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CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
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EXERCISE/EXERCICE FINAL ARBITER

OIL PIRATES OF THE NIGER DELTA

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ABSTRACT

Piracy has been on the rise globally since 2006. In 2008 there were 40 confirmed attacks that occurred in the oil rich waterways of the Niger Delta and the Gulf of Guinea. Modern piracy in Nigeria is sustained by economic, social, political and geographic factors which favor the pirate.

Nigeria is the seventh highest ranking nation for total oil exports, sending 2.3 million barrels abroad every day. The transportation requirements to move the oil guarantees that shipping, especially tankers, must come close to the Nigerian coast. The majority of that oil is produced inside the Niger Delta and pumped to stations along mouths of navigable rivers such as the Bonny Inshore Terminal in River State and Forcados Terminal in Delta State or further offshore. Here tankers, supply ships and tugboats must sail in constrained waters, making these vessels prime targets for pirates.

Oil prices rise and fall in the supply and demand equation of market economics. Oil shock, a rapid rise in fuel prices, is precipitated by an abrupt loss of oil from the market. The threat of Nigerian piracy shutting down oil production in the Niger Delta could be a catalyst for a massive run on oil prices, fueled by fear of peak oil and the inability of oil producing nations to absorb the disruption. Today the United States is economically weakened as it recovers from recession. The harm to the United States and global economy from oil shock would likely push the world deeper into recession.

Nigeria is either unwilling or unable to suppress piracy emanating from the Niger River Delta. Intervention by the U.S. can bring the military and diplomatic strength required to put an end to piracy in the region and protect vital energy resources.

TABLE OF CONTENT

Abstract.....	iii
Table of Content	v
Table of Figures	vii
Introduction.....	1
Chapter 1 - On Piracy	9
Cycle of Piracy.....	9
Historical Piracy.....	10
The Act of Piracy	14
Definition of Piracy.....	17
Piracy vs. Maritime Terrorism.....	21
Modern Piracy in Nigeria.....	23
Types of Pirates.....	24
Opportunist Pirates.....	24
Organized Pirates	26
Sustaining Piracy	29
Legal and Jurisdictional Weakness.....	30
Favorable Geography.....	31
Conflict and Disorder.....	32
Under-funded Law Enforcement / Inadequate Security	35
Permissive Political Environments	36
Cultural Acceptability.....	38
Promise of Reward.....	39
Analysis.....	41
Chapter 2 - Oil and Nigerian Piracy	43
The Global Oil Production System.....	45
Peak Oil.....	47
Transportation Concerns.....	51
Economic Effects of High Oil Prices.....	54
Demand Effects.....	55
Supply Effects.....	56
Policy Effects.....	59
Effects on Market Confidence	62
Analysis.....	64
Chapter 3 Intervention	67
Military Intervention.....	69
Defensive and Offensive Operations	70
Security Assistance	74
Diplomatic Intervention	77
Improving Security	77
Just Governance and Democratic Values	81
Needs of the Citizens	82
Analysis.....	86
Conclusion	89
Bibliography	93

TABLE OF FIGURES

Figure 1 – Map of Nigeria	3
Figure 2 – Traditional Niger River Delta States	6
Figure 3 – Niger Delta Oil Infrastructure	52

INTRODUCTION

History books are filled with accounts of pirates who roamed the seas to commit murder and robbery for financial gain. Some pirates were so successful that they raised entire fleets and threatened not only the shipping lanes but the towns and cities of coastal lands as well. It was not until the superpower of the age intervened that piracy was eradicated, the ships sunk and safe havens burned. The motivation of modern pirates differs little from their predecessors. Today's pirates hunt the sea lanes armed with modern assault rifles, high-tech communications, and speed boats.

The International Chamber of Commerce's (ICC) International Maritime Bureau Piracy Reporting Center (IMB PRC) observed that piracy has been on the rise globally since 2006. In 2007, 263 incidents occurred and in 2008 there were 293.¹ The increase is primarily attributed to two African nations: Somalia and Nigeria. Pirates of both countries have grown more successful in recent years. They have demonstrated an improved capability to conduct assaults far out to sea, increased organization, and the inability of government forces to prevent the pirate operations.

The failed state of Somalia is well documented as the world's most notorious pirate haven. In 2008, using little more than hand held Global Positioning Systems (GPS), speed boats and assault rifles, pirates from Somalia seized 42 vessels and 815 hostages, primarily in the Gulf of Aden.² Included was the Very Large Crude Carrier (VLCC) Merchant Tanker (MT) *Sirius Star*, loaded with two million barrels of crude oil,

¹ International Chamber of Commerce International Maritime Bureau, *Piracy and Armed Robbery Annual Report 2008* (Essex: ICC Commercial Crime Services, Maritime House, 2005), 26.

² *Ibid.*, 26.

captured 500 miles off the coast of Kenya.³ Their brazen hijackings and demands for ransom, the primary drive for piracy in the region, finally drew the ire of the international community. Throughout the year, the United Nations (U.N.) passed six resolutions each progressively more aggressive towards combating the menace, including the authorization for U.N. member nations to attack pirates on the Somali mainland itself.⁴ Still, some criminals in other African nations are mimicking the pirates in Somalia.⁵

The lesser known but arguably equally dangerous region for pirate activity, and the focus of this paper, is Nigeria. In 2008 the IMB PRC received reports on 40 confirmed attacks that occurred on the inland waterways of the Niger Delta and the Gulf of Guinea.⁶ In these attacks, 27 vessels were boarded, five were hijacked and 39 crew members were kidnapped.⁷ In addition, the agency stated in its 2008 annual report on *Piracy and Armed Robbery against Ships* that a further 100 attacks occurred but were not confirmed.⁸ Piracy in Nigeria is noted by the IMB for the high level of violence

³ Sky News, "Pirates seize biggest hijack ship," <http://news.sky.com/skynews/Home/World-News/Somali-Pirates-Gang-Captures-Large-Saudi-Crude-Oil-Ship-Sirius-Star/Article/200811315153159>; Internet; accessed 15 March 2009.

⁴ Security Council Resolutions 1814 (2008), 1816 (2008), 1838 (2008), 1844 (2008), and 1846 (2008), 1851 (2008). See United Nations, "UN Security Council Resolutions 2008," http://www.un.org/Docs/sc/unsc_resolutions08.htm; Internet; accessed 15 March 2009.

⁵ Christian Purefoy, "African pirates cop ideas for ransom riches," CNN 08 April 2009 available from <http://www.cnn.com/2009/WORLD/africa/04/08/piracy.africa/>; Internet; accessed 08 April 2009.

⁶ International Chamber of Commerce International Maritime Bureau, *Piracy and Armed Robbery Annual Report 2008*, 26.

⁷ Ibid. Though the IMB does not specifically define the difference between "kidnapping" and "hostage" the author presents the primary difference being that, for this paper, kidnapping indicates pirates removed a person from a vessel by force and held them against there will until some demand was met (i.e. ransom). A "hostage" is determined to mean that personnel are held aboard the vessel seized by pirates as a security for a ransom. Source; www.dictionnaire.reference.com; .

⁸ International Chamber of Commerce International Maritime Bureau, *Piracy and Armed Robbery Annual Report 2008*, 26.

associated with the attacks and the propensity for pirates to kidnap sailors for ransom. Even the presence of armed security guards has been ineffective at stopping dedicated pirate attacks.



Figure 1 – Map of Nigeria⁹

The pirates of the Niger River Delta and the Gulf of Guinea are a motley network of groups and subgroups of young men, predominantly ethnic Ijaws, loosely affiliated with a dozen different militant groups with names that sound like fiction: the Egbesu Boys of Africa (EBA); the Niger Delta Vigilante (NDV); the Niger Delta People’s Volunteer Force (NDPVF); and the most prominent, the Movement for the Emancipation

⁹ Integrated Regional Information Networks, “Map of Nigeria,” <http://www.irinnews.org/pdf/map/Nigeria.pdf>; Internet; accessed 15 March 2009.

of the Niger Delta (MEND). Their fight against the Nigerian government, supposedly addressing claimed political injustices and social grievances, has undermined the state's authority in the Niger River Delta. Piracy has benefitted from the general lawlessness and the call by militants to target vessels and oil platforms of the international oil companies.

Nigeria is of strategic vital interest to the U.S because it is the U.S.'s fifth largest provider of oil¹⁰ and sits atop 36.2 billion barrels of proven reserves.¹¹ The preponderance of these reserves is located throughout the poverty stricken area of the Niger River Delta and offshore in the Gulf of Guinea. Oil production capacity in Nigeria is nearly three million barrels per day (bpd) and expected to increase to four million bpd by 2010.¹² Civil unrest in the Delta though has reduced a large percentage of that production capacity.

Nigeria itself is located in Western Africa along the Gulf of Guinea, bordered by the nations of Benin to the west, Niger and Chad to the north, and Cameroon to the east. It is Africa's most populous nation with over 146 million people from 250 different ethnic groups. A British holding during the 19th and much of the 20th century, Nigeria received her independence in 1960. Following independence, the oil rich nation suffered several decades of governmental instability, systemic corruption, poor infrastructure

¹⁰ Energy Information Administration, "Crude Oil and Total Petroleum Imports Top 15 Countries," http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/company_level_imports/current/import.html; Internet; accessed 17 March 2009.

¹¹ Energy Information Administration, "Nigeria: Oil," <http://www.eia.doe.gov/emeu/cabs/Nigeria/Oil.html>; Internet; accessed 20 April 2009.

¹² *Ibid.*

development, and macroeconomic mismanagement.¹³ Today Nigeria ranks amongst the world's weakest states and is unable to effectively cope with the social, political and economic stresses it faces.¹⁴ The result is a failing state riddled with violent internal conflict, lawlessness and societal deterioration. Nowhere is this more evident than in the southern waterways of the Niger River Delta.

Nigeria's Niger River Delta encompasses 20,000 square miles of rivers, lakes, mangroves, creeks and swamps.¹⁵ Though scholars differ on the specific composition of Nigerian states which make up the delta, traditionally it is recognized as the three southern regions of Delta, Bayelsa and Rivers bounded between the Benue and Imo Rivers.¹⁶ The oil from the southern region accounts for 75%¹⁷ of the country's entire production, which earned the Nigerian government \$24 billion dollars in 2008.¹⁸ Yet 31 million people¹⁹ of the region live in squalor with little clean drinking water or

¹³ Central Intelligence Agency, "World Fact Book: Nigeria." <https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>; Internet; accessed 15 February 2009.

¹⁴ Foreign Policy, "The Failed State Index," http://www.foreignpolicy.com/story/cms.php?story_id=4350&page=5; Internet; accessed 02 March 2009, 6.

¹⁵ World Wildlife Federation, "Wild World Ecoregion Profile – Niger River Delta," <http://www.worldwildlife.org/wildworld/profiles/g200/g155.html>; Internet; accessed 16 March 2009.

¹⁶ In 2000 President Obasanjo expanded the definition to include six others; Abia, Akwa Ibom, Cross River, Edo, Imo and Ondo states. This paper will focus on the southern regions of the delta. Wikipedia; "Niger Delta," http://en.wikipedia.org/wiki/Niger_Delta; Internet; accessed 15 March 2009.

¹⁷ Lauren Ploch, *Nigeria*, Report prepared for Members and Committees of Congress (Washington D.C.: Congressional Research Service, 2009), 15, available from <http://ftp.fas.org/sgp/crs/row/RL33964.pdf>; Internet; accessed 17 March 2009.

¹⁸ Anonymous, "Official: Nigeria's Crude Oil Earning Crash by 50%," *China News* 27 March 2009 available from http://news.xinhuanet.com/english/2009-03/27/content_11085272.htm; Internet; accessed 21 April 2009.

¹⁹ Ploch, Lauren. *Nigeria*. Report prepared for Members and Committees of Congress (Washington D.C.: Congressional Research Service, 2009), 14, available from <http://ftp.fas.org/sgp/crs/row/RL33964.pdf>; Internet; accessed 17 March 2009.

electricity. The majority of money earmarked for delta states' development is siphoned away into the private accounts of corrupt officials and military officers.²⁰ The region suffers from serious oil pollution. Spills have ruined wetlands and farmland, and air pollution from natural gas flaring has causes acidic rain and smog. Decades of unaddressed grievances



Figure 2 – Traditional Niger River Delta States

over environmental pollution and oil revenues by the indigenous people of the delta has festered from political tension to protests and finally into widespread criminality. Today riverine bandits emanate from the creeks and rivers of the Delta, attacking ships, oil platforms and pipelines, conducting kidnappings, armed robbery and murder.

²⁰ Sebastian Junger, "Blood Oil," *Vanity Fair* February 2007 available from <http://www.vanityfair.com/politics/features/2007/02/junger200702?printable=true¤tPage=all>; Internet; accessed 27 February 2009.

These attacks highlight the threat to U.S. national security that piracy in the region poses. Attacks that remove oil from the market affect prices worldwide. The forces of supply and demand typically maintain the equilibrium of the oil market. However, concerns about the ability of the global oil production system to meet future demands or increase production in the face of disruptions have created the conditions for a rapid rise in fuel prices, also known as oil shock.

Today the U.S. petroleum based economy is in the grip of a recession from which it may cost over \$9 trillion to recover. In addition, the U.S. is unable to meet its energy demands domestically and therefore must import approximately 8 million bpd, mostly by sea, to satisfy energy demands. This oil transportation system of tankers and pipelines, experts have warned, is vulnerable to attack and disruption.²¹ Therefore, the threat to the recovering economy from an inflation of oil prices caused by pirate induced disruptions of supply in the Niger River Delta and the Gulf of Guinea warrants U.S. intervention.

²¹ Institute for the Analysis of Global Security, "Threats to Oil Transport," <http://www.iags.org/oiltransport.html>; Internet; accessed 12 February 2009.

CHAPTER 1 - ON PIRACY

Piracy, in the past and today, is simply violence in the maritime environment conducted for personal gain. The crime has existed for centuries yet there is little international agreement on a single definition, which has served to convolute discussion of the subject and constrained the international community's response. Historically, where piracy has existed, the suppression of pirates has only occurred when a hegemonic nation has intervened militarily.

