of the South China Sea or prevented other States from exploiting their resources.” Secondly, the award stated that “all of the high-tide features in the Spratly Islands are legally ‘rocks’ that do not generate an exclusive economic zone or continental shelf.” Thirdly, and following from the first two conclusions, the PCA found that China – by interfering with Philippine oil exploration and fishing activities and constructing artificial islands in the Philippine EEZ – “had violated the Philippines’ sovereign rights with respect to its exclusive economic zone and continental shelf.” In other words, the verdict of the PCA tribunal effectively
denies China any legal basis under international law for its expansive claims to and assertive practices in the contested waters in the South China Sea. Moreover, the findings of the PCA on China’s alleged “historic rights” should apply equally to the other maritime disputes in the Spratlys, thus more generally undermining China’s assertive claims and practices.

The verdict of the PCA tribunal effectively denies China any legal basis under international law for its expansive claims to and assertive practices in the contested waters in the South China Sea.

Unsurprisingly, the Chinese government maintained its total and principled rejection of the award, declaring that the ruling is “null and void and has no binding force. China neither accepts it, nor recognizes it” (MFAPRC, 2016c). Yet, Beijing refrained from taking any provocative moves in response to the ruling such as withdrawing from UNCLOS or initiating new land reclamation activities in the SCS. On its side, the Philippine government – not being the same government that originally submitted the lawsuit – avoided any triumphalism, calling “on all those concerned to exercise restraint and sobriety”, but also affirming “its respect for this milestone decision” (DFARP, 2016). Critically, even though the award from the PCA is legally binding on its member states, the court lacks any authority to implement it. As China will undoubtedly stick to its dismissive position, it begs the question of the wider implications of the ruling for China.

First of all, Beijing’s continued rejection of the PCA ruling will definitely have a negative impact on China’s international reputation. Being a party to UNCLOS since 1996, the PRC is open to charges of double standards, since China itself routinely refers to the principles of UNCLOS in its maritime territorial disputes (see Panda, 2016a). What is more, as the PCA has systematically rejected China’s arguments for dismissing the case and thereby asserted its legal jurisdiction (PCA, 2015), Beijing is left in an awkward position that smacks of great power arrogance. This is particularly disturbing to China, since the Chinese government for more than a decade has been diligently conveying the message that China is a responsible member of international society and will abide by its rules and institutions (see e.g. Zheng, 2005; SCIO, 2011). It creates the impression that the Chinese government will only respect its international commitments as long as they do not run against its core interests. While China in this respect may not be very different from other great powers (Allison, 2016), China appears quite vulnerable when it comes to its international reputation. Hence, it should be equally worrying to the Chinese government that it has been unable to garner much international support for its rejection of the arbitration case. Two weeks after the ruling, only Pakistan and Taiwan had come out publicly in support of Beijing’s stance, whereas nearly all Western states have either urged the parties to respect the ruling or simply positively acknowledged the ruling (AMTI, 2016b).

Furthermore, China’s rejection of third-party arbitration has gone hand-in-hand with its insistence on direct bilateral negotiations with the other claimant states in the South China Sea disputes (e.g. PRC, 2014: Paragraph 40). As such, the whole arbitration case has, from a public relations viewpoint, ended up being another “sobering reminder” of how China prefers to rely on its sheer size and geopolitical clout to overcome competing claims from its much smaller neighbors in the SCS. Indeed, the underlying dispute is easily framed along the lines of David vs. Goliath, as an unbalanced contest where the underdog (the Philippines) faces a much larger and intimidating adversary (the PRC). Only by resorting to legal arbitration could Manila hope to engage Beijing on a level playing field, rooted in international law. Taken together, the Chinese government’s entire handling of the arbitration case has not only failed to produce a desirable outcome as China’s claims and practices in the SCS have been deemed illegal; China’s approach has also jeopardized its international image as a peaceful and responsible rising power. By insisting on groundless “historical rights” and by dismissing the whole arbitration case, Beijing offers plenty of ammunition to the powerful choir of mostly US-based China-critics who have long propagated the so-called “China threat theory, stating that China is a revisionist state bent on forging a new world order more to its own liking (see e.g. Storey and Yee, 2002, Carafano, 2015).

Irrespective of the harm done to China’s international image, the arbitration case may actually set off some serious talks between the Chinese and Philippine side on their SCS dispute. The new Philippine president has clearly signaled that he wants to build a positive, economics-oriented relationship with China (Chen, 2016), which, for its own part, really needs to demonstrate a willingness to engage in constructive dialogue to mend its battered image. Yet, the clarity and decisiveness of the PCA ruling in favor of Manila could make it difficult to reach any viable compromises. As can the deeper geopolitical trends of Chinese assertiveness in the South China Sea and the US rebalance to the Asia-Pacific.
The whole arbitration case has, from a public relations viewpoint, ended up being another “sobering reminder” of how China prefers to rely on its sheer size and geopolitical clout to overcome competing claims from its much smaller neighbors in the South China Sea.

Irrespective of the harm done to China’s international image, the arbitration case may actually set off some serious talks between the Chinese and Philippine side on their SCS dispute. The new Philippine president has clearly signaled that he wants to build a positive, economics-oriented relationship with China (Chen, 2016), which, for its own part, really needs to demonstrate a willingness to engage in constructive dialogue to mend its battered image. Yet, the clarity and decisiveness of the PCA ruling in favor of Manila could make it difficult to reach any viable compromises. As can the deeper geopolitical trends of Chinese assertiveness in the South China Sea and the US rebalance to the Asia-Pacific.
CHINA’S ASSERTIVENESS IN THE SOUTH CHINA SEA
Most scholars of Chinese foreign policy would readily agree that Beijing has adopted a new foreign policy line since around 2010. The policy shift has variously been referred to as “China’s foreign policy revolution” (Economy, 2010: 142), “The Chinese tiger shows its claws” (Shambaugh, 2010), “Beijing’s abrasive diplomacy” (Christensen, 2011: 54), “China’s new wave of aggressive assertiveness” (Thayer, 2011: 555), “foreign policy muscle-flexing” (Layne, 2012: 3), “The strident turn” (Zhao, 2013: 535) or merely “Chinese assertiveness” (Friedberg, 2011: xvi; Rozman, 2011: 87; Wang, 2011: 68; Yahuda, 2013: 446). While a number of critics have questioned the scope of China’s “new assertiveness”, especially when viewed through a historic lens, even these critics tend to recognize that China’s policies and practices in the South China Sea have undergone substantial change (Johnston, 2013: 19; Jerdén, 2014: 69-74). On the one hand, China’s growing assertiveness in the SCS can to some extent be regarded as “reactive”, i.e. as partially triggered by actions taken by other coastal states, which means that Beijing is by no means solely responsible for bringing about a more confrontational climate in the SCS (Swaine and Fravel, 2011). However, with this reservation in mind, the focus here lies on the new pattern of Chinese assertiveness, not only because the PRC is by far the largest actor among the littoral states in the SCS, but also because China’s assertiveness differs from what we have seen from the other actors in both a qualitative and a quantitative sense.

Basically, China’s new assertiveness in the South China Sea is manifested in three ways. First, by undertaking a wide-ranging modernization of the PLA Navy and the China Coast Guard, Beijing has greatly expanded its power projection capacity in the SCS and thereby its ability to exercise sovereignty in contested areas. Secondly, the PRC has been far more willing to assert its (alleged) sovereignty in a confrontational manner against rival claimant states in contested areas. Thirdly, China has embarked on massive land reclamation and construction activities in the Spratlys to bolster its sovereignty claim to the disputed archipelago. The following three sections deal with each of these dimensions of China’s new assertiveness in turn.

CHINA’S EXPANSION OF ITS MARITIME POWER PROJECTION CAPACITY

The extensive build-up of China’s power projection capabilities in the SCS comes against the backdrop of a decades-long modernization of China’s armed forces, which in recent years has stressed the need to “safeguard China’s maritime rights and interests, and build China into a maritime power” (Hu, 2012: Section VII). With annual growth rates of around 10%, the PLA’s budget has soared leaving ample resources for expanding and renewing China’s military hardware at a pace unparalleled by any of China’s neighboring states (Liff and Ikenberry, 2014: 66-67). The Chinese government itself employs notoriously vague and nebulous language in accounting for its military modernization (see e.g. SCIO, 2015), thus leaving outside observers with a range of mostly American sources in order to make sense of recent investment trends.

Much of the military equipment procured by the PLA seems to be targeted at the US Pacific Fleet, whose dominant position in the Pacific Ocean extends into China’s “near seas” (i.e. the Yellow Sea, the East China Sea and South China Sea) due to Washington’s alliances and partnership with many of the Asian littoral states (see Chapter 4). The underlying purpose would likely be to prevent the US Fleet from being able to intervene in China’s near seas in case of a military conflict – often referred to by Washington as the “anti-access/area-denial strategy” (see e.g. Pentagon, 2012: 21; Pentagon, 2013: 32). Moreover, by deploying an increasingly sophisticated fleet of attack submarines and a burgeoning arsenal of cruise and ballistic missiles, some of which appear capable of hitting US aircraft carriers in the Pacific Ocean, China is at least indirectly buttressing its own ability to project power in the near seas without US interference.

At the same time, the PLA has also carried out a large-scale “homegrown” expansion of its surface naval fleet – laying down around 60 new vessels in 2015 alone – in order to directly enhance the PLA Navy’s striking power and operating capacity in China’s near seas (Cheng, 2015: 10-16; ONI, 2015). For instance, the PLAN has invested heavily to modernize the backbone of its surface combatant fleet, i.e. frigates and destroyers, providing new models with, among other things, much-improved air defense capabilities. Another important aspect of the PLA Navy build-up is the recent mass production of Jiangdao-class corvettes, which are well equipped to patrol China’s claimed EEZs in the South China Sea. Equally important, Chinese dockyards have put several types of replenishment vessels into serial production, thus remedying a long-standing problem of the PLA Navy of how to sustain naval operations in the more distant waters of the SCS. Yet, the undoubtedly most prominent token of China’s naval armament has been the commissioning, in 2012, of China’s first aircraft carrier, the Liaoning, which has been subject to intense media coverage (Holmes, 2015). Although the Liaoning does not quite meet state-of-the-art standards of technology and has yet to become fully operational, it has become an important token of China’s ambitious naval program, serving primarily as a training vessel that will be accompanied by additional, more advanced, carriers over the next decade (Collin, 2016). Taken together, the overall modernization of the
The comprehensive modernization of China’s naval capacity is, more than anything else, responsible for changing the power and security dynamics of the South China Sea as a maritime arena, as it has allowed Beijing to assert its alleged sovereignty over contested waters in the South China Sea in a more direct manner.

Apart from the highly conspicuous build-up of its naval military power, the PRC has simultaneously undertaken a low profile strengthening of its naval capacity to exercise sovereignty in contested waters. This has taken the form of an organizational streamlining as well as a rapid expansion of the white-hulled China Coast Guard fleet (CCG), which is in charge of the daily law enforcement activities in China’s near seas. While maritime law enforcement used to be carried out mainly by the PLAN, the primary enforcer of China’s maritime sovereignty is now the CCG, assisted by the PLAN whenever a more serious situation arises (Martinson, 2015; ONI, 2015: 44-46). In the past few years, the CCG has experienced a remarkable expansion not only in the number of vessels but also with respect to the size of these new vessels, thereby allowing the coast guard to extend its reach to most areas of the SCS. According to recent estimates, the CCG currently operates more than 200 vessels, half of which are large ones (above 1000 tons), whereas Vietnam possesses 55 coast guard vessels (five large ones) and the Philippines merely four (ONI, 2015: 41). Furthermore, some observers have pointed to a creeping militarization of the CCG, which is manifested in, among other things, its recruitment of para-military personnel and the conversion of obsolete PLAN ships into refurbished coast guard vessels (Martinson, 2015; Tate, 2015). In operational terms, the China Coast Guard conducts a number of maritime law enforcement activities or rights protection missions such as declaring Chinese sovereignty to foreign ships, denying them (e.g. fishing cutters) access to Chinese waters or protecting Chinese ships (like fishing cutters) that operate in contested areas.

As a whole, China is certainly augmenting its power projection capacity in the South China Sea at a rapid pace. Since there is a tendency to sensationalize this development in the Western media, we should keep in mind that China’s transformation of its naval and coast guard forces is to some extent understandable given the overall modernization trends of an expanding Chinese economy, the largely obsolescent state of China’s maritime forces at the beginning of the century and the strong presence of the US fleet in China’s neighborhood. Nevertheless, the comprehensive modernization of China’s naval capacity is, more than anything else, responsible for changing the power and security dynamics of the SCS as a maritime arena, as it has allowed Beijing to assert its alleged sovereignty over contested waters in the SCS in a more direct manner.