Examination of piracy reveals a set of invariables common to the crime. From these invariables can be deduced a comprehensive definition which encompasses modern piracy. Piracy in Nigeria is perpetrated by two different types of pirates, though at times their *modus operandi* overlaps. In all its forms, piracy is sustained by economical, social, political and geographical conditions that favor the pirate. Only armed intervention by the United States could quash the growing problem of piracy in Nigeria today.

CYCLE OF PIRACY

Piracy is far from a new phenomenon. Throughout time, piracy operations have generally followed a cyclical pattern. The predations start out small with intermittent attacks on vulnerable merchantmen conducted by small groups of pirates. Success builds upon success and as the amount of reward grows, more individuals become attracted to piracy, thus increasing the frequency of attacks. Eventually better organized pirates with

larger fleets absorb or destroy rivals. At the top of the cycle the pirates ravage shipping lanes, threatening not only the seas but also adjoining coastal lands. Simply arming merchants is insufficient at deterring the pirates. Without some sort of check from an external influence, piracy seldom ends by itself.

The downward part of the cyclical pattern only occurs, according to historian Donald Puchala, when pirates "...were sought out, hunted down and forcefully destroyed along with their strongholds and sanctuaries."²² In addition he adds that eradication of pirates was typically driven by economic factors and executed by the hegemonic nation of the period able to exert firm sea control.²³ The historical record supports this assertion. It also shows that when the pirate fleets were not destroyed but instead bribed for peace, cessation of attacks was temporary at best.

HISTORICAL PIRACY

Though literary documentation is lacking, piracy is generally believed to have started around the moment the first boat went to sea loaded with goods.²⁴ Undoubtedly after that first boat put to sea, there was a pirate following with plans to steal it. Most civilizations have at one time or another been harassed by the scourge of piracy.

²² Donald J. Puchala, "Of Pirates and Terrorists: What Experience and History Teach," *Contemporary Security Policy*, vol. 26, no. 1 (April 2006): 13.

²³ *Ibid.*, 13.

²⁴ Jack A. Gottschalk, Brian P. Flanagan, *Jolly Roger with an Uzi* (Annapolis: Naval Institute Press, 2000), 1.

The Etruscans in the late 4th century B.C. were documented targeting Greek shipping in the Aegean Sea and raiding the coastal cities of the Hellenic States.²⁵ Piracy became such a problem that the Rhodian navy eventually was forced to act against the pirates in the early 3rd century B.C.²⁶ Harry J. Dell describes how the Illyrians of the Adriatic terrorized the sea circa 230 B.C in special boats called *lembi* designed for the task.²⁷ The Illyrian pirates soon ran afoul of the interests of the Roman Empire and were dealt with by Rome's navy. Yet piracy continued in the Mediterranean for another 200 years until 10 A.D. when Emperor Augustus applied the full might of the Empire against piracy and freed shipping lanes for the next 300 years.²⁸

During the crusades, Muslim and Christian nations alike used piracy as a tool of war. Each side built ships, organized crews and armed them for the task. Known collectively as "corsairs", each religion targeted the other's merchant vessels. Quite often the crew and passengers were just as valuable as the cargo, for they could be either be ransomed or sold at auction for slavery.²⁹

The literature on Vikings conjures images of wild barbarians with axes setting forth in their dragon prow long-ships to plunder. Piracy in this part of the world had been in practice for centuries, periodically rising and ebbing in intensity. Scandinavian pirates by 912 A.D. had raided England, much of Europe's coastal towns and conquered

²⁵ Harry J. Dell, "The Origin and Nature of Illyrian Piracy," *Historia Zeitschrift fur Alte Geschichte*, vol.16, no.3, (July, 1967): 354; <http://www.jstor.org/stable/4434993>; Internet; accessed 17 March 2009.

²⁶ *Ibid.*, 355.

²⁷ *Ibid.*, 348.

²⁸ Jack A. Gottschalk, Brian P. Flanagan, *Jolly Roger with an Uzi*, 2.

²⁹ Museum of Unnatural History, "The Golden Age of Piracy," <http://unmuseum.mus.pa.us/pirate.htm>; Internet; accessed 18 March 2009.

Normandy, outright settling there.³⁰ In 1377 the merchants of the German Hansa, also known as the Hanseatic League, complained that in the Baltic and North Sea “. . . large fleets [of pirates] appeared and inflicted terrific damages. . . .”³¹ To safeguard trade in the region, the League instituted *vredecogghen*, or peace-ships, to patrol the seas during the sailing season, and merchant ships were advised to travel in groups.³² Political scheming amongst the royalty of the Baltic nations unfortunately provided a conducive atmosphere for piracy to flourish and it would not be until 1398 when the last pirate castles of Gotland were burned that peace returned.³³

The greatest surge of piracy in history occurred during the first three decades of the 18th century (1692-1725)³⁴. Known as the “golden age”, it is the era that most people associate to the topic of piracy. The surge in pirate activity resulted from a confluence of events which turned the Atlantic, Caribbean, and Indian Ocean into a fertile hunting ground for maritime bandits.

The conditions for piracy were ripe. Peace had finally been achieved between the European powers, which in turn alleviated the requirement for expensive navies. Thousands of sailors suddenly found themselves unemployed with little opportunity. Simultaneously mercantile trade experienced a boom. Valuable goods were shipped around the world as the European nations once again focused on their imperial goals of

³⁰ Douglas R. Burgess, “The Dread Pirate Bin Laden,” *Legal Affairs Magazine* (July/August 2005) available from http://www.legalaffairs.org/issues/July-August-2005/feature_burgess_julaug05.msp; Internet; accessed 17 March 2009.

³¹ David K. Bjork, “Piracy in the Baltic, 1375-198,” *Medieval Academy of America*, vol. 18, no. 1, (January, 1943): 45; <http://www.jstor.org/stable/2853638>; Internet; accessed 17 March 2009.

³² *Ibid.*, 45-46.

³³ *Ibid.*, 67-68.

establishing colonies. Pirate havens sprung up in the colonies of the Americas, the Caribbean and the west coast of Africa, where weak governments turned a blind eye to the pirate's predations in return for a cut of the profits. Many names of infamous pirates known today spurn from this "golden age": William "Captain" Kidd, Edward "Black Beard" Teach and John "Calico Jack" Rackam. These individuals became popularized in books, movies and even tourist destinations like Disney Land and the Outer Banks of North Carolina. Most pirates ironically had begun their careers employed by the English against the Spanish, commissioned to search out enemy shipping and coastal towns to destroy or plunder. By 1728 many pirates, though, met their end at the hands of the British navy which played a prominent role in ridding the seas of pirates and essentially putting an end to the "golden age."

Pirates have always been particularly active off of Asia. Possibly the most successful pirate of all time was Cheng I Sao of China. In 1807 the prostitute turned pirate wife inherited the reigns of a growing pirate fleet. Shrewd, with a good head for business and military strategy, she compiled a force that surpassed many of the navies of the region. At the height of her power she commanded over 1500 ships and almost 80,000 sailors, and controlled nearly all the pirate activity in the South China Sea.³⁵ She evaded capture many times, including multiple engagements with the Qing dynasty navy. Cheng I Sao was eventually forced to the negotiating table where she earned full amnesty and was allowed to keep her earnings, provided her pirate fleet disbanded.

³⁵ Maggie Koerth, "Most successful pirate was beautiful and tough," *Mental Floss Magazine* (July 2006) available from <http://www.cnn.com/2007/LIVING/worklife/08/27/woman.pirate/index.html>; Internet; accessed 17 March 2009.

Southeast Asia has the notorious Straits of Malacca, a passage of water 550 miles long that narrows at one end to only nine miles wide, offering the shortest route between China and India.³⁶ This stretch of water had been a leading hotspot of piracy for centuries. Vessels constrained by the narrow channel were valuable targets on a critical and highly travelled trade route. Piracy was so profitable that pirate kingdoms sprang up along the waterway subsistent on their activities' profits. In the late 1800s European navies brought most bandit kingdoms under control but never fully eradicated the profession from the hearts of the people.³⁷ To this day the Strait of Malacca is still considered by many to be a hotbed of piracy.

In regards to piracy, little fundamentally has changed in the last 2400 years. Certainly gone are the large pirate fleets armed with cannons and various medieval weaponry, replaced today by swarms of small speed boats and the ubiquitous AK-47. The face of piracy may be different but the historical record gives context to the act of piracy and provides a set of invariables to define the crime.

THE ACT OF PIRACY

A number of elements are common to the act of committing piracy. Douglas Burgess breaks the act of piracy down to the three components common into criminal

³⁶ Peter Gwin, "Dangerous Straits," *National Geographic*, October 2007, available from <http://ngm.nationalgeographic.com/2007/10/malacca-strait-pirates/pirates-text/1>; Internet; accessed 18 March 2009, 1.

³⁷ *Ibid.*, 2.

law: *mens rea*, the mental state; *actus reus*, the actions; and *locus*, the location.³⁸ In laymen terms, this means the deliberate conduct of an illegal act in a specific place.

Mens rea applied to piracy implies that the actor intends to commit the crime.³⁹ To that end, Burgess offers terror as an integral weapon to piracy, citing Edward Teach's tactics of weaving burning fuses into his beard or the flying of the Jolly Roger flag to induce terror in the potential target.⁴⁰ But terror is just one tactic⁴¹ amongst a number leading to motive. Boats designed to go fast, procurement of modern weapons, approaching ships in a manner in order to gain surprise, the use of violence or threat of violence; are various means employed to execute successfully the act of piracy.

Actus reus is the element of action. With piracy the action is quite plainly robbery. Financial gain motivates pirates. Similarly, state sponsored piracy offers a slight twist on traditional piracy as it may involve political or strategic motives, but ultimately sanctioning financially benefits both the sponsor and the pirate. In John Burnett's book, *Dangerous Waters: Modern Piracy and Terror on the High Seas*, he quotes Economic Historian J.L Anderson, "...throughout history many officials at all levels of authority have found it expedient and usually profitable to ignore or even covertly sponsor acts of piracy."⁴² Queen Margret of Denmark in 1385 utilized piracy as

³⁸ Douglas R. Burgess, "The Dread Pirate Bin Laden".

³⁹ Cornell University Law School Legal Information Institute, "Mens Rea," http://topics.law.cornell.edu/wex/mens_rea; Internet; accessed 17 March 2009.

⁴⁰ Douglas R. Burgess, "The Dread Pirate Bin Laden".

⁴¹ Tactic is defined as, "a plan, procedure, or expedient for promoting a desired end or result" as per Dictionary.com, "Tactic," <http://dictionary.reference.com/browse/tactic>; Internet; accessed 18 March 2009.

⁴² John S. Burnett, *Dangerous Waters: Modern Piracy and Terror on the High Seas* (New York: First Plume Press, 2003), 117.

a weapon to give Danish merchants parity with the Hanseatic League in Baltic trade.⁴³ During the reign of Queen Elizabeth, private men-of-war were issued letters of marque that authorized the seizing and/or destruction of Spanish ships (Private sailors issued letter of marquee became famously known as “privateers”) in a war over the valuable New World.⁴⁴ Of course the state received compensation by way of a cut or percentage of the goods brought to port.⁴⁵ To the pirate the goal was to capture vessels but to the sponsor the theft of goods was irrelevant, providing the targeted shipping was destroyed or captured. So one can conclude that though the majority of cases of piracy involve the theft of something tangible and valuable, all pirate attacks are done to achieve or obtain something valued.

Lastly the concept of *locus* deserves consideration. Obviously the historical evidence bears that piracy occurs upon the sea, or in the terms of sacking coastal towns “descent by sea.”⁴⁶ The unifying principal of historical piracy is that the act is facilitated by the pirate’s transportation to the objective upon the water. Secondly, piracy occurs in areas lacking strong law-enforcement authority. The predominance of attacks upon the open seas are due largely to the fact that the oceans are uncontrollable except within the immediate sensor range of any patrolling warships. Thus pirates benefit from the nature of the maritime environment and if coastal nations are unwilling or unable to regulate

⁴³ David K. Bjork, “Piracy in the Baltic, 1375-198,” 42.

⁴⁴ P. Bradley Nutting, “The Madagascar Connection: parliament and Piracy, 1690-1701,” vol. 22, no. 3 (July, 1978): 203; <http://www.jstor.org/stable/845181>; Internet; accessed 17 March 2009.

⁴⁵ *Ibid.*, 203.

⁴⁶ Douglas R. Burgess, “The Dreaded Pirate Roberts.”

their internal waters, then piracy may flourish anywhere there is enough reward to satisfy the effort.

From these three elements a rough paradigm can be established. Pirates utilize equipment and tactics upon a body of water in order to attack targets to achieve or obtain an objective that is perceived as valuable. This paradigm is timeless and can serve as a comparative model against the modern understanding of piracy.

DEFINITION OF PIRACY

Achieving a global consensus on defining piracy has proven difficult. As the presence of piracy is quite often connected to state power or lack thereof, politics frequently obfuscate what should be a clearly identifiable crime.⁴⁷ Modifying an old colloquial phrase, one man's pirate is seen as another man's freedom fighter. Therefore a number of different definitions of piracy, each with its own legal basis and adherents, are utilized today.

Article 101 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) defines piracy as:

- (a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:
 - (i) on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;
 - (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;

⁴⁷ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism: The threat to international security* (New York: Routledge, 2007), 11.

- (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;
- (c) any act inciting or of intentionally facilitating an act described in subparagraph (a) or (b).⁴⁸

Compared to the historical record, this definition appears inadequate for three reasons. Firstly, the stipulation that piracy is committed by a private crew to private ends eliminates the crime whereby a nation state sponsors the act. Secondly, the definition specifies the attack is carried out by a ship which semantically eliminates attacks from small boats, canoes or rafts. Lastly, the greatest disparity between the historical paradigm and the UNCLOS definition is found in the geographical limitation that pirate attacks can only occur upon the high seas. Therefore any attack that occurs within the territorial waters of a nation, upon coastal towns, ships alongside or at anchor would not be technically piracy. Thus the UNCLOS definition appears somewhat inadequate to encompass the full and evolving range of modern piracy.

The U.N. body tasked with developing a regulatory framework for shipping to include safety, legal matters and maritime security is the International Maritime Organization (IMO).⁴⁹ The IMO recognized the short coming of the UNCLOS definition and adopted an amendment in November 2001 titled “Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery against Ships,”⁵⁰

Armed robbery against ships means any unlawful act of violence or detention or any act of depredation, or threat thereof, other than an act of

⁴⁸ United Nations International Maritime Organization, “Piracy and armed robbery against ships,” available from: <http://www.imo.org/>; Internet; accessed 21 March 2009.

⁴⁹ United Nations International Maritime Organization, “About IMO,” <http://www.imo.org/>; Internet; accessed 20 March 2009.

⁵⁰ United Nations International Maritime Organization, “Piracy and armed robbery against ships.”

“piracy”, directed against a ship or against persons or property on board such ship, within a State’s jurisdiction over such offences.⁵¹

Accordingly, all attacks on shipping within territorial waters would be categorized as armed robbery. According to the U.N., in one place a crime is called armed robbery and solely the responsibility of the nation in which the crime takes place. Shift the attack a short distance and then it might become piracy and subject to international response and laws.⁵² Within these conditions geographical lines and demarcations become critically important. This adds an unnecessary level of complexity to addressing the problem and in some cases restrains response by law enforcement. Only piracy benefits from the distinction.

The distinction between territorial waters and internal waters moved the United Kingdoms House of Commons Transport Committee to observe: “Having two definitions of piracy undermines the effort to classify incidents transparently.”⁵³ The report further adds that because of the two separate definitions, the scale of the piracy problem worldwide is probably not properly understood and therefore the correct level of attention to the problem cannot be brought to bear.⁵⁴ The lack of a single definition for such a complex international problem as piracy has resulted in an improper appreciation of the scope of the problem. Clearly it requires a single concise definition.

⁵¹ United Nations International Maritime Organization, “Report on Act of Piracy and Armed Robbery against Ships,” http://www.imo.org/includes/blastData.asp/doc_id=1765/10.pdf; Internet; accessed 20 March 2009.

⁵² Crimes committed on a nationally flagged vessel are still subject to the laws of that nation regardless of the vessels location.

⁵³ House of Commons Transport Committee, *Piracy; Eighth Report of Session 2005-2006* (London: Stationary Office Limited, 2006) available from <http://www.publications.parliament.uk/pa/cm200506/cmselect/cmtran/1026/1026.pdf>; Internet; accessed 20 March 2009, 10.

⁵⁴ *Ibid.*, 10.

The IMB offers such a single definition of piracy that, Commander Brian D. Murray of the Canadian navy stated, “focuses on the action rather than the means.”⁵⁵

An act of boarding or attempting to board any ship with the apparent intent to commit theft or any other crime and with the apparent intent or capability to use force in the furtherance of the act.⁵⁶

An apparent drawback of this definition is that it does not address the historical paradigm of piracy in regards to raiding of coastal towns most infamously represented by the privateer Henry Morgan’s sacking of Panama in 1671,⁵⁷ or more modernly by pirates using speedboats from the sea to rob banks in Nigeria⁵⁸ or kidnap tourists for ransom from Malaysian resorts.⁵⁹ Despite this shortcoming, the IMB definition encompasses all aspects of attacks on vessels whether they are at sea or at anchor, regardless of the type of craft utilized or the victim’s proximity to land. Yet this definition reveals another problem with defining piracy.

⁵⁵ Brian D. Murray, “Piracy in Southeast Asia: Cause for Concern and Intervention” (Toronto: Canadian Forces College National Security Studies Course Paper, 2006), 12.

⁵⁶ International Chamber of Commerce International Maritime Bureau, *Piracy And Armed Robbery Against Ships Annual Repot 2008*, 3.

⁵⁷ Donald J. Puchala, “Of Pirates and Terrorists: What Experience and History Teach,” *Contemporary Security Policy*, 3.

⁵⁸ Javno, “Robbers Shoot 4 Dead in Nigerian Bank Raid,” http://www.javno.com/en-world/robberd-shoot-4-dead-in-nigerian-bank-raid_206299; Internet; accessed 03 April 2009.

⁵⁹ Cyber Diver News Network, “CDNN Special Report: Sipadan Hostage Crisis,” <http://www.cdnn.info/industry/i010615/i010615.html>; Internet; accessed 03 April 2009.

Piracy vs. Maritime Terrorism

A significant limitation of the IMB definition is that the statement "...to commit theft or any other offense..." is too broad and runs the risk of confusing terrorism and piracy. To further muddy the waters, the environment in which piracy occurs is typically permissive to terrorist activity as well. As Martin N. Murphy points out in *Contemporary Piracy and Maritime Terrorism*, the conditions which support piracy and maritime terrorism are very similar and where "...the two differ, the difference can be one of nuance."⁶⁰ The methods utilized by pirates and terrorists can mirror each other as well, particularly ship hijacking, and have further blurred the distinction between piracy and terrorism.⁶¹

The Palestine Liberation Organization (PLO), for example, captured the Italian cruise liner Achille Lauro and murdered a wheelchair bound American in a bid to draw attention to their cause as well as win freedom for 50 Palestinians held by Israel.⁶² President Reagan called the PLO's actions piracy,⁶³ though scholars disagreed with the President, citing that the international definition did not support his assertion.⁶⁴ If we

⁶⁰ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 9.

⁶¹ Adam J. Young, Mark J. Valencia, "Conflation of Piracy and Terrorism in Southeast Asia: Rectitude and Utility," *Contemporary Southeast Asia*, vol. 25, no. 2 (August 2003): 280, available from <http://web.ebscohost.com/ehost/pdf?vid=4&hid=3&sid=18775b3e-4df8-45e0-a8e1-8d600b0d6977%40sessionmgr3>; Internet; accessed 21 March 2008.

⁶² Palestine Facts, "Achille Lauro Hijacking 1985," http://www.palestinefacts.org/pf_1967to1991_achille_lauro.php; Internet; accessed 17 March 2009.

⁶³ Douglas R. Burgess, "Piracy is Terrorism," *International Herald Tribune*, 5 December 2008, 1; available from <http://www.iht.com/articles/2008/12/05/opinion/edburgess.php>; Internet; accessed 18 March 2009.

compare the Achille Lauro incident to the historical paradigm and the IMB definition, the forceful seizure of a ship and the illegal acts of hostage taking and murder, it does appear to qualify as piracy by some measure.

Yet two main differences exist between pirates and terrorists. The pirate is motivated by greed and immediate financial gain while terrorism is motivated by political goals beyond the immediate act of attacking a maritime target.⁶⁵ Akiva Lorenze, an ex-Program manager for the Israeli International Institute for Counter-Terrorism turned private consultant, uses a modified definition of maritime terrorism from the Council for Security Cooperation in the Asian Pacific (CSCAP) Working Group on Maritime Terrorism. He states maritime terrorism as:

...the use or threat of violence against a ship (civilian as well as military), its passengers or sailors, cargo, a port facility, or if the purpose is solely a platform for political ends.⁶⁶

Within this definition we are able to find all the elements of our historical paradigm of piracy and modify it to define piracy as:

...the undertaking of piratical acts and activities for financial gain within the maritime environment, using or against vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel, against coastal facilities or settlements, including tourist resorts, port areas and port towns or cities.⁶⁷

⁶⁴ Joseph Figaro, "Piracy Is Not Terrorism: It's Something Else," *Blackstate.com*, 14 December 2008 available from <http://www.blackstate.com/somalipirates1208.html>; Internet; accessed 18 March 2009.

⁶⁵ Adam J. Young, Mark J. Valencia, "Conflation of Piracy and Terrorism in Southeast Asia", 275-276.

⁶⁶ Maritime Terrorism Research Center, "Definitions," <http://www.maritimeterrorism.com/definitions/>; Internet; accessed 21 March 2009, n.p.

⁶⁷ Authors own definition modified from CSCAP definition of maritime terrorism. Graham Gerard Ong, "Ships Can Be Dangerous Too: Coupling Piracy and Maritime Terrorism in Southeast 's maritime Security Framework," Institute for Southeast Asian Studies, series no. 1 (2004); 17, available from <http://www.iseas.edu.sg/ipsi12004.pdf>; Internet; accessed 21 March 2009.

This definition, like that of the IMB, focuses on the act vice the motive. The term “pirate acts and activities for financial gain” is sufficiently broad to encompass nearly any criminal action taken in conduct of an attack, yet specific in that the act must be for monetary gain. This makes the definition simple in application and useful for understanding the rise of piracy in present-day Nigeria.

MODERN PIRACY IN NIGERIA

Piracy in Nigeria has prospered over the last decade primarily under the umbrella of a violent campaign by militants in the resource rich Niger Delta. The degeneration of the Niger Delta states is a complex scenario but stems from the government sanctioned pumping of billions of dollars of oil by foreign companies from the region. Widespread corruption has resulted whereby little oil revenue actually benefits the people in the delta who suffer the environment destroying by-products of modern oil extraction techniques, namely oil spills and gas flaring. Proliferation of military-grade small arms⁶⁸ coupled with destitute sea faring communities with long-unaddressed grievances against both the government and the multi-national oil companies operating in the delta is an auspicious combination for the rise of piracy.

⁶⁸ Jennifer M. Hazen and Jonas Horner, “Small Arms, Armed Violence, and Insecurity in Nigeria: The Niger Delta in Perspective,” *Small Arms Survey* (December 2007): 3; http://www.smallarmssurvey.org/files/sas/publications/o_papers_pdf/2007-op20-Nigeria.pdf; Internet; accessed 08 March 2009.

Types of Pirates

Piracy typically occurs where large numbers of merchant vessels enter into regions with substantial populations living barely at the subsistence level.⁶⁹ In these parts of the world nearly anything is worth stealing. Simple thieves often target the captain's safe and the crew's personal items but paint, rope, electric cables and food are all valuable targets for this type of bandit.⁷⁰ The more sophisticated thieves target the ship's contents such as shipping containers, bulk cargo, oil or even the entire ship.⁷¹ The difference between the two categories delineates the two types of pirates: the opportunists and the organized.⁷² Both types are found in the Niger River Delta and off the coast but the differentiation is not inflexible as there may be some overlap during an attack.

Opportunist Pirates

These pirates are usually driven to piracy due to poverty and temptation.⁷³ They customarily have a job as a local dockyard worker, fishermen or even as a security guard but just as often are intermittently unemployed. Even if employed, they frequently

⁶⁹ Roger Villar, *Piracy Today* (London: Conway Maritime Press, 1985), 10.

⁷⁰ International Chamber of Commerce International Maritime Bureau, *Piracy and Armed robbery against Ships 2008*, 64-65.

⁷¹ *Ibid.*, 66-69.

⁷² Brian D. Murray, "Piracy in Southeast Asia: Cause for Concern and Intervention," 16.

⁷³ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 12.

supplement low incomes by pirating or aiding pirates. The opportunist pirate is less a way of life than a given instant in which the pirates believe they can get away with the crime when opportunity presents itself.

At the lowest levels, this first type of pirate is really nothing more than a petty thief. This type piracy is the most common⁷⁴ because it typically occurs when the ship is alongside and work gangs are aboard.⁷⁵ During the confusion of the working party, an individual may sneak onboard to rummage through crew cabins or steal from the ship's store. If the pirates work in a small group, the next level up from the individual, then during a working party one might scout the ship to identify the most valuable items for later theft. In Nigeria, ships have reported discovering burnt paper torches in holds after a working party has been aboard, evidence of reconnaissance work by pirates.⁷⁶

The opportunistic pirate will just as often conduct night attacks, by boat or by dock, attempting to gain access to the ship using the ships lines, anchor chain or some type of grappling hook or climbing pole. Ships today are minimally manned due to automation and desire of shipping companies to reduce costs.⁷⁷ The result is that a ship's security in port consists of only one or two crewmembers on watch at any given time, which makes the pirate's job that much easier.⁷⁸ Once aboard, pirates may steal whatever they can grab, but they may target specific items previously surveyed such as

⁷⁴ Interestingly from 1989 to 1993 the Office of Naval Intelligence found that 90% of all ships reporting attacks inport were successfully boarded making ships alongside the ideal and easiest target for pirates. *Ibid.*, 18.

⁷⁵ Roger Villar, *Piracy Today*, 11.

⁷⁶ *Ibid.*, 11.

⁷⁷ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 18.

⁷⁸ Rogar Villar, *Piracy Today*, 11.

the captain's safe or goods from a specific container. The opportunist, if armed, usually possesses a knife or machete but seeks to avoid confrontation and will often abandon the attack if an alarm is raised.⁷⁹ These crimes have a low economic impact typically netting \$5,000-\$15,000 per attack.⁸⁰ The sum is rather paltry compared to the value of cargo carried or even the vessel itself.

Organized Pirates

At the top end of pirate attacks, and the majority of Nigerian piracy, lies organized crime. These groups are well-organized and well-funded gangs that carry out attacks while vessels are underway both on the high seas and in territorial waters.⁸¹ They are typically armed with modern weapons, fast and reliable transport, modern communications, equipment to gain entry to a ship and most importantly a plan.⁸²

Organized pirates tend to choose their targets carefully. To maximize efficiency they utilize intelligence gathered by bribing locals who work in the shipyards in order to target specific ships and cargo.⁸³ Frequently pirate gangs operate in a body of water and, using a form of merchant vessel natural selection, target vessels that are slowed or

⁷⁹ *Ibid.*,12.

⁸⁰ Peter Chalk, *The Maritime Dimension of International Security: Terrorism, Piracy and Challenges for the United States* (Santa Monica: RAND Corporation, 2008), 5.

⁸¹ *Ibid.*, 5.