ASSERTING CHINESE SOVEREIGNTY IN CONTESTED WATERS

Chinese assertiveness in the South China Sea has been put on display in a number of confrontational encounters between the PRC and several of its littoral neighbors. It is important first to specify what is meant by Chinese assertiveness, since there is no shortage of Western media reports accusing China of assertiveness in the SCS. In a broad sense, one might say that the PRC – as well as the other claimant states – engages in assertive behavior on an every-day basis as Chinese coast guard vessels assist Chinese fishing cutters in disputed areas or routinely seize “illegally obtained” catches by fishers of other claimant states. Here though, Chinese assertiveness in the SCS is defined more narrowly as the use of physical naval force in a confrontational manner, either by the CCG or PLAN, to assert China’s alleged right to sovereignty in contested waters. Since a substantial number of incidents would still fall within this narrower definition, suffice it here to mention some of the more controversial episodes where the PRC behaved particularly assertively.

One of the most heated encounters between China and the Philippines occurred in April 2012 when the Philippine Navy attempted to apprehend some Chinese fishing boats, conducting “illegal” fishing activities at the Scarborough Shoal, which is located within the EEZ of the Philippines and more than 500 nm from the Chinese mainland. As CCG boats intervened to block the apprehension, the two countries found themselves locked into in a month-long naval standoff during which Beijing brought in additional coast guard vessels to increase the pressure. In early June, Manila announced that a US-mediated agreement had been reached for both sides to vacate the shoal, as a typhoon was approaching the area. Yet, the Chinese ships soon returned to the Scarborough Shoal and sealed off the lagoon within the shoal to exercise “Chinese sovereignty”, even though it had never previously been subject to any effective control or permanent presence by the Chinese (Fravel, 2012; Tiezzi, 2015a).
Another incident of Chinese assertiveness against the Philippines took place in March 2014 in the Spratlys at the Second Thomas Shoal, deep within the EEZ of the Philippines. Since 1999, when the Philippines intentionally ran a decommissioned naval ship, the Sierra Madre, aground on the shoal to serve as a sort of base for stationing a handful of marines, Manila has continuously resupplied the troops to maintain Philippine sovereignty over the shoal. However, in early 2014 Chinese CCG vessels began a blockade of the Sierra Madre, claiming that the Philippine side had attempted to bring construction materials to the shoal. While Manila countered that it was merely seeking to prevent the rusting vessel from breaking apart, the Chinese blockade forced the Philippines to airlift provisions to the Sierra Madre. After another prolonged standoff, Beijing finally abandoned its blockade apparently under the influence of mounting international pressure, but the CCG has continued to patrol the area around the Second Thomas Shoal in order to monitor the Philippine replenishment ships (Baruah, 2014; Keck, 2014; Heredia, 2015).

A third highly controversial episode involved China and Vietnam in early May 2014, when China unilaterally announced that one of its offshore oil rigs would start drilling in contested waters located within Vietnam’s EEZ (but possibly also within the EEZ of the China-controlled Paracels). Moreover, China declared a 3 nm security perimeter around the oil rig (ten times wider than provided for in UNCLOS), which was intensely guarded by some eighty odd vessels primarily from the CCG but also from PLAN. Hanoi immediately issued a sharp protest against the drilling activities, dispatching more than thirty fishing cutters in an attempt to breach the security perimeter. During the following two and a half month-long standoff, Chinese vessels were able to fend off the Vietnamese boats (using water cannon and other non-lethal techniques), thereby preventing the Vietnamese side from interrupting the drilling activities. Meanwhile large-scale anti-Chinese demonstrations erupted in several parts of Vietnam directed at Chinese-owned factories and even Chinese citizens, forcing Beijing to evacuate many Chinese citizens from Vietnam. Tensions remained at a very high level until the Chinese government in mid-July suddenly announced a completion of the drilling activities, which was followed by a withdrawal of the oil rig (Leaf, 2014; Panda, 2015a).

A fourth more recent episode, which may at a first glance appear less consequential than the previous ones, took place in March 2016 in the vicinity of the Natuna Islands, which are undisputed Indonesian territory. After detaining the crew of a Chinese fishing cutter, fishing illegally within Indonesian waters, the Indonesian coast guard was forced by its Chinese counterpart (using ramming techniques) to give up on bringing the Chinese cutter back to an Indonesian port for inspection. Instead, the CCG managed to sail off with the recaptured fishing cutter, prompting a strong diplomatic protest from Jakarta to Beijing (Supriyanto, 2016). What is significant about this incident is not so much the fact that the PRC uses CCG vessels as proxies to enforce its extensive sovereignty claims in the South China Sea – it happens all the time. Rather, the incident represents the first time that China has clashed publicly with Indonesia in the SCS, meaning that even Jakarta may have had enough and decided to abandon its longstanding neutral position in the SCS disputes. Indeed, two other clashes between Indonesian coast guard and Chinese fishing vessels have followed in its wake (Panda, 2016b).

Importantly, as seen through the lens of the Chinese leadership, all these incidents of Chinese assertiveness look very different. Given Beijing’s wide-ranging claims to sovereignty in the South China Sea (see Chapter 2), what neighboring states see as Chinese assertiveness can therefore be justified as defensive or protective practices aimed at safeguarding China’s legitimate entitlements in the SCS in the face of various outside challengers. Illustratively, the recent government white paper on “China’s Military Strategy” notes that “On the issues concerning China’s territorial sovereignty and maritime rights and interests, some of its offshore neighbors take provocative actions and reinforce their military presence on China’s reefs and islands that they have illegally occupied. Some external countries are also busy meddling in South China Sea affairs; a tiny few [read: the US] maintain constant close-in air and sea surveillance and reconnaissance against China. It is thus a long-standing task for China to safeguard its maritime rights and interests” (SCIO, 2015: Section I). In light of statements like these, we should certainly not – despite the ruling from the PCA – expect China to change its current practices of asserting Chinese sovereignty within the “nine-dash” demarcation line.

**LAND RECLAMATIONS AND ARTIFICIAL ISLANDS IN THE SPRATLYS**

Midway into 2014, Western media were flooded with reports that China was creating new land features in the Spratly archipelago, as satellite imagery revealed land reclamation activities on a massive scale (e.g. NYT, 2014). Using dredging vessels to pump up millions of tons of rocks and sand from the sea-floor, China has transformed miniscule pre-existing reefs into artificial islands, some of which are now several hundred meters wide. At a rapid pace, the PRC has managed to build seven artificial islands – around the Cuarteron Reef, Fiery Cross Reef, Gaven Reef, Hughes Reef, Johnson Reef, Mischief Reef and Subi Reef – before announcing in June 2015 that the land reclamation activities had been completed (MFAPRC,
The seven new islands range from 76,000 square meters at Hughes Reef to more than five and a half million square meters at Mischief Reef, the largest of the artificial islands (AMTI, 2016a). After halting the land reclamation, China has embarked on extensive construction activities on the new artificial islands in order to develop them into strategic footholds in the South China Sea. Breakwaters, coastal fortifications and piers are being constructed to reinforce the islands and shield them from rough seas; lighthouses are being erected to help navigate nearby waters; harbors and ports are built to allow ships to take shelter and to enable the PLAN and CCG to use the islands as forward bases for patrolling the Spratlys; satellite antennas and radars are shooting up to enhance China’s communication and monitoring capacity in the area; defensive towers, air-defense guns and military garrisons are being established to strengthen China’s territorial control in the area; and airstrips have materialized that connect the new islands to the Chinese mainland in a matter of hours instead of days (for a full overview, see AMTI, 2016a).

At first, China refrained from commenting on its building activities, except for brief repetitive statements stressing their lawful, reasonable and justifiable character. Since April 2015, however, spokespersons of the Chinese government have been more informative in their justifications, offering a wide list of reasons: As such, Beijing acknowledges that the new islands serve a purpose both for asserting China’s declared sovereignty over the Spratlys and for improving China’s military defense capability in the area. Yet, the Chinese government is eager to emphasize the civilian aspects of the construction projects and to point out that Chinese troops have been stationed on some of the reefs for several years, thereby warranting improvements of their living conditions. Most importantly, Beijing is fond of underlining that other claimant states have undertaken similar activities in previous years (MFAPRC, 2015a; MFAPRC, 2015b; Tiezzi, 2015b). While this is true – in particular with respect to Vietnam (Austin, 2015) – the scope, speed and not least the character of their activities differ markedly from those of the PRC. For one thing, the other claimant states have built on existing islands and sometimes rocks rather than creating artificial islands out of low-tide elevations. For another, the land reclamation work carried out by Vietnam amounts to a small fraction of China’s. Furthermore, although both the Philippines and Vietnam have established some basic infrastructure on their permanent land features in the Spratlys, their facilities are a far cry from what China is currently building on its new artificial islands (Roach, 2015; AMTI, 2016a).

Finally, by converting previously uninhabitable land features in the Spratlys into artificial islands, Beijing is tampering with legal evidence, inasmuch as their status and thus potential territorial entitlements – be they rocks or mere reefs in the context of UNCLOS – has not been settled yet (Kraska, 2015; see also PCA, 2016: 11). Perhaps even worse, Beijing is also violating the legally non-binding, but nevertheless important Sino-ASEAN DOC agreement, which commits the parties to “exercise self-restraint in the conduct of activities that would complicate or escalate disputes and affect peace and stability including, among others, refraining from actions of inhabiting on the presently uninhabited islands, reefs, shoals, cays and other features and to handle their differences in a constructive manner” (ASEAN, 2002: #5, my own underlining).

**IMPLICATIONS OF CHINA’S ASSERTIVENESS IN THE SOUTH CHINA SEA**

China’s new assertive posture in the SCS represents a serious challenge to regional order in Southeast Asia and calls into question China’s self-professed strategy of “peaceful rise” (Zheng, 2005; SCIO, 2011). It would be wrong to single out the PRC as solely responsible for the conflictual atmosphere in the SCS. Yet, the preceding sections should have made abundantly clear that China has become substantially
more assertive in terms of its expanding power projection capability, its willingness to use coercive power and its efforts to establish a strategic foothold in the Spratlys. China's assertiveness, by undermining the existing status quo among the claimant states, is therefore the main driver behind the negative development, we have seen in the South China Sea in recent years. There are several implications of this development, some of which are highlighted here.

First, as Chinese assertiveness has disrupted the status quo in the South China Sea, other coastal states have resorted to various strategies to safeguard their own territorial and maritime claims. Several countries have responded by strengthening their own naval forces, thereby reinforcing the impression that the region stands on the verge of an arms race (Liff and Ikenberry, 2014; Cheung, 2016). Most notably, Vietnam has significantly expanded its military budget in recent years to become the world's eighth largest purchaser of military equipment during the 2011-15 period as Hanoi has imported new frigates, jet fighters and attack submarines (Parameswaran, 2016). Another strategy has been to cultivate or further deepen strategic ties to the United States in order to balance the rising power of China (see also Chapter 4). The Philippines, in particular, has adopted this type of strategy, since its own maritime and military capabilities are no match for China's. Specifically, the Philippines and the United States last year signed an agreement (the EDCA) to grant the US military access to eight bases, including America's bases in the Philippines during the Cold War (De Castro, 2016). As well as shoring up their military and strategic position, the ASEAN claimant states in the SCS have pursued a legal strategy to bolster their claims as demonstrated most clearly by the Philippine lawsuit against the PRC at the International Court of Arbitration (see Chapter 2). Malaysia and Vietnam have, likewise, sought to clarify their territorial claims in the SCS by filing submissions, in conformity with UNCLOS, to a special UN Commission on the Limits of the Continental Shelf (Beckman, 2013: 147-48).

Second, as the cooperative spirit among the coastal states, witnessed especially in the first half of the 2000s, has evaporated, so has the original objective of the DOC to replace its non-binding guidelines with a legal code of conduct for the South China Sea (see Chapter 1). To be sure, Beijing regularly offers to engage in talks with ASEAN on a code of conduct, but the Chinese leadership has in practice stalled the negotiation process, seeing little reason to accept institutional constraints at a time when China is favorably positioned to change what it perceives to be an undesirable status quo in the SCS (Tiezzi, 2014a; Panda, 2015b). From Beijing's perspective, other littoral states have taken advantage of China's weakness during the 20th century to bolster their own territorial claims in the SCS, a historical wrong China is now poised to redress (see e.g. SCIO, 2016: Section II). Rather than standing up to China's growing assertiveness in unity, however, ASEAN itself has experienced an unprecedented level of division in recent years, as several of its member states, notably Cambodia, Laos and Myanmar, have been drawn into China's orbit (see e.g. BBC, 2012). Indeed, the ASEAN countries have found it increasingly difficult to reach a common position on the SCS, as demonstrated most recently at the US-ASEAN summit in Sunnylands, California in February 2016 (Edwards, 2016).