⁸² Peter Lehr, *Violence at Sea: Piracy in the Age of Global Terrorism* (New York: Routledge 2007), 98.

⁸³ Rogar Villar, *Piracy Today*,12.

stopped, constrained by draft, in confined waters, or in some other fashion more vulnerable to predation.⁸⁴

The tactics of these gangs vary but often consists of multiple small fast-speed boats approaching from astern at night. This type of approach minimizes detection by lookouts and radar watch-standers. The stern approach masks the radar return and any intermittent contacts may be disregarded as “sea clutter”.⁸⁵ Nigerian pirates have also used deception to facilitate an approach on target vessels. Pirates will use “mother boats” that appear to be fishing boats or some other type of craft common to the region to get close to their victim before launching their fast boats.⁸⁶ Once alongside the victim, the pirates will board by either climbing equipment or firing warning shots in front of, or into, the pilot house and ordering the crew to lower a ladder and/or stop the ship.⁸⁷ Like any special operations team, the pirates use purpose, speed, and surprise to gain relative superiority over a crew, then violence or the implied threat of violence to ensure continued compliance through out the attack.⁸⁸ After the ship is under control of the pirates, they can complete their objective whether it is robbery of goods, kidnapping for

⁸⁴ Peter Lehr, *Violence at Sea*, 99.

⁸⁵ *Ibid.*, 105.

⁸⁶ Sarah Simpson, “A rise in pirate attacks off Nigeria’s coast,” *The Christian Science Monitor*, 20 March 2008, 2, available from <http://www.csmonitor.com/2008/0320/p01s01-woaf.html>; Internet; accessed 12 February 2008.

⁸⁷ International Chamber of Commerce International Maritime Bureau, *Piracy and Armed robbery against Ships 2008*, 23.

⁸⁸ William H. Mcraven, *SPEC OPS, Case Studies in Special Operations Warfare: Theory and Practice* (Novato: Presidio Press, 1995), 11.

ransom, using the ship and crew as hostages for ransom, or hijacking the ship for devolution.⁸⁹

Of great concern to the IMB PRC is the significant rise in organized piracy in Nigeria specifically.⁹⁰ In a period of 60 days, from January 4 – March 4, 2009, the International Institute for Strategic Studies Armed Conflict Database reported twelve acts of piracy in the Niger River Delta or off the coast. The attacks have ranged from oil platforms, security boats and oil tankers twenty miles or more out to sea, to ferry boats and tugs within the Delta Rivers. All but two of the attacks were against obvious oil industry vessels. The remaining two attacks were against a Norwegian cable laying ship and a seaborne attack targeting Equatorial Guinea's presidential palace in Malabo which was repulsed by military forces. These attacks resulted in four deaths and 27 kidnappings.⁹¹ Evidence indicates that increasingly pirates are better armed, possess expanded maritime capabilities to conduct attacks out to sea, seize larger vessels, and are more prone to violence.⁹²

Conspicuously absent from the database are any attacks on local fishing boats and the routine small boat traffic that traverses the delta and close inshore. The true number

⁸⁹ Devolution is the extremely difficult operation of hijacking a vessel then repainting and reflagging it. It requires detailed planning with large amounts of fake paperwork and a complacent broker to fence the stolen cargo. The ship can then be further utilized for illegal cargo operations, sold or abandoned. The legitimate crews are usually killed and thrown overboard. Peter Lehr, *Violence at Sea*, 98, 113-115.

⁹⁰ International Chamber of Commerce International Maritime Bureau, *Piracy and Armed robbery against Ships 2008*, 26.

⁹¹ International Institute for Strategic Studies Armed Conflict Database, "Nigeria (Delta region): Timeline 2009," http://acd.iiss.org/armedconflict/MainPages/dsp_ConflictTimeline.asp?ConflictID=204&YearID=1166; Internet; accessed 28 March 2009, n.p.

⁹² *Ibid.*, 26.

of attacks in this period and region may never be known since many undoubtedly go unreported.

Sustaining Piracy

Why does piracy continue to thrive in Nigeria despite the international condemnation that the acts draw and involvement of multi-national companies? There is no internationally recognized list of factors which give rise to piracy. Martin N. Murphy, proposes seven major factors:

- Legal and Jurisdictional Weakness
- Favorable Geography
- Conflict and Disorder
- Under-funded Law Enforcement / Inadequate Security
- Permissive Political Environments
- Cultural Acceptability
- Promise of Reward⁹³

These seven factors are important as each skews the “risk vs. reward” equation in favor of piracy. Piracy can exist in places which do not have every one of these factors present, but the risk is increased which serves to regulate the occurrence of the crime. In

⁹³ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 13.

places such as Nigeria where all seven factors are extant to some degree or another, it serves as fertile breeding ground for piracy.

Legal and Jurisdictional Weakness

The accepted international definition of piracy is Article 101 of the 1982 UNCLOS. As was mentioned previously, there are a number of drawbacks to this piece of legislation, but the most significant is a jurisdictional loophole in which pirates are the benefiter. By declaring piracy as an act that occurs only upon the high seas, it binds the legal actions of international law enforcement. Pirates may wisely choose to operate close to territorial waters and, if necessary, they can dash back across “the line” should international law enforcement attempt to apprehend them. Once inside territorial waters the pirates are only subject to apprehension by law enforcement of the state. In Nigeria, that often means the pirates go free.⁹⁴

The 1992 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA) attempted to provide a uniform method to deal with politically motivated violence at sea which, by its definition, could also be applied to piracy.⁹⁵ The convention mandated that signatories either prosecute or extradite alleged offenders.⁹⁶ Unfortunately, it cannot be invoked unless the violence aboard is sufficient

⁹⁴ For example, in India and Japan piracy is not even considered a crime. In other parts of the world the state is failing or failed and unable to enforce laws. *Ibid.*, 13.

⁹⁵ United Nations International Maritime Office, “Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation,” http://www.imo.org/home.asp?topic_id=910; Internet; accessed 21 March 2009.

⁹⁶ *Ibid.*

to hazard maritime safety.⁹⁷ Nigeria ratified the Convention in 2004,⁹⁸ but there is little evidence of consistent enforcement.

Favorable Geography

Jack Gottschalk and Brian Flanagan, in their colorfully titled *Jolly Roger with an Uzi*, identify three requirements for piracy to be successful in an area: first, ample targets worth the risk; two, acceptable risk of likely detection; and, three, a safe haven in close proximity for support.⁹⁹ Historically and contemporarily, piracy occurs close to the coast or in narrow seas. Hot spots arise where vessels are constrained by the geography and forced by traffic condition to travel close to shore and generally slower than normal.¹⁰⁰

Nigeria is the seventh highest ranking nation for total oil exports, sending 2.3 million barrels abroad every day.¹⁰¹ The transportation requirements to move the oil guarantees that shipping, especially tankers, must come close to the Nigerian coast. The majority of that oil is produced inside the Niger Delta and pumped to stations along mouths of navigable rivers such as the Bonny Inshore Terminal in River State and

⁹⁷ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 14.

⁹⁸ Australian Maritime Safety Authority, "IMO documentation: Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation," <http://imo.amsa.gov.au/public/parties/sua88.html>; Internet; accessed 29 March 2009

⁹⁹ Jack A. Gottschalk, Brian P. Flanagan, *Jolly roger with an Uzi*, 5.

¹⁰⁰ Peter Chalk, *The Maritime Dimension of International Security*, 11.

¹⁰¹ Energy Information Agency, "Country Energy Profiles," <http://tonto.eia.doe.gov/country/index.cfm>; Internet; accessed 29 March 2009.

Forcados Terminal in Delta State or further offshore.¹⁰² Here tankers, supply ships and tugboats must sail in constrained waters, making these vessels prime targets for pirates. Even the illusion of security by moving oil terminals up to 75 nautical miles (nm) offshore has been shattered by the demonstrated capabilities of the pirates to attack further out in deep water.

More susceptible to piracy is the smaller merchant traffic that traverses the rivers to inland ports, such as Lagos (Tin Can Island), Port Harcourt, and Calabar that support the cities of the delta.¹⁰³ The currents and shifting mud flats of the tidal creeks make for extremely difficult navigation requiring slow speeds with little room to maneuver. In these conditions, vessels become easy prey for modern day pirates.

Conflict and Disorder

Piracy often arises in the coastal regions of nations suffering from internal conflict or civil disturbance.¹⁰⁴ Conflict means that state authority in the region becomes degraded. When a state is unable to project authority to all regions and dire conditions prevail, people turn to piracy as a way to get by. This situation appears to be what occurred in Somalia after rebel forces ousted Dictator Mohamed Siad Barre's regime in

¹⁰² Maritime-Database.com, "Ports in Nigeria," <http://www.maritime-database.com/port.php?pid=2948>; Internet; accessed 29 March 2009.

¹⁰³ *Ibid.*

¹⁰⁴ Donald J. Puchala, "Of Pirates and Terrorists," 5.

1991.¹⁰⁵ The lawlessness that ensues today has facilitated piracy that is so prolific that the IMB advises all vessels not calling Somalia should remain at least 200nm off the coast.¹⁰⁶ Distance gives some modicum of protection.

Nigeria too suffers from internal strife. The initial rumblings of militants began in 1966 when ethnic Ijaws announced the independence of the resource-rich, poverty-stricken Niger Delta region. The armed revolt was put down quickly but the quest for “resource control” has since been the focus of an enduring conflict between the government, the people of the delta and the militants.¹⁰⁷ Tensions between the inhabitants of the Niger Delta and the government simmered for another three decades. This period of time was characterized by predominantly non-violent demonstrations and petitions.¹⁰⁸ In the 1990’s however, the long standing political grievances by the poor communities against the Nigerian government and multinational oil corporations were hijacked by an armed conflict pursuing financial motivations.¹⁰⁹ The ideological basis for the grass roots rebellion fed “opportunistic rebels” who used looted oil wealth from

¹⁰⁵ Global Security, “Somalia Civil War,” <http://www.globalsecurity.org/military/world/war/somalia.htm>; Internet; accessed 21 March 2009.

¹⁰⁶ International Chamber of Commerce Commercial Crime Service, “IBM report cites spike in piracy,” http://www.icc-ccs.org/index.php?option=com_content&view=article&id=136:imb-report-cites-spike-in-piracy&catid=60:news&Itemid=51; Internet; accessed 21 March 2009.

¹⁰⁷ “Resource Control” is the term applied to the militant’s goal of expanding their share of oil revenues from their region. Stephanie Hanson, “MEND: The Niger Delta’s Umbrella Militant Group,” *Backgrounder* 22 March 2007 available from <http://www.cfr.org/publication/12920/>; Internet; accessed 19 March 2009.

¹⁰⁸ Anonymous, “Niger Delta Chaos,” *International Institute for Strategic Studies*, vol. 13, no. 6 (August, 2007): 2 [journal on-line]; available from <http://www.iiss.org/index.asp?pgid=21537&mtype=print>; Internet: accessed 18 March 2009.

¹⁰⁹ Augustine Ikelegbe, “The economy of conflict in the oil rich Niger Delta region of Nigeria,” *Nordic Journal of African Studies*, vol. 14, no. 2 (2005): 230; <http://www.njas.helsinki.fi/>; Internet; accessed 28 March 2009.

the state to buy weapons and attract recruits to counter the government's authority in the delta.¹¹⁰

The militant groups are motley bands mostly composed of unemployed young men usually organized around the village or clan level. The exact number of militant groups in the southern states of Nigeria is almost impossible to identify. An estimated 97 groups existed in Rivers state in 2004 but the validity of the number is suspect as quite often groups arise and fall quickly or are absorbed into other groups, have duplicate memberships or share claimed territory.¹¹¹ This group volatility tends to a confusing arrangement of group affiliations with little defined structure, other than they want to benefit economically and financially.

In recent times, MEND has been the largest and most dominant militant faction fighting, they claim, for the address of environmental degradation, oil profiteering and state neglect.¹¹² Since January 2006 the group has been leading an episodic campaign against the Nigerian government. Throughout the conflict, MEND has declared as a matter of policy that all government facilities and the personnel, infrastructure, aircraft and vessels of foreign oil companies are subject to attack. The decentralized nature of the militants favors pirates who use the cloak of insurgency in Nigeria to cover their predations.

¹¹⁰ Jeremy M. Weinstein, "Resources and the Information Problem in Rebel Recruitment," *The Journal of Conflict Resolution*, vol. 49, no. 4 (August, 2005): 600; <http://www.jstor.org/stable/30045132>; Internet; accessed 28 March 2009.

¹¹¹ Anonymous, "Niger Delta Chaos," 2.

¹¹² Anonymous, "Nigerian rebels end ceasefire in oil-rich delta," *Edmonton Journal*, 31 January 2009, 1.

Under-funded Law Enforcement / Inadequate Security

Navies, coast guards and police with the ability to conduct maritime law enforcement are expensive. They require radar equipped vessels with communications gear and crewed by reliable men with the skills to be good mariners.¹¹³ To be effective, the anti-piracy vessels require shore-based command and control and maritime aerial surveillance capability.¹¹⁴ In addition the ocean is vast and to provide a sustained presence takes a credible numbers of vessels. Quite often, poor nations cannot afford the specialized equipment and personnel in the numbers required to combat piracy effectively.¹¹⁵

Nigeria is a prime example of underfunded and inadequate security for its resource wealth in the Niger Delta region. Operationally, the readiness of the Nigerian navy is low,¹¹⁶ the nation lacks an effective coast guard and the immense number of riverine transportation routes is inadequately policed.¹¹⁷ The Center for Strategic and International Studies stated in a 2005 report that according to U.S. naval experts, "... the

¹¹³ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 15

¹¹⁴ *Ibid.*, 15.

¹¹⁵ Peter Chalk, *The Maritime Dimension of International Security*, 12.

¹¹⁶ News Blaze, "U.S. Partners with Nigeria on Security for Oil-Rich Delta Region," <http://newsblaze.com/story/20070315155702sop.nb/topstory.html>; Internet; accessed 28 March 2009.

¹¹⁷ David L. Goldwyn and J. Stephen Morrison, *A Strategic U.S. Approach to Governance and Security in the Gulf of Guinea*, A Report by the Center for Strategic and International Studies (CSIS) Task Force on Gulf of Guinea Security (Washington D.C: CSIS, 2005), 23; available from http://www.csis.org/media/csis/pubs/0507_gulfofguinea.pdf; Internet; accessed 28 March 2009.

Nigerian navy lacked the surveillance equipment and training to detect oil theft, intercept offenders, track vessels, and maintain security in their ports.”¹¹⁸

Nigerian attempts at improvement have meet with little success. In 2007 the Nigerian navy purchased seventeen patrol vessels to enhance security in the delta. Theresa Whalen, the U.S. Deputy Assistant Secretary of Defense, observed that the problem, “...is that the navy is not appropriately trained to use those boats and so for the most part ... they sit idle down in the delta.”¹¹⁹ Experts agree that to build a capable force to deter piracy, Nigeria would need to start from scratch and costs would likely reach \$100 million dollars. If properly funded however, Nigeria could reduce oil revenue losses by an estimated \$1 billion a year.¹²⁰

Permissive Political Environments

A permissive political environment stems from corruption of state officials.¹²¹ As mentioned earlier, the historical literature contains numerous examples of state authorities condoning and prospering from piracy. Pirates require a safe haven to dispose of goods, rest and conduct repairs. When agents at the highest levels of government

¹¹⁸ *Ibid.*, 23.

¹¹⁹ News Blaze, “U.S. Partners with Nigeria on Security for Oil-Rich Delta Region.”

¹²⁰ David L. Goldwyn and J. Stephen Morrison, *A Strategic U.S. Approach to Governance and Security in the Gulf of Guinea*, 23.

¹²¹ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 16.

responsible for law enforcement are underpaid they may enter into business with criminals or casually look the other way.¹²²

Corruption in Nigeria is endemic from top to bottom. At the highest levels of government, corruption stems from the fact that oil accounts for about 80%¹²³ of Nigeria's budgetary revenue. Little taxes are collected therefore the government has little accountability to the people.¹²⁴ The anti-corruption commission of the World Bank estimated that between Nigerian independence in 1960 and 1999, over \$380 billion dollars of oil revenue was misspent or siphoned into the private accounts of the political elite.¹²⁵ Such blatant graft by senior officials cascades down to the lowest levels of public office. Billions of oil revenue dollars earmarked for infrastructure development has disappeared from the Niger Delta states governors' offices.¹²⁶ Without money for development, the impoverished people of the Niger Delta feel exploited and marginalized by the state and turn to piracy to provide for themselves.

At lower levels are the corrupt police officers, military members, local politicians and port officials who have a direct role in piracy. Police officers take bribes rather than enforcing the laws, security guards and military members hired to protect vessels and oil terminals disappear just as a pirate attack starts or fail to respond in a meaningful manner, port officials accept stolen goods for a part of the profits, and politicians ensure that the

¹²² Peter Chalk, *The Maritime Dimension of International Security*, 13.

¹²³ Central Intelligence Agency, "World Fact Book: Nigeria."

¹²⁴ Ester Pan, "The Pernicious Effects of Oil," *Backgrounder*, 10 October 2005, available from http://www.cfr.org/publication/8996/pernicious_effects_of_oil.html; Internet; accessed 28 March 2009.

¹²⁵ Robert Guest, "Oil and Democracy Don't Mix Well," *The Wall Street Journal*, 01 May 2007, available from http://setup1.wsj.com/article/SB117798915190087809.html?mod=todays_us_opinion; Internet; accessed 29 March 2009, n.p.

¹²⁶ Sebastian Junger, "Blood Oil," *Vanity Fair*, n.p.

right people are bribed to “look the other way.” Evidence of graft is of course difficult to obtain and quantify, but it is commonly accepted by experts that organized pirates, such as those that operate in and around the Niger Delta, enjoy the protection of corrupt public employees.¹²⁷

Of course, another factor that promotes the politically permissive environment is that money obtained by piracy remains in Nigeria. Though it is money off the books, it still pumps currency into the Nigerian economy. So, the government has little incentive to stop the activity. Otherwise, they would have to address the economic and political conditions of people in the delta.

Cultural Acceptability

Those parts of the world where social attitudes and institutions condone piracy, or at least are tolerant, tend to have a greater propensity for the crime. Places such as the Strait of Malacca have had at times entire bandit kingdoms built upon a heritage of piracy against wealthy foreign trade that plied the waters.¹²⁸ Some sea faring communities in the Sulu Sea of the Philippines have as much social as economic pressure encouraging piracy because the act is considered a demonstration of male prowess.¹²⁹ These traditions in turn have been passed down from generation to generation.

¹²⁷ Martin N. Murphy, *Contemporary Piracy and Maritime Terrorism*, 41.

¹²⁸ Peter Gwin, “Dangerous Straits,” *National Geographic*, 1.

¹²⁹ Stefan Eklof, *Pirates in Paradise*, (Copenhagen: Nias Press, 2006), 57.

In the late 1800's, ethnic Ijaws in the western Niger Delta were known as pirates. The Ijaws had turned to piracy out of jealousy of Itsekiri prosperity from trade arrangements made with the British and Urhobo clan. Though Nigeria does not have a true culture of piracy, the crime enjoys social tolerance today amongst the riverine communities of the Niger Delta. Some traditional fishing communities impacted economically by oil pollution and declining fish stocks have turned to piracy to provide a way of living.¹³⁰ Other communities serve as fences for stolen goods or ports for pirates to rest and refit. Piracy in Nigeria today has gained acceptance of the marginalized delta populace by pushing capital into the regional economy.

Promise of Reward

Piracy can be a very lucrative business, especially in the economically depressed delta region of Nigeria. A single night's piracy might gross \$5,000, an average haul on the low side, and even when split between ten pirates it would earn each a sum equal to the annual wage of the average Nigerian worker.¹³¹

Ships pirated are often looted of anything that is valuable that can be easily carried off. Generally the crew is robbed of all valuables and electronics but the crew has value as well. A primary tactic of MEND, and other small pirate groups associated with

¹³⁰ Stephanie Hanson, "MEND: The Niger Delta's Umbrella Militant Group," *Backgrounder* 22 March 2007 available from <http://www.cfr.org/publication/12920/>; Internet; accessed 19 March 2009.

¹³¹ The average Nigerian earns approximately \$550 a year according to "Table 2: Minimum Wage Levels in African Countries (\$USD)" from the website of the Nigeria Labor Congress, "Demand for the Review of the National Minimum Wage and General Wage Review," <http://www.nlcng.org/minimum%20wage.pdf>; Internet; accessed 21 March 2009, 3.

the militants, is kidnapping of oil crews working from vessels in the delta or offshore.¹³² Though MEND denies it, the crew members are taken hostage and held until a ransom is paid.¹³³

If the pirates are organized, they can also steal the entire cargo and sell it. Mrs. Margaret Onyema – Orakwusi, the Nigerian Trawlers Owners Association’s (NTOA) Vice President, during an interview in 2008 reported that pirates would often seize fishing trawlers and take them into the creeks [of the Niger delta] “...where they spend days offloading the catch, for which they can get a ready market.”¹³⁴ Sometimes the ships vanish with their cargo, as in 2004 when two tankers carrying 30,000 barrels of oil disappeared while under the control of the Nigerian navy.¹³⁵ One ship was later found close to Port Harcourt. The ship had been completely repainted,¹³⁶ presumably to continue the smuggling of stolen oil, another method of revenue known as “oil bunkering.”

“Oil bunkering” is the process of drilling a hole into one of the thousands of miles of oil pipes crisscrossing the delta, attaching a spigot and siphoning the contents to sell. Money earned from this crime supports militants, criminals and pirates alike. More enterprising pirates have begun filling barges and tankers which then rendezvous offshore with a larger tanker to sell the illegal oil. Bunkering in recent years has become so

¹³² Stephanie Hanson, “MEND: The Niger Delta’s Umbrella Militant Group.”

¹³³ *Ibid.*

¹³⁴ Mary Ogar, “Pirates lord it over trawler owners,” *The Intellectual*, 25 March 2008 available from <http://www.theintellectualng.com/en/news/pirates.html>; Internet; accessed 25 March 2009.

¹³⁵ Milan Vesely, “The vanishing oil tankers: When it comes to scams, believe the unbelievable,” *African Business* November 2004 available from <http://www.allbusiness.com/africa/941240-1.html>; Internet; accessed 28 March 2009 2.

¹³⁶ *Ibid.*

profitable that between 100,000 and 300,000 barrels of oil are stolen every day.¹³⁷ In 2007, authorities captured 43 tankers and 11 barges engaged in oil bunkering, a number assuredly trivial in relation to the true scope of the problem.¹³⁸ In turn, as the profit from illegal bunkering grows so does the demand for vessels to carry the stolen goods which results in increased hijackings of tankers. The cycle becomes self-perpetuating.

ANALYSIS

Piracy is historically violence at sea for financial gain. The historical record shows several common factors associated with pirate attacks which transcend time. By comparing the paradigm to modern legal interpretations of piracy, a more comprehensive definition which encompassed the total scope of piratical acts was generated. In addition, the historical cycle of piracy demonstrated that pirates were typically only suppressed when a hegemonic state intervened militarily and destroyed them.

Modern piracy has not significantly changed from days of yore. Armed men still roam the seas, motivated by greed, hunting for the weak and defenseless. Only the tactics and sophistication in weaponry, navigation aids and communication are different.

¹³⁷ Integrated Regional Information Networks, "Nigeria: Under development continues to fuel oil theft," <http://www.irinnews.org/Report.aspx?ReportId=81507>; Internet; accessed 15 March 2009.

¹³⁸ Shell in Nigeria, "The Operating Environment," http://www.shell.com/static/nigeria/downloads/pdfs/brief_notes/shell_nigeria_operating_environment.pdf; Internet; accessed 08 March 2009.

In Nigeria, poor men of the Niger Delta under cover of political militancy take advantage of the constraining geography, internal conflict, ineffective law enforcement, corruption, and social acceptability of crime to reap the rewards of piracy. Piracy in Nigeria has been growing, in frequency, violence and complexity of targets, since 2006 without any sign of abating on its own accord.

The Nigerian government itself is not willing to face up to the problem. If piracy in Nigeria is to be truly eradicated it will require outside action by a hegemonic or stronger power. Without such an intervention Nigeria will remain unable to end the piracy in the Niger Delta. The United States has a vested economic interest in ensuring the security of its energy resources and the naval power to put a stop to piracy in a determined and forceful way.

CHAPTER 2 - OIL AND NIGERIAN PIRACY

In early November 2007, the organization Securing America's Future Energy (SAFE), whose self described aim is the reduction of U.S. dependence on oil, conducted a real-world based simulation exercise called Oil Shockwave.¹³⁹ The scenario involved a panel comprised of former political and national security officials who were asked to provide an analysis of events following a fuel price increase of 75%. Part of the scenario revolved around Nigeria losing 500,000 barrels of oil per day because of violence towards the oil industry in the Niger Delta. The report predicted that the resulting rise in oil prices would trigger massive unemployment, inflation and recession. Former U.S. Secretary of the Treasury, Robert Rubin, stated the exercise vividly made apparent that, "...improving energy security must be considered a serious national priority both for our economy and for our national security."¹⁴⁰

Since early 2008 the U.S. economy, as well as the global economy, has been in recession. The recession was exacerbated by the doubling of oil prices from about \$70 per barrel in August 2007 to the record high of approximately \$145 in July 2008, which was caused in part by attacks on multi-national oil industries in the Niger Delta by Nigerian pirates. The sharp spike in crude oil prices sent energy costs soaring, which in

¹³⁹ Securing America's Future Energy, "Oil Shockwave 2007: Report," <http://www.secureenergy.org/site/page.php?node=353&id=24>; Internet; accessed 28 March 2009.

¹⁴⁰ Securing America's Future Energy, "Oil Shockwave 2007," [http://www.secureenergy.org/files/files/747_SAF_862%20OS%20report_final%20\(2\).pdf](http://www.secureenergy.org/files/files/747_SAF_862%20OS%20report_final%20(2).pdf); Internet; accessed 28 March 2009.

turn raised costs for other goods and services, including food.¹⁴¹ The rise in prices damaged an already faltering United States (U.S.) economy which was reeling from a credit crisis brought about by the collapse of the sub-prime mortgage industry. Combined, these two factors pushed the world into a global recession which may, as some argue, deepen into a depression.¹⁴² Recovery of the U.S. economy may take years and, though exact costs are difficult to predict, upwards of \$9.7 trillion dollars.¹⁴³

The 2009 economic picture is fragile. The U.S. possesses a petroleum based economy mired in recession with a predicted 4% drop in GDP¹⁴⁴ and 8.5% unemployment for the year.¹⁴⁵ The top consumer of world oil¹⁴⁶ and unable to produce enough crude oil to satisfy its own demand, the U.S. is forced to import nearly 65% of its oil from foreign sources.¹⁴⁷ There is much concern over the global oil production system's future ability to absorb disruption at the same time demand for oil is predicted to increase. The psychological impact of perceived inadequate supplies and concerns

¹⁴¹ Microsoft / National Broadcasting Company, "Oil price spike has wide economic impact," <http://www.msnbc.msn.com/id/24778287>; Internet; accessed 15 March 2009.

¹⁴² A recession is declared if there are two straight quarters of economic contraction or the National Bureau of Economic Research makes the call. Seattlepi.com, "Are we in a depression?" http://seattlepi.nwsource.com/business/402041_depression03.html?source=rss; Internet; accessed 15 March 2009.

¹⁴³ Peter Grier, "Fighting recession has become a new kind of warfare." *The Christian Science Monitor*, 13 February 2009, available from <http://www.csmonitor.com/2009/0213/p01s01-usgn.html>; Internet; accessed 15 March 2009, 1.