Third, and most importantly, China's growing assertiveness has prompted the United States to reconsider its post-Cold War strategic priorities in East Asia. Hence, in late 2011, the Obama administration announced its "Pivot to Asia and the Pacific" in an attempt to re-engage the region and reassure China's neighbors (see Chapter 4).
THE SOUTH CHINA SEA – A BREEDING GROUND FOR GEOPOLITICAL RIVALRY?

Enter the US STRATEGIC REBALANCE AND FREEDOM OF NAVIGATION
In a Foreign Policy article in October 2011 entitled “America’s Pacific Century”, then-Secretary of State Hillary Clinton fleshed out the so-called “pivot to Asia and the Pacific”, which reflected the Obama administration’s intention to shift its strategic focus from Europe and the Middle East towards East Asia. In the article, Clinton pointed to six key areas that would receive considerably more attention and thus resources to signal shifting US priorities (Clinton, 2011):

- Engaging with regional multilateral institutions
- Expanding trade and investments in the region
- Reassuring key allies and partners and strengthening US security relationships
- Forging a broad-based forward military presence
- Advancing universal values such as democracy, human rights and the rule of law
- Deepening engagement with emerging powers such as China

The article in Foreign Policy was followed by a carefully orchestrated series of speeches and essays on “the pivot” by leading members of the Obama administration, including Obama himself who, before the Australian parliament, announced that “I have made a deliberate and strategic decision [that] as a Pacific nation, the United States will play a larger and long-term role in shaping the region and its future” (Obama, 2011; for an overview of the official US government discourse, see Berteau, 2014: 3-17). The somewhat vague terminology of “the pivot” was later replaced by the more muscular concept of “rebalance” in order to counter widespread criticism that the high-profile trumpeting of a new strategy had not really materialized into any significant manifestations on the ground (see e.g. Cookson, 2015; King, 2015). Yet, for all the trite sloganeering, the rebalance has actually been accompanied by a wide range of US policy initiatives to the effect that America has managed to deepen its strategic involvement in the region considerably. This chapter takes a closer look at Washington’s strategic re-engagement with the Asia-Pacific region, focusing in the next two sections first on the key components of the rebalance and then on the FONOP program that seemingly has brought the United States on a collision course with China in the South China Sea.

The key components of the US rebalance to the Asia-Pacific region

Against the backdrop of the six specific areas of strategic priority (listed above), there is plenty of evidence suggesting that the Obama administration has, in fact, markedly stepped up its strategic presence in East Asia. Starting with the institutional level, Obama has from the outset of his tenure adopted a far more active and engaging line than his predecessors centered on ASEAN rather than APEC – the latter having traditionally been the favored and somewhat impotent instrument of American institutional involvement in Asia. In 2009, Obama signed the Treaty of Amity and Cooperation, the cornerstone document of ASEAN’s external relations, thereby opening the door to a closer relationship with its ten member states. Since then, Obama has not only instituted an annual summit between the United States and the ASEAN countries (since 2013) and appointed a resident US ambassador to the ASEAN secretariat in Jakarta as the first non-ASEAN country to do so (in 2014); he has also committed the US Secretaries of Defense and State to participate in several types of annual ASEAN-related meetings such as the East Asian Summit and the ADMM Plus (Parameswaran, 2015b; Harding, 2016). Moreover, following their summit in Kuala Lumpur in late 2015, the United States and ASEAN made a decision to elevate their relationship to a strategic partnership (TWH, 2015a). As such, the Obama administration has, in the words of one senior observer of US East Asia policies, created “an architecture for engagement with Asia that will outlive this administration” (Harding, 2016).

Turning from the diplomatic to the economic aspects of America’s engagement in East Asia, not even the critics of the rebalance would dispute that Washington has been highly active on the economic front. In an attempt to tap into the economic dynamism of the Asian-Pacific region, the Obama administration has since 2009 promoted a new regional free-trade community called the Trans-Pacific Partnership (TPP). Indeed, according to then-National Security Advisor Tom Donilon, the TPP is “the centerpiece of our economic rebalancing” (Donilon, 2013). As negotiations were concluded in October 2015, the landmark TPP agreement was signed by twelve countries – Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam – which together represent 40% of world GDP and a third of world trade (Sanchez, 2015). Moreover, as witnessed during the recent US-ASEAN summit in California, the Obama administration is very determined to bring additional ASEAN countries into the TPP to further expand the reach of the TPP and thereby strengthen Washington’s position in the regional economic architecture (Cronin, 2016). Crucially, by far the most conspicuous non-
member of the TPP is China, which was effectively barred from joining the negotiations due to the Obama administration’s accentuation of “high standards” on labor rights, environmental protection and intellectual property law. Tellingly, in a White House statement hailing the TPP, Barack Obama recently declared that it “allows America – and not countries like China – to write the rules of the road in the 21st century” (Obama, 2016a).

Moving on to US security relationships in East Asia, we have witnessed three notable development trends since “the Pivot” was announced. The first is that the United States has been eager to reassure its allies and reinforce its military alliances in the region. While the first couple of post-Cold War decades periodically saw US alliances in Asia under great strain, all of them seem to have been reinvigorated in the current decade. Apart from the recent US-Philippine agreement on the EDCA framework, Washington has also been refurbishing its long-standing alliances with Australia, South Korea and Japan in the recent past (Lang, 2015; Bower, 2016: 51-73). The second development trend is that the United States has been very busy, not only shoring up its existing strategic partnerships in the region, notably with Singapore and Thailand, but also cultivating new partnerships with, among others, Malaysia, Indonesia and in particular Vietnam. Such partnerships have been facilitated by joint military exercises, US arms sales, frequent high-level exchanges of senior state representatives and US assistance for improving the ISR capabilities of partner states etc. (Bower, 2016: 94-108; Parameswaran, 2016). The third noticeable trend is the shifting nature of the American security order in the region, which has traditionally been described as a hub-and-spokes system of bilateral relations with the United States at the center. Instead, Washington now increasingly seeks to create a broader network system of like-minded partner states based on shared values and interests to strengthen security cooperation among these states (Lang, 2015; TWH, 2015b).