¹⁴⁴ Organization for Economic Cooperation and Development, "OECD Economic Outlook: Interim Report, Chapter 2," <http://www.oecd.org/dataoecd/52/29/42466854.pdf>; Internet; accessed 06 April 2009, 68.

¹⁴⁵ United States Department of Labor; Bureau of Labor Statistics, "Economic News Release: The Employment Situation March 2009," available from <http://www.bls.gov/news.release/empsit.nr0.htm>; Internet; accessed 06 April 2009.

¹⁴⁶ Energy Information Administration, "Petroleum Basic Statistics," available from <http://www.eia.doe.gov/basics/quickoil.html>; Internet; accessed 14 March 2009.

¹⁴⁷ *Ibid.*

over vulnerability of the oil transport systems to disruptions plays heavily on the financial market. Recovery for the ailing U.S. economy is predicted to begin in early 2010, but the Organization for Economic Cooperation and Development (OECD) warns that the rate will be slowed predominantly by the reduction in wealth available for merchandise consumption with a corresponding slump in industrial production and employment.¹⁴⁸ Though the current price of a barrel of light sweet crude oil has fallen from its \$145 high to \$46.25 today¹⁴⁹, it is recognized that further increases in oil prices would have additional depressive effects on a fragile U.S. and global economy. Thus the threat of Nigerian pirates denying or disrupting U.S. access to oil is an issue of national security and promotes a policy for intervention.

THE GLOBAL OIL PRODUCTION SYSTEM

Oil is a fungible commodity. The result, fluctuations in the supply or demand anywhere affect prices globally. Prices tend to be stable when significant spare capacity exists, which tempers the impact from fluctuations. The term “spare capacity” refers to the ability of oil producing nations to increase their production in order to meet the world’s demand for oil in the event of supply disruption. These events may be accidents, unplanned maintenance of oil facilities, labor strikes, political unrest, natural disaster, or war. Spare capacity is a finite amount at any one time, and continual investment is

¹⁴⁸ Organization for Economic Co-operation and Development, “OECD Economic Outlook: Interim Report, Chapter 2,” 67.

¹⁴⁹ Price as of 15 March 2009 per 321Energy, “Market Data,” <http://www.321energy.com/>; Internet; accessed 15 March 2009.

required by oil producing nations to increase production capacity. Projects to increase oil production to meet future demand must be anticipated and planned for, as they are costly and take years to bring on line. This is particularly important during periods of economic growth when demand rises and global spare capacity decreases.

As of March 2009, spare capacity of the global oil production system was effectively 5.2 million bpd.¹⁵⁰ This excess of spare capacity was the result of the current economic crisis and the decreased demand for oil. Though excess spare capacity tends to lower prices spurring economic growth, what have analysts from the International Energy Agency (IEA) concerned are the consequences of the credit crisis. Low demand and tightening credit for oil companies has led to the recent cancellation of plans to develop new oil fields and the expansion of existing fields.¹⁵¹ Organization of the Petroleum Exporting Countries' (OPEC) analysts have revealed that energy infrastructure investment is down 12% worldwide which will reduce capacity in 2009 by 1.1 million barrels.¹⁵² Thus, prevailing economic conditions are setting the stage for a dramatic decrease in spare capacity as the global economy begins to recover from recession. Little spare capacity decreases the ability of the oil industry to absorb disruptions and subsequently can cause a spike in oil prices.

¹⁵⁰ International Energy Agency, "Oil Market Report: 13 March 09," <http://omrpublic.iea.org/currentissues/high.pdf>; Internet; accessed 03 April 2009, 16.

¹⁵¹ *Ibid.*, 18.

¹⁵² The Malaysian Insider, "Investment drought spells fresh energy crisis," <http://www.themalaysianinsider.com/index.php/business/20689-investment-drought-spells-fresh-energy-crisis>; Internet; accessed 13 April 2009.

PEAK OIL

There is little debate that the quantity of oil accessible under the earth is finite. Therefore, inevitably one day oil production around the world will peak and then begin the inexorable ebb toward zero. The theory of oil being an exhaustible energy source was first presented by American geophysicist M. King Hubbert in his 1949 paper *Energy from Fossil Fuels*.¹⁵³ Although the period in which he predicted global oil production would peak was wrong, his theory is still viewed by many as sound. Just when that ebb will occur is the fuel of speculation, as demand for oil is still strong despite the price spike of 2008.

In a report delivered to the U.S. Congress, 22 studies from major oil companies, the automobile industry, national and international agencies, and various scientific journals were able to provide a time period in which the world would reach peak oil. Estimates ranged from “already occurred” to “well into the next century.”¹⁵⁴ The majority of studies presented projections that had peak oil occurring between 2007 and 2040.¹⁵⁵ Ten of the 22 studies identified scenarios in which peak oil occurred as early as

¹⁵³ M. King Hubbert, “Energy from Fossil Fuels,” *Science*, vol. 109, no. 2823 (04 February 1949): 106; <http://www.hubbertpeak.com/Hubbert/science1949/>; Internet; accessed 10 April 2009.

¹⁵⁴ To see the statistical representation of the reports findings see Figure 5: Key Estimates of the Timing of Peak Oil from the United States. Government Accountability Office. *Crude Oil: Uncertainty about the Future Oil Supply Makes it Important to Develop a Strategy for Addressing a Peak and Decline in Oil Production*. Report to Congressional Requestors. (Washington D.C.: Government Accountability Office, 2008), 13, available from <http://www.hubbertpeak.com/US/GAO/GAOPeakOilReport20070329.pdf>; Internet; accessed 04 April 2009.

¹⁵⁵ *Ibid.*, 13.

2013.¹⁵⁶ The large variance was caused by a number of factors which complicated calculating a scientifically valid prediction.

Firstly, no one is sure how much oil is available. Russia, OPEC and others consider the amount of oil available for exploitation as state or corporate secrets.¹⁵⁷ In addition, it is claimed by some analysts that OPEC arbitrarily inflated proven oil reserves in the 1980s by hundreds of billions of barrels in political schemes to boost production.¹⁵⁸ The lack of transparency by oil producers makes it difficult to determine the total amount of oil reserves as a base for any calculations.

Secondly, there are technological, economical and environmental challenges to production of oil reserves which make it difficult to predict how much oil can actually be retrieved.¹⁵⁹ Technology has improved oil recovery from proven fields, but at increased costs in equipment, production and transportation. These methods of Enhanced Oil Recovery (EOR) also increase greenhouse gas emissions, which bring environmental concerns. Technology has also made difficult to reach oil fields, such as those in the

¹⁵⁶ Ibid., 13. Based on the prediction by ref (j) in Figure 5 identified in Annex II as the French Ministry of Economics and Finance report on *The Oil Industry 2004*. References (a)-(i) in Figure 5 all hold peak oil dates before reference (j). In the report, 2013 was identified as the date for peak oil as reported by BBC available from <http://news.bbc.co.uk/2/hi/business/4077802.stm>; Internet, accessed 11 April 2009.

¹⁵⁷ Matthew R. Simmons, presentation at the EIA 2008 Energy Conference, “The Peak Oil Debate: As the EIA Turn 30,” available from http://www.eia.doe.gov/conf_pdfs/Monday/Simmons.pdf; Internet; accessed 10 April 2009.

¹⁵⁸ George Jahn, “When will the oil runout? Experts can’t agree,” *Peak Oil News*, 02 October 2005 available from <http://peakoil.blogspot.com/2005/10/when-will-oil-run-out-experts-cant.html>; Internet; accessed 10 April 2009

¹⁵⁹ United States. Government Accountability Office. *Crude Oil: Uncertainty about the Future Oil Supply Makes it Important to Develop a Strategy for Addressing a Peak and Decline in Oil Production*. Report to Congressional Requestors (Washington D.C.: Government Accountability Office, 2008), 18, available from <http://www.hubbartpeak.com/US/GAO/GAOPeakOilReport20070329.pdf>; Internet; accessed 04 April 2009.

environmentally sensitive deepwater ecosystems, accessible for exploitation, but at costs 3 to 4.5 times greater than other oil rigs.¹⁶⁰ Furthermore, the energy intensive production and processing of non-conventional oils such as oil sands, oil shale, heavy oil and extra-heavy oil may delay peak oil, providing demand maintains oil prices at a level high enough to make production profitable.

The third factor affecting the timing of peak oil is the risk associated with production of fields in less politically stable parts of the world. Key producing nations such as Nigeria, Iraq, Iran, Venezuela, Saudi Arabia, and Russia are all susceptible to increased risk of civil wars, coups, labor strikes, and civil unrest.¹⁶¹ Political instability deters investment in exploration and limits production, which can create an artificial production peak despite proven reserves.

The last uncertainty in peak oil calculations is the rate at which oil will be depleted. Today the world's daily consumption of oil hovers around 84 million bpd and is estimated to increase to 105 million bpd by 2030.¹⁶² The majority of the growth is fueled by developing nations such as China, India and Brazil. Interestingly, the Energy Information Agency's (EIA) predictions for U.S. consumption during the same period holds a zero percent increase in consumption, based on the deterrent effects of rebounding oil prices, more stringent fuel economy standards and requirements for increased use of renewable fuels.¹⁶³ Environmental concerns, especially emissions of

¹⁶⁰ *Ibid.*, 19.

¹⁶¹ Securing America's Future Energy, "Oil Shockwave 2007," 7.

¹⁶² Energy Information Agency, "Annual Energy Outlook 2009: Reference Case Tables, Table A21," available at http://www.eia.doe.gov/oiaf/aeo/excel/aeotab_21.xls; Internet; accessed 08 April 2009.

¹⁶³ *Ibid.*, 2.

greenhouse gases, may lead other nations to adopt policies which promote alternate fuels or conservation. Although the amount of future oil demand is uncertain, global demand remains high and will surely increase.

The conclusion of the congressional report echoes the sentiments of the scientific community that no one is able to identify exactly when peak oil will occur. Clearly the most serious scenario is if peak oil has already occurred, or will occur soon, and production drops off quickly. Industrialized nations, especially the U.S., would be forced to drastically reduce oil consumption. Without an adequate source of alternate energy, competition for remaining oil energy would drive prices to record levels. For a world already experiencing a recession, the economic fallout from such an event would be severe. Ideally the international community would have a long lead time to develop alternate fuels, but clearly the studies do not offer any guarantees.

Herein lays the major danger of peak oil - the uncertainty in timing. Global consensus indicates the belief that peak oil will occur. It is because expert analysts cannot agree on the "when" that consumer confidence is eroded and the market becomes driven by the next closest prediction of peak oil. With some predictions calling for peak oil before or in 2013, the psychological effect on the global market that the "big drop off" is just around the corner could induce panic buying and precipitate the type of frenzied bidding on oil as if peak oil had actually occurred. As in the Shockwave scenario, Nigerian pirate attacks aimed at the oil industry could be just such a trigger for escalating oil prices.

TRANSPORTATION CONCERNS

Moving oil from point of extraction to refinement and ultimately to the end user is a long and complicated logistics train. International oil companies have viewed the transportation system of petroleum with growing concern since October 6, 2002, when the VLCC *Limburg* was attacked by terrorist suicide boats.¹⁶⁴ This attack exposed the weak link in the movement of oil from wellhead to gas nozzle; long distances of travel create windows of vulnerability and facilitates disruption of the oil transport system. Each day millions of barrels of oil move along well defined routes thousands of miles long, carried in massive tankers and pipelines.¹⁶⁵ To make security matters worse, the majority of the global oil transport system must travel through parts of the world with significant political instability. Nigeria is the perfect microcosm of the threat to the global transportation of oil.

Today's tankers are massive vessels capable of carrying multiple millions of barrels of oil. In 2007 tankers moved 43 million bpd, half of the world's daily production, along well established sea routes.¹⁶⁶ The sheer sizes of modern tankers make them slow and maneuver poorly. In constrained waters of choke points or operating close to coastal areas tankers become easy targets for pirates. In Nigeria this is a

¹⁶⁴ Global Security.org, "Homeland Security: Limburg oil tanker attacked," http://www.globalsecurity.org/security/profiles/limburg_oil_tanker_attacked.htm; Internet; accessed 11 April 2009.

¹⁶⁵ Institute for the Analysis of Global Security, "Threats to Oil Transport."

¹⁶⁶ Energy Information Agency, "World Oil Transits Chokepoints," http://www.eia.doe.gov/cabs/World_Oil_Transit_Chokepoints/Background.html; Internet; accessed 11 April 2009.

particular concern as all of its oil exports are shipped, and most of the six oil terminals are in the confined waters of river mouths (see Figure 3).

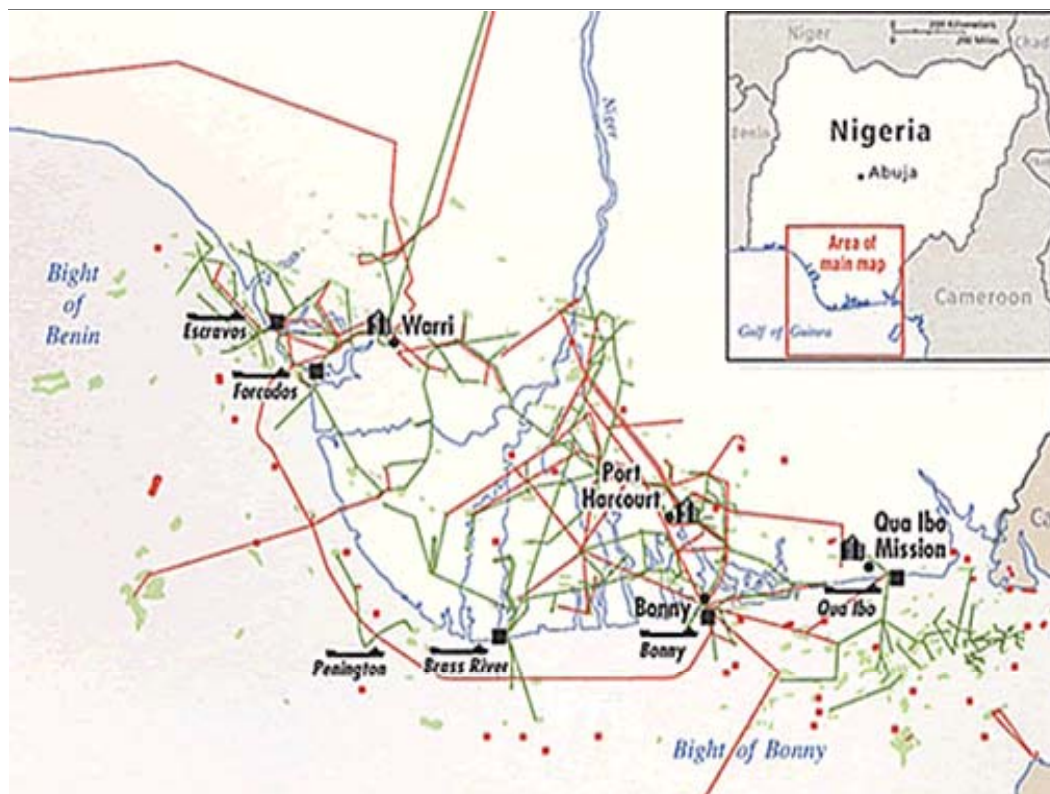


Figure 3 – Niger Delta Oil Infrastructure¹⁶⁷

The second method of oil transportation is via pipelines. Pipelines move roughly 40% of the world oil flow, and stretch vast distances through regions torn by political instability, civil unrest and war. In 2007, Nigeria possessed 2,695 miles of oil pipelines throughout the Niger Delta.¹⁶⁸ It is virtually impossible to provide continuous security over such distances, leaving the lines susceptible to sabotage and theft of cargo. As

¹⁶⁷ Based on CIA map presented by the Energy Information Agency, “Nigeria Energy Data,” <http://www.eia.doe.gov/cabs/Nigeria/Background.html>; Internet; accessed 11 April 2009.

¹⁶⁸ Central Intelligence Agency, “The World Fact Book: Field Listings – Pipelines,” <http://start.csail.mit.edu/mirror/cia.gov/library/publications/the-world-factbook/fields/2117.html>; Internet; accessed 11 April 2009.

mentioned previously, “oil bunkering” is a significant part of organized piracy in Nigeria and often pipelines are purposely damaged in order to force their shutdown, making installation of illegal taps easier.

Though concerns over security for the transportation of oil originated from terrorist threats, it is the pirate that has arguably most damaged the oil trade. Piracy in Nigeria today is a clear and present danger. At the end of 2008 disruptions to pipelines and attacks on oil vessels had shut-in an estimated 1.2 million barrels per day of production, with new attacks occurring daily.¹⁶⁹ On February 10, 2009, Royal Dutch Shell declared *force majeure*, which provides legal protection from not meeting contractual obligations, following an increase in pirate attacks. The attacks damaged the Bonny Oil Terminal and caused a drop in production of 200,000 bpd.¹⁷⁰ One month later on March 3, 2009, Shell again declared *force majeure* for the Forcados Terminal, when output was reduced following damage allegedly caused by oil bunkering. This resulted in a further 280,000 bpd unavailable for market.¹⁷¹ During this one month period the price of oil rose from \$35.94 to \$45.71,¹⁷² a 27% increase, partly attributed to disruptions in

¹⁶⁹ Alexander’s Gas & Oil Connections, “Around 1.2 mm/bpd of crude producton is shut-in,” <http://www.gasandoil.com/goc/company/cna90459.htm>; Internet; accessed 11 April 2009.

¹⁷⁰ *Force majeure* provides legal protection for Shell from not meeting contract obligations. Dow Jones Deutschland, “Shell: Force Majeure On Nigeria Bonny Since Feb 10,” <http://www.dowjones.de/site/2009/02/shellforce-majeure-on-nigeria-bonny-since-feb-10.html>; Internet; accessed 29 March 2009.

¹⁷¹ AllAfrica.com, “Nigeria: Shell Declares Force Majeure on Forcados Shipments,” <http://allafrica.com/stories/200903100491.html>; Internet; accessed 04 April 2009.

¹⁷² Seeking Alpha, “Oil Price Moves (February 11-March 27),” <http://seekingalpha.com/article/128328-oil-price-moves-february-11-march-27>; Internet; accessed 04 April 2009.

Nigeria.¹⁷³ Today the U.S. and world economy are in recovery from recession. A \$10 increase in oil prices can have serious consequences upon an already fragile economy.

ECONOMIC EFFECTS OF HIGH OIL PRICES

The era of easy oil is over. The U.S. and global economy are beginning to recover from the recession of 2008-2009 and demand for energy will be in full swing by 2011. According to predictions from the EIA, as demand for oil rises, spare capacity will drop sending oil back to almost \$90 dollars a barrel.¹⁷⁴ It will never be cheaper again, as the global oil production system will be stressed to meet demand and ill disposed to address any interruption in supply. With consumer fears of peak oil looming, it is conceivable that pirate attacks against the vulnerable oil tankers and pipelines in the Niger Delta could shock oil prices to \$135 or even higher.

How would rapidly rising oil prices affect the U.S. and global economies? Dr. Robert F. Wescott and Robbie Diamond of the organization SAFE identify four main channels through which high oil prices can affect an economy: demand effects, supply effects, policy effects, and effects on confidence and financial market psychology.¹⁷⁵

¹⁷³ International Energy Agency, "Oil Market Report: 13 March 09," <http://omrpublic.iea.org/currentissues/high.pdf>; Internet; accessed 03 April 2009, 34.

¹⁷⁴ Energy Information Agency, "Forecastes & Analysts: Annual Energy Outlook Oil (Petroleum) Prices," http://www.eia.doe.gov/oiaf/aeo/excel/aeotab_12.xls; Internet; accessed 12 April 2009.

¹⁷⁵ Robert F. Wescott and Robbie Diamond, "\$120 Oil And Beyond: An Update," *Securing America's Future Energy*, available from http://www.secureenergy.org/files/files/837_SAF_996_New%20Westcott%20Report_v08_ELEC.pdf; Internet; accessed 08 April 2009, 1.

Demand Effects

In this channel, higher oil prices directly impact consumers by raising energy costs. Without any changes in energy consumption, bills will account for a greater percentage of annual income. Demand for goods will drop as families will simply have less money to spend.

As of January 2009, the U.S. consumed 19 million barrels of per day.¹⁷⁶ Assuming prices stayed constant at \$45 a barrel for 2009, total household energy costs would be roughly \$312 billion. This is equal to 3% of the \$10.6 trillion in disposable income earned by tax payers.¹⁷⁷ If EIA predictions hold true and consumption does not increase and oil prices reached \$135 per barrel, the U.S. would spend almost \$1.0 trillion per year on oil, or 9% of disposable income. If oil prices rose to \$200 per barrel, the U.S. would spend \$1.4 trillion per year on oil, which would be equal to 13% of take-home pay. These numbers match Westcott's and Diamond's findings that for every \$10 increase in oil prices, the U.S. economy loses approximately \$35 billion dollars in household spending power.¹⁷⁸ Clearly, in the face of high energy costs, the spending power of U.S. families would be drastically cut. Spending on luxury items and non-essential goods would subsequently be curtailed.

¹⁷⁶ International Energy Agency, "Oil Market Report: 13 March 09," 6.

¹⁷⁷ U.S. Bureau of Economic Analysis, "National Income and Products Account Tables: Table 2.1. Personal Income and Its Disposition," <http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=58&Freq=Qtr&FirstYear=2006&LastYear=2008>; Internet; accessed 12 April 2009.

¹⁷⁸ Robert F. Westcott and Robbie Diamond, "\$120 Oil And Beyond: An Update," 5.

Similar effects could be expected globally. The International Monetary Fund's World Economic Outlook for 2005 estimated that for every \$5 increase in the price of a barrel of oil, world GDP growth would decrease by up to 0.3 percentage point.¹⁷⁹ Therefore, even a modest increase in oil prices of \$45 would reduce global GDP by up to 2.7%, equivalent to \$1.5 trillion dollars.¹⁸⁰ With GDP growth predicted to still be negative in 2010 and growing only very slowly in the near future,¹⁸¹ a reduction of GDP by 2.7% would push the world deeper into recession.

As the world begins to recover from recession, the sensitivity of the U.S. and global economy to oil shock is obvious. Rapid increases in oil prices would have immediate dampening effects of the spending power of the U.S., the world's largest economy. Likewise, the impact from increasing oil costs would most likely push the global economy deeper into recession.

Supply Effects

Supply disruptions develop when high oil prices reduce companies' profits. Like in families, if energy costs increase, then industry's expenditures increase and cut backs result. Some services may attempt to pass charges on to customers to stay in the black,

¹⁷⁹ International Monetary Fund, "World Economic Outlook: globalization and External Imbalances, April 2005," <http://www.imf.org/external/pubs/ft/weo/2005/01/pdf/chapter1.pdf>; Internet; accessed 12 April 2009, 9.

¹⁸⁰ International Energy Agency, "Analysis of the Impact of High Oil Prices on the Global Economy 2004," http://www.iea.org/Textbase/Papers/2004/High_Oil_Prices.pdf; Internet; accessed 20 March 2009, 3.

¹⁸¹ See Table 1.1 Growth has Collapsed. Organization for Economic Co-operation and Development, "OECD Economic Outlook: Interim Report, Chapter 1," <http://www.oecd.org/dataoecd/60/32/42438064.pdf>; Internet; accessed 12 April 2009, 9.

but fuel costs jumping by a third or more would force more drastic measures. Overall, industries would be forced to decrease production of goods, shut down non-essential and non-profitable services, and lay off workers or risk bankruptcy. The shrinking margin of profitability would curtail supply of goods and services for the market with serious secondary and tertiary effects.

The oil intensive transportation sector would be one of the hardest hit by a price shock. In the U.S., 68% of oil demand is consumed by the transportation sector. This is predicted to increase to 73% by 2025.¹⁸² The development of alternate energy sources, which gained momentum amid the high oil prices of mid-2008, crumbled as prices deflated by \$100 dollars.¹⁸³ The dependence of airlines, trucking, maritime shipping, buses, rail, and even the military on oil leaves little flexibility in shifting energy sources to curb costs. Companies would be forced to raise prices, decrease routes and frequency of services, cancel orders for new vehicles, suspend improvements to facilities, and lay off employees.

The impact on the transportation sector would cascade into the global manufacturing industry. Modern economies depend on “just-in-time” supply chains, primarily based in Asia, which rely on low transportation costs.¹⁸⁴ By keeping inventory moving, companies save money by avoiding costs associated with storing goods.

¹⁸² Armory B. Lovines, E. Kyle Datta, Odd-Even Business, Jonathan G. Koomey and Nathan J. Glasgow, *Winning the Oil Endgame* (Snowmass, CO: Rocky Mountain Institute, 2004), 36. Available from <http://www.aeromt.org/PDFs/Winning%20the%20oil%20endgame.pdf>; Internet; accessed 13 April 2009.

¹⁸³ Daveed Gartenstein-Ross, “Why energy Security Matters Despite Falling Oil Prices,” *Foundation for the Defence of Democracies* available from http://www.defenddemocracy.org/index.php?option=com_content&task=view&id=11784347&Itemid=102; Internet; accessed 13 April 2009.

¹⁸⁴ Shlok Vaidya, “The ripple effect of high oil prices,” *Energy Bulletin* available from <http://www.energybulletin.net/node/46804>; Internet; accessed 13 April 2009.

Analysts estimate that a 1% rise in the price of oil translates into a 0.4% increase in shipping costs.¹⁸⁵ If the price of oil doubles, then the cost of freight will increase by 40%. The nature of the “just-in-time” supply system makes the impact of high oil prices unavoidable, and thus industries in Taiwan, China, South Korea, and Japan would be forced to reduce production to absorb the costs.¹⁸⁶ The rippling effect of an oil shock would directly result in the production of fewer goods.

The tourism and travel industries would also suffer from the effects of higher costs. In tourist destinations around the U.S. hotels, restaurants and entertainment industries would all see drops in revenue, as families and businesses would cut back on travel. Even more serious would be the global impact on nations whose GDP is dependent on tourism. Nations such as Palau, Maldives, Bahamas, and the United Arab Emirates earn 30% or more of their GDP from tourism.¹⁸⁷ The impact would be the same as in the transportation sector: layoffs, reduced services and bankruptcy.

Another critical industry impacted would be the food industry. Petroleum costs directly affect production of raw agricultural commodities, transportation and processing, and distribution of all finished consumer food.¹⁸⁸ The overall increase in food prices caused by high energy costs may be better weathered in the U.S., where expenditures on food are around 7% of household costs. In places such as India (39.7%) or the

¹⁸⁵ Jeff Rubin and Benjamin Tal, “Occasional Report #55,” *Canadian Imperial Bank of Commerce World Markets* 19 October 2005 available from http://vi.unctad.org/trasnpfaccd/docs/occ_55.pdf; Internet; access 14 April 2009.

¹⁸⁶ *Ibid.*

¹⁸⁷ *Ibid.*

¹⁸⁸ John M. Urbanchuk, “The Relative Impact of Corn and Energy Prices in the Grocery Aisle,” http://www.biodiesel.org/resources/sustainability/pdfs/food_price_analysis_-_urbanchuk.pdf; Internet; accessed 13 April 2009.

Philippines (47.5%),¹⁸⁹ increases in costs may prevent countries from importing sufficient food supplies, causing regional shortages. If this occurred it could lead to food rationing, such as those seen in Russia and Pakistan in 2008, when oil was at \$135.¹⁹⁰ The threat of high oil costs to the food industry would be serious and could result in reduced supply and world hunger.

The supply disruptions to the economy caused by oil shock would clearly be significant. Industries across the board would face immediate higher operating costs, which would force a contraction in production, a cut in services, or a reduction in payroll through layoffs. These effects would ripple through the global economy with grave consequences.