Another key feature of the US rebalance is the stated objective to have a stronger forward military posture in the region (Carter, 2012). On the face of it, the recent adjustments to America’s military presence in the Asia-Pacific may seem negligible. However, if we factor in the serious budgetary constraints on the Pentagon in the wake of the global financial crisis, requiring a considerable downsizing of both the number of troops deployed abroad and the overall force structure, then it becomes quite clear that the Asia-Pacific has gained a larger weight in relative terms (Bower et al., 2016: 44). In fact, instead of force reductions, the US military in the Asia-Pacific has received some build-ups in selected areas. Well-known examples include the stationing of additional US Navy destroyers and littoral combat ships in Japan and Singapore as well as the deployment of 1150 US Marine Corps soldiers (to be increased to 2500) on a rotational basis in Darwin (Australia). In broader terms, the overall number of US troops in the region has actually risen from 244,000 to 266,000, and the Pentagon has recently reaffirmed its pledge to place 60% of its ships and aircraft in the Asia-Pacific by 2020 (a historically high level). What is more, the naval and air force base at Guam is currently being significantly upgraded to serve as a strategic hub of the US military in the Asia-Pacific, while a new potent missile defense system (the so-called THAAD) is being deployed on US Navy destroyers at key sites to lessen the vulnerability of US forward bases and key allies in the region (Olson, 2015; Bower, 2016: 123-126). Taken together, these changes do amount to some strategic weight shifting in favor of the Asia-Pacific at a time when the US military is also preoccupied with a resurgent Russia and the threat from Islamic State.

Most of the components of the US rebalance seem deliberately designed to retain America’s strategic dominance in the Asia-Pacific region in the face of an increasingly powerful and assertive China.

A fifth prioritized area is the promotion of universal values such as democracy, the rule of law and human rights, which have figured prominently in the key speeches on the US rebalance (see e.g. Obama, 2011; Obama, 2014). For instance, in his speech in Australia in 2014, Obama declared that “we are also encouraging China to adhere to the same rules as other nations whether in trade or on the seas. And in this engagement we will continue to be frank about where there are differences, because America will continue to stand up for our interests and principles, including our unwavering support for the fundamental human rights of all people.” The discursive articulation of such allegedly universal values at the same time serves the purpose of trying to rally states in the Asia-Pacific region to America’s side and pit them against the PRC, which is repeatedly targeted as a repressive regime, a human rights violator and, more recently, a challenger of international law (in the context of UNCLOS). As stated in the latest Fact Sheet from the White House on the objectives of the US rebalance, “Our priority is to strengthen cooperation among our partners in the region, leveraging their significant and growing capabilities to build a network of like-minded states that sustains and strengthens a rule-based regional order and addresses regional and global challenges” (TWH, 2015b: my own underlining).
Finally, the US rebalance is also about engaging the PRC more directly and encouraging it to be a responsible player or stakeholder in international affairs, as Washington likes to put it (Kerry, 2015). After all, Washington needs China not only to tackle a wide range of international challenges such as climate change, non-proliferation and international terrorism but also to coordinate and manage their extensive bilateral trade relationship. Accordingly, the Obama administration has stepped up its direct diplomacy with the Chinese leadership, as epitomized by the annual Strategic and Economic Dialogue (SED), which is headed by top government representatives on both sides and (the eighth SED took place this summer). Yet, while this dialogue is clearly comprehensive and substantive, it has recently been increasingly overshadowed by a number of security-related issues that threaten to drive a wedge in between the two countries (see e.g. USDS, 2015).

Taken together, the Obama administration has succeeded in directing strategic attention as well as resources towards the Asia-Pacific region since it took office. To be sure, the White House consistently underlines that "the United States welcomes the rise of a China that is peaceful, stable, prosperous and a responsible player in global affairs" (TWH, 2015c). Yet, most of the components of the US rebalance seem deliberately designed to retain America’s strategic dominance in the Asia-Pacific region in the face of an increasingly powerful and assertive China.

**FREEDOM OF NAVIGATION OPERATIONS IN THE SOUTH CHINA SEA**

One of the most controversial aspects of the US rebalance is the "freedom of navigation operations" (FONOPs). Such operations can be seen as a practical manifestation of three components of the US rebalance discussed above: reassurance of allies and partners, a forward military presence and promotion of universal values such as the rule of law.

Under the jurisdiction of the US Department of Defense the FONOP program has been active since 1979 and is not targeted at any specific country or region in the world. For instance, in 2014 the US military carried out FONOPs against 19 different countries, most of which were located in South America and Asia, including in the South China Sea (Pentagon, 2015a). According to the US Department of Defense, the underlying motivation of the FONOP program is that "Some coastal states in the world have asserted maritime claims that the United States considers to be excessive – that is, such claims are inconsistent with the international law of the sea and impinge upon the rights, freedoms and uses of the sea and airspace guaranteed to all states under that body of international law" (Pentagon, 2015b). In order to counter such excessive claims, the Pentagon has been charged to undertake FONOPs on a regular basis in every region of the world.

Specifically, a FONOP is conducted by US military vessels, i.e. aircraft or ships, operating in a way that overtly challenges another country’s claims to rights of exclusivity, which are deemed to violate the international law of the sea (i.e. UNCLOS). Typically, such claims concern a number of restrictions for foreign military vessels, requiring them to seek prior notice or permission before they enter waters adjacent to the coastal state in question (e.g. the EEZ or the territorial waters). In the case of China, the Pentagon is currently challenging four types of claims that are found to be excessive (Pentagon, 2015a):

- Restrictions on the freedom of navigation of foreign military vessels in China’s EEZ such as requirements for prior notification and acceptance.
- Domestic Chinese law criminalizing surveillance activities by foreign vessels in China’s EEZ.
- Restrictions on the freedom of navigation within China’s Air Defense Identification Zone in the East China Sea.
- The excessive use of straight baselines to extend China’s maritime territorial reach.

Apart from some limited operations in the early 1990s, the US FONOPs did not officially target China until 2007 (see Pentagon, 2015a). In fact, there was virtually no public awareness of the FONOP program until midway into 2015 when the US government floated a proposal in the media to conduct a FONOP in the vicinity of the artificial islands that China was constructing in the Spratlys. However, the first strong indication that the Obama administration was about to embark on a more publicized challenge to China’s maritime claims in the SCS came back in July 2010 when then-Secretary of State Hillary Clinton stated at a ASEAN-related security conference that "The United States has a national interest in freedom of navigation, open access to Asia’s maritime commons and respect for international law in the South China Sea" (cited in: Landler, 2010). Since then, the Obama administration has increasingly voiced its support for the freedom of navigation and respect for
international law in the South China Sea, as encapsulated in the often-heard official mantra that the US “will continue to fly, sail and operate wherever international law allows” (e.g. Obama, 2016b). In late 2013, the Pentagon carried out a FONOP with two B-52 bombers in the East China Sea to demonstrate that the US does not recognize the special notification requirements that China had introduced there as part of its new Air Defense Identification Zone. In the second half of 2014, as news about China’s artificial island building in the Spratlys swamped the media, the Obama administration expressed its strong concern and started to conduct frequent surveillance missions in the area – even inviting Western media like CNN aboard the surveillance planes (see Sciutto, 2015).

Finally, on 27 October 2015, the Pentagon conducted a publicly pre-announced and therefore much-hyped FONOP in the South China Sea (Rapp-Hooper, 2015; Panda, 2015c). Accompanied by two surveillance aircraft, the USS Lassen, an Arleigh Burke class guided missile destroyer, transited within 12 nautical miles of the Subi Reef, one of China’s man-made islands in the Spratly archipelago. While the FONOP also targeted land features in the Spratlys controlled by three other claimant states, the operation plainly served to draw attention to China’s artificial island building. Specifically, the FONOP aimed to reject the Chinese demand (also advanced by other claimant states) that naval vessels have to notify relevant authorities before entering the 12 nm territorial sea of such land features, even when conducting so-called “innocent passage”. However, inasmuch as Subi Reef – originally a low-tide elevation – is not entitled to a territorial sea in the first place, much confusion surrounded the exact implications of the first FONOP and Beijing’s reactions were accordingly measured (Tiezzi, 2015c). Thus, in what was widely seen as an attempt “to straighten things out”, a second FONOP followed soon after.

On 30 January 2016, USS Curtis Wilbur, another guided missile destroyer, entered the territorial waters of Triton Island in the China-administered Paracel islands (also claimed by Vietnam and Taiwan) to conduct innocent passage without notifying relevant authorities in advance. Since Triton Island is undoubtedly entitled to a territorial sea, the second FONOP was clearly challenging China’s (as well as Vietnam’s and Taiwan’s) excessive demand about prior notification. Beijing made a stern response this time, stating that the operation “is, in essence, the pursuit of maritime hegemony by the U.S. under the cloak of ‘freedom of navigation’” (MFAPRC, 2016a). In early May 2016, a third FONOP was carried out by yet another guided missile destroyer, USS William P. Lawrence on “innocent passage” within 12 nm of Fiery Cross Reef, one of China’s artificial islands in the Spratlys featuring a 3000 meter long airstrip. Since the Fiery Cross Reef – a ‘rock’ in its natural state (PCA, 2016: 9) – is entitled to a territorial sea according to UNCLOS, Chinese officials reacted harshly to what they saw as another breach of China’s “prior notification” requirements by an American warship (Panda, 2016c).

The Pentagon has made clear that we will see an increased frequency of FONOPs in the SCS (Pentagon, 2016). It raises at least two important questions about the legitimacy of these operations. First, one might point to the ironic fact – seemingly verging on hypocrisy – that the United States is a self-proclaimed standard bearer of the international law of the sea without being a formal party to UNCLOS. Such criticism is misguided, however, since Washington by virtue of both its behavior and declarations (USDS, 1983) has long supported UNCLOS as confirming the customary law of the sea. Indeed, the Obama administration has eagerly – like its predecessors – sought to win support for the treaty in the Senate, but to no avail so far (Patrick, 2012). Secondly, and more critically, for many years the United States has been carrying out traditional surveillance operations within China’s EEZ in the SCS, often prompting China to intercept and sometimes harass American vessels – notable examples include the EP-3 incident in 2001 and the impeccable incident in 2009 (see e.g. Kraska, 2010). As Washington, unlike Beijing, considers such surveillance operations to be in conformity with UNCLOS, they might in principle be framed as FONOPs, which would explain the Pentagon’s ambiguity about the number and scope of its previous FONOPs in the SCS. Yet, if the boundary between surveillance activities and FONOPs becomes blurred, it would pose a serious risk to the overall international legitimacy of the Pentagon’s freedom of navigation campaign.

IMPLICATIONS OF THE US REBALANCE: AN EMERGING STRATEGIC RIVALRY WITH CHINA?

There are several important effects of the US rebalance on the territorial disputes in the South China Sea. One is that the United States is becoming progressively more directly involved in the maritime conflicts, even if Washington maintains its official policy of not taking any sides in the underlying territorial disputes. The FONOPs in the SCS provide a case in point, as they seem deliberately designed to serve as a tool of public diplomacy against the PRC. After all, other FONOPs around the world are conducted without Washington feeding the media in any comparable way. By directing international attention to China’s excessive demands in the SCS, the FONOPs play powerfully into the wider debate about Chinese assertiveness and the threat that China may pose to the existing, rule-based international order,
championed by the United States itself. Furthermore, as Washington involves itself more actively in the security of claimant states such as the Philippines and Vietnam, it risks becoming dragged into some sort of showdown with Beijing in the SCS. Such a scenario is most likely in the case of the Philippines, a US alliance partner that is frequently conducting joint military exercises with the US and has opened up several of its bases to US military forces (as part of the EDCA agreement). One recent example of US interference in the Sino-Philippine territorial disputes came in late April when US air force vessels, operating from Clark air base in the Philippines, conducted what appears to have been a hybrid surveillance/FONOP around the Scarborough Shoal following reports that the Chinese may start land reclamation activities there as well (WSJ, 2016).

Another obvious implication of the US rebalance on the SCS disputes is its reassuring effect on those claimant states that enjoy the backing of the United States. Hence, by demonstrating to the smaller claimant states that a forward US military presence in Asia will remain a bedrock of American grand strategy, these states are allowed to stand more firmly on their maritime claims rather than succumbing to Chinese might and pressure. For instance, it is highly unlikely that the Philippines would have opted for the legal arbitration case against the wishes of Beijing (cf. Chapter 2), if Manila harbored any doubts about Washington’s long-term commitment to the region. On the negative side, American reassurance may also embolden some of the claimant states to adopt more provocative measures against China, thereby further deepening the present deadlock of the territorial disputes.

As Washington gradually positions itself as a key player in the South China Sea and orchestrates a strategic network of like-minded states to balance China’s rising power, the world’s two greatest powers could easily become locked into a confrontational pattern of rivalry.

Most importantly, the US rebalance is bound to add fuel to the already simmering strategic rivalry between China and America. As Washington gradually positions itself as a key player in the South China Sea and orchestrates a strategic network of like-minded states to balance China’s rising power, the world’s two greatest powers could easily become locked into a confrontational pattern of rivalry. From Beijing’s perspective, of course, the US rebalance is nothing but a thinly veiled militarized containment strategy, which aims to prevent China from realizing its great power potential as well as its rightful claims in the SCS as manifested by the “nine-dash line” (MODPRC, 2015; Xinhua, 2016). Insofar as an overarching pattern of Sino-American rivalry does in fact take hold, it would have serious consequences for the existing international order. With little in the way of shared values, outlooks or identities, strategic rivalry would certainly undermine the prospects for Washington and Beijing of reaching any stable consensus on the key questions of international order in the 21st century. As such, the South China Sea may not only be a hotbed of regional maritime conflict, but also turn out to be a breeding ground for full-blown great power rivalry.
The South China Sea has emerged as a critical maritime arena in the second decade of the 21st century. Being located in one of the most economically vibrant and strategically important regions of the world, the South China Sea has become a significant body of water in a geopolitical sense. This is manifested not only in the conflicting territorial and maritime claims of the coastal states, notably the PRC, the Philippines and Vietnam, but also in the simmering strategic rivalry between an increasingly self-assertive China and a United States bent on rebalancing China's growing power in the region. At the risk of simplifying the complexity of the overall picture somewhat, this report has zoomed in on three key development trends that characterize the present situation in the South China Sea.

First, the report has looked into the legal arbitration case between the Philippines and China concerning the legality – in terms of UNCLOS – of their conflicting claims and practices in the South China Sea. In July 2016, the Permanent Court of Arbitration in The Hague issued an award that, by rigorously undermining the validity of China's expansive claims and practices, is highly favorable to the Philippines. Specifically, the ruling deemed China's claim to “historical rights” in the South China Sea (often illustrated by the nine-dash line) to be without any basis in UNCLOS. The court also concluded that China's maritime practices had violated the Philippines' sovereign rights to the resources within the latter's exclusive economic zone and continental shelf. Importantly, as the arbitration case has come to signify a litmus test of China's adherence to the rule of international law, Beijing, by rejecting the ruling of the court as “null and void”, has exposed itself to widespread international critique with long-term consequences for its international image.

Second, the report has provided an overview of the primary components of China's more assertive strategy in the South China Sea in pursuit of its territorial and maritime claims. This strategy involves an extensive expansion of China's maritime power projection capacity (including the PLA Navy as well as the China Coast Guard), large-scale land reclamation and construction activities to reinforce Chinese sovereignty claims in the Spratlys and an increased willingness to pursue maritime and territorial claims in a confrontational manner against rival claimant states. The report therefore argues that Chinese assertiveness, by having fundamentally eroded the existing balance among the claimant states, is mainly responsible for the current state of geopolitical tensions and confrontational practices in the South China Sea. To be sure, other claimant states such as Vietnam and the Philippines have also been instrumental in bringing about the negative development, but the overall magnitude of China's assertiveness constitutes a key driver.

Third, the report has examined the role played by the United States in the South China Sea. In response to the overall rise of China and Beijing's increased assertiveness, Washington has embarked on a strategic rebalance to the Asia-Pacific region. The US rebalance entails a wide range of diplomatic, institutional, economic, political and not least military-strategic initiatives, including the orchestration of a strategic network of like-minded states to balance rising Chinese power and an enhanced US forward military presence in the region. Against this backdrop, the report has argued that Washington's deepening involvement in the existing territorial disputes in the South China Sea ultimately raises the specter of a comprehensive strategic rivalry with China in the years to come. Specifically, the media-hyped US freedom of navigation operations in the South China Sea tend to exacerbate existing tensions, in effect reinforcing China's impression that Washington's engagement, first of all, reflects an underlying strategy for containing the rise of China in the 21st century.

AS VIEWED FROM COPENHAGEN

From a Danish perspective, the conflict-ridden maritime arena of the South China Sea may seem of limited interest, being located conveniently far away, even by the standards of Danish foreign policy activism over the past few decades. Yet, Denmark does in fact have substantial interests at stake in more than one sense. First of all, as a small state Denmark benefits enormously from a rule-based international order; and as a small state with significant unresolved territorial claims in the Arctic region Denmark needs UNCLOS as the centerpiece of maritime dispute settlement in contested areas. Given China's rejection of the international arbitration case and its claim to “historic rights” that seemingly defy UNCLOS-based principles, the Danish government should take advantage of its close political dialogue with Beijing to voice Danish concerns about what could be a potential erosion of the international law of the sea.

The prospects of a full-blown strategic rivalry between Washington and Beijing are extremely worrying from a Danish perspective.
Furthermore, Denmark profits immensely from enjoying a strong relationship with both China and the United States. The latter being our principle alliance partner and ultimate backer of the existing international order, while China is fast overtaking the US as our largest non-EU trading partner with whom we have moreover established a “comprehensive strategic partnership”. The prospects of a full-blown strategic rivalry between Washington and Beijing are therefore extremely worrying from a Danish perspective. Not so much because higher insurance premiums on Danish shipping companies operating in the South China Sea (Maersk) would be in the offing, but rather because Denmark might be forced to choose sides in such a conflict. Accordingly, the Danish government should, on the one hand, do its utmost through bilateral communication channels to speak against the emerging pattern of great power rivalry and, on the other hand, prepare itself for how to navigate internationally between Washington and Beijing, if our diplomatic advice turns out not to be heeded.


The South China Sea – A Breeding Ground for Geopolitical Rivalry?


DIIS - Danish Institute for International Studies
The Danish Institute for International Studies is a leading public institute for independent research and analysis of international affairs. We conduct and communicate multidisciplinary research on globalisation, security, development and foreign policy. DIIS aims to use our research results to influence the agenda in research, policy and public debate, and we put great effort into informing policymakers and the public of our results and their possible applications.