Policy Effects

In the event of an oil shock up to \$135, rocketing oil prices would raise the costs of goods and services throughout the economy. Total inflation would increase, and concerns of a price-wage spiral would force monetary institutions to tighten credit, causing a decline in investment spending and limiting trade.¹⁹¹ Government budgets would tighten as fuel costs account for increasingly larger percentages of budgets.

¹⁸⁹ United States Department of Agriculture Economic Research Service, "Food CPI, Prices and Expenditures: Expenditures on Food by Selected Countries, 2002," <http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/table97.htm>; Internet; accessed 13 April 2009.

¹⁹⁰ Robert Sheppard, "Rice riots and empty silos: Is the world running out of food," *Canadian Broadcast Corporation* April 30, 2008 available from <http://www.cbc.ca/news/background/food/prices.html>; Internet; accessed 13 April 2009.

¹⁹¹ Robert F. Wescott and Robbie Diamond, "\$120 Oil and Beyond: An Update,"7.

Lastly, emerging markets and developing nations would not be immune from surging prices. Struggling nations may find difficulty maintaining loan repayments schedules, further adversely affecting the financial health of an already stressed global economy. Policy makers in the U.S. and throughout the world would be hard pressed to maintain economic growth and prevent slipping back into another recession.

As prices of goods increase, so would inflation. In this environment, financial institutions would be concerned over the inability to predict relative prices into the future. Money today could literally be worth more than tomorrow. Thus, credit lenders would be less likely to provide long-term financing for investment in capital formation.¹⁹² Inflation also discourages international trade by causing uncertainty in future exchange rates and prices. In a fragile global economy, trade partners may be more risk adverse and shy away from conducting trade with foreign parties at risk for inflation.¹⁹³ In total, inflation caused by oil shock would weaken economic growth by reducing the real value of savings, decreasing investment and production, and impeding trade.

Policy makers would be faced with budgetary constraints caused by fuel costs. Sir Simon Milton of the Local Government Association, a lobby organization in Westminster England, clearly articulated the dilemma confronting governments when he stated:

“Local authorities spend hundreds of millions ensuring that critical services never stop. Yet, like for all vehicle users, councils are seeing their

¹⁹² Boston University, “Inflation and its Effects on Investment,” http://econc10.bu.edu/Ec341_money/Papers/Gerolamo_paper.htm; Internet; accessed 13 April 2009.

¹⁹³ *Ibid.*

energy bills going through the roof. Councils cannot stop collecting the bins or stop providing vital services that people need...”¹⁹⁴

The choice between raising taxes or slashing payrolls and services would challenge many governments. During the high oil price costs of mid-2008, a survey conducted by the North Carolina League of Municipalities found that governments were reporting purchasing new vehicles with higher efficiency or alternative fuel, cutting services or, in fewer cases, raising fees and taxes.¹⁹⁵ These actions were taken during a relatively short period of higher prices. In the future, fuel costs in general will be sustained at higher levels already constraining budgetary decisions by policy makers. With an oil shock, vital services can only be decreased so much before taxes would have to be increased to cover fuel charges. The costs of these actions would be borne by the tax payer, which reduces spending power and stifles economic growth.

The adverse economic effects of higher energy costs on budgets of developing nations could be even greater. Oil importing countries with lower incomes would be especially sensitive to oil shock. Nations that offer substantial subsidies to mitigate the impact of fuel costs on poor families and domestic industry, such as India and Indonesia, would find the strain on their budgets substantial.¹⁹⁶ Some governments would be faced with the choice of importing fuel to maintain economic growth or fulfilling international

¹⁹⁴ Local Government Organization, “Huge rise in fuel costs means belt tightening for councils,” <http://www.lga.gov.uk/lga/core/page.do?pageId=772673>; Internet; accessed 14 April 2009.

¹⁹⁵ Matt Lail, “Rising Fuel Prices,” *North Carolina League of Municipalities* available from <http://www.nclm.org/environmental%20pages/risingfuelprices.htm>; Internet; accessed 13 April 2009.

¹⁹⁶ International Energy Agency, “Analysis of the Impact of High Oil Prices on the Global Economy 2004,” 14.

debt obligations.¹⁹⁷ Either choice hurts economic growth. Reduction in fuel and higher energy costs would decrease production of industry. Failure to make debt payments would damage the nation's credit, as well as the prosperity of the international financial lending institutions.

Higher fuel costs from an oil shock would affect governments and institutions worldwide. Inflation caused by high oil prices would reduce the value of real money, signal credit lenders to raise rates and tighten credit, and discourage international trade. Policy makers worldwide would be forced to make difficult choices. Even in the best case, in developed nations, the choices would be between providing services or raising taxes. In the worst case, in developing nations, governments may find themselves cash strapped and forced to choose between propping up domestic industries and making debt payments. The damage to the recovering global economy could propel the world back into recession.

Effects on Market Confidence

Historically, major geopolitical crises have affected consumer confidence, which has translated into real losses in the stock market. Traditionally, in the short run following major tragedies, consumer confidence drops and retail industries experience losses.¹⁹⁸ As consumer spending accounts for 60-65% of U.S. GDP,¹⁹⁹ investors become

¹⁹⁷ Robert F. Wescott and Robbie Diamond, "\$120 Oil And Beyond: An Update," 8.

¹⁹⁸ Roger M. Kubarych, "Aftermath of the Terrorist Attack: Economic, Financial and Policy Consequences," *Foreign Affairs*, 11 Spetember 2001, available from http://www.cfr.org/publication/4041/aftermath_of_the_terrorist_attack.html; Internet; accessed 14 April 2009.

risk adverse when confidence dips and participation in the stock market decreases.²⁰⁰ Oil shock would be little different, with investors increasingly alert to regional events that can impact the global economy.

Spiking oil prices caused by reduction in oil supplies would raise fears of inflation, and consumers would pull money from the stock market. Economists find that, on average, consumers will spend approximately 3-5 cents of each dollar earned from increases in stock market wealth.²⁰¹ Therefore, as wealth drops, money that would have been spent is lost. In this way large shifts in the financial market would negatively impact consumer spending and the economy.

After September 11, 2001, consumers realized that even first world nations were vulnerable to foreign attack. The Dow Jones Industrial Average lost approximately 15% of its value in ten days and erased \$3 trillion from U.S. accounts.²⁰² In SAFE's Oil Shockwave simulation, oil prices jumped by 75% (\$95 to \$165). Researcher participating in the exercise predicted the Dow Jones Industrial Average would drop by 12%.²⁰³ The negative wealth effect would further decrease consumer spending and detrimentally affect the economic health of the U.S. and world economies.

¹⁹⁹ Joseph Lazzaro, "Consumer confidence mirrors stock market decline," *Daily Finance*, 31 March 2009, available from <http://www.dailyfinance.com/2009/03/31/consumer-confidence-continues-to-mirror-stock-market-decline/>; Internet; accessed 14 April 2009.

²⁰⁰ Roger M. Kubarych, "Aftermath of the Terrorist Attack."

²⁰¹ Karen E. Dynan and Dean M. Maki, "Does Stock Market Wealth Matter for Consumption?," *Board of Governors of the Federal Reserve System* available from <http://www.federalreserve.gov/Pubs/feds/2001/200123/200123pap.pdf>; Internet; accessed 14 April 2009, 1.

²⁰² Robert F. Wescott and Robbie Diamond, "\$120 Oil And Beyond: An Update," 8.

²⁰³ Securing America's Future Energy, "Oil Shockwave 2007," 17.

ANALYSIS

World oil prices are developing into a perfect storm scenario. The recession and collapse of the housing market has tightened credit. Coupled with lower demand and falling oil prices, multi-national oil companies have little financial incentive to invest in oil infrastructure to improve production capacity. As the recession recovery gathers momentum, demand for oil will decrease the global spare capacity and prices will climb.

Further aggravating the oil market is peak oil. The widely accepted theory of peak oil highlights that oil is a finite resource. One day oil production will culminate and then begin to decrease. The date of peak oil is difficult to predict, because scientists are unsure of just how much oil is left, whether the remaining oil is technologically accessible, and whether the economic, political and environmental costs make extraction feasible. Uncertainty as to the date of peak oil raises fears of oil “running out”, and escalates oil prices as nations bid higher and higher to secure resources.

Concern over movement of oil to market plays a key role in raising prices. SAFE’s Oil Shockwave simulation utilizes piracy in Nigeria as a portion of the exercise which demonstrates the susceptibility of the transportation system to interruption. Immensely oversized and slow tankers operating in coastal waters have become choice game for pirate attacks in Nigeria. Likewise, organized pirates have targeted the pipeline system which moves the oil from wellhead to loading terminals, siphoning off hundreds of thousands of barrels of oil and routinely disrupting supply of oil for export. Pirate attacks commonly prevent the multi-national oil companies in the Niger Delta from meeting contractual obligations, the effects of which ripple through the global market,

raising prices everywhere. The nexus of peak oil, decreasing global spare capacity, increased world demand, and Nigerian piracy create the perfect storm for an oil shock.

The impact on oil prices from an oil shock would be disastrous. Rising fuel costs would cascade through the world economy. Families would find a larger proportion of their income going to bill payment and would be forced to cut spending. The general demand for goods and services would drop, as higher fuel costs hit companies. Industries from airlines to tourism would be forced to cut operating costs, reduce services offered, and layoff employees. Transportation costs would leap, threatening global trade. Rising food prices would result in shortages in parts of the world. The resulting inflation would reduce the real value of currency, deter trade and force a tightening of credit. Oil shock would also decrease investor confidence, resulting in a tumbling stock market. The negative wealth effect would further deepen the financial woes of investors. In the end, economic growth would be crippled.

Oil prices rise and fall in the supply and demand equation of market economics. Oil shock, though, is precipitated by an abrupt loss of oil from the market. The threat of Nigerian piracy shutting down oil production in the Niger Delta could be a catalyst for a massive run on oil prices, fueled by fear of peak oil and the inability of oil producing nations to absorb the disruption. Today the U.S. is already economically weakened as it recovers from recession. The harm to the U.S. and global economy would be great and likely push the world deeper into recession. Therefore the threat of oil supply disruption to the U.S. is an unacceptable risk and warrants intervention.

CHAPTER 3 INTERVENTION

The increasing predation by pirates in the Niger Delta of Nigeria and Gulf of Guinea can no longer be ignored. Since 2006 piracy has been on the rise and threatens a region which will provide a quarter of America's oil by 2015.²⁰⁴ Armed gangs of pirates have managed to cut production of oil in Nigeria, and driven security costs for the multinational oil corporations to \$3.5 billion.²⁰⁵ The threat to oil production in the region and to the global economy is growing as attacks spill over into neighboring countries. Defending the free flow of oil from the region is vital to U.S. energy and economic security. U.S. intervention is required to stabilize the situation and ensure the accessibility of the world market to an important energy source.

To be truly successful, any intervention in the region should have the cooperation of the government of Nigeria. Reports indicate that the government of Nigeria is generally supportive of U.S. ideals and policies,²⁰⁶ but in the event cooperation is not forthcoming, options would be mostly limited to military operations in international waters. Arguments could be made to the U.N. Security Council to authorize entry into territorial waters and even to allow the conduct of military strikes inside Nigeria. This precedent has been set before in the case of U.N. sanctioned anti-piracy efforts off the horn of Africa. Yet, as history has shown, a military-only solution will work, but with

²⁰⁴U.S. National Intelligence Council, "Global Trends 2015," http://www.dni.gov/nic/NIC_globaltrend2015.html#link13e; Internet; accessed 15 April 2009.

²⁰⁵ David Lewis, "Pirates, gangs fuel Gulf of Guinea woes," *Reuters* 15 April 2009 available from <http://www.alertnet.org/thenews/newsdesk/L9951481.htm>; Internet; accessed 15 April 2009.

²⁰⁶ U.S. Agency for International Development, "USAID/Nigeria Country Strategic Plan 2004-2009," available from http://pdf.dec.org/pdf_docs/pdabz265.pdf; Internet; accessed 118 April 2009.

out sustained expensive military operations it merely provides a temporary solution. Pirates lay low while the threat is immediate, or move to areas the military is not. Thus a military-only solution can be likened to a doctor treating the symptoms but not the disease.

To stamp out the root causes of piracy requires a unity of effort similar to that described in the Army's *FM 3-24 Counterinsurgency* (COIN). Only through employing all instruments of national power to eliminate or mitigate factors that support piracy can maritime security be re-established. To truly bring stability to the region all aspects of the local populace's concerns must be addressed: security from pirates and militants must be established; basic economic needs met; essential services such as electricity, sanitation, clean water and medical care provided; key cultural and social institutions sustained; and basic quality of life supported.²⁰⁷ There are strong parallels between the requirements to succeed in COIN and the factors that must be addressed which support piracy. This provides a useful roadmap to conducting anti-piracy operations.

Though arguments have been presented demonstrating U.S. capability gaps in regards to any COIN operations which may occur in the Niger Delta,²⁰⁸ it is arguably the U.S. that is the best situated for this type operation. By leveraging lessons learned from anti-piracy operations off of Somalia, securing of the oil infrastructure in Iraq, and COIN operations alongside the Afghan Army, the U.S. has a vast wealth of experience to draw

²⁰⁷ U.S. Department of the Army, *FM 3-24 Counterinsurgency* (Washington D.C.: Headquarters Department of the Army, 2006), 2-2 available from <http://www.fas.org/irp/doddir/army/fm3-24.pdf>; Internet; accessed 16 April 2009.

²⁰⁸ Brian Lionberger, "Emerging Requirements for U.S. counterinsurgency: An Examination of the Insurgency in the Niger River Delta Region," (Fort Leavenworth, Kansas: U.S. Army Command and General Staff College Course Paper, 2007), 120.

upon in stabilizing the region. Although COIN operations are outside the scope of this paper, it would be remiss not to point out that to eradicate piracy in the Niger Delta, anti-piracy operations and COIN operations would have to go hand-in hand.²⁰⁹

What would U.S. intervention against piracy in Nigeria and the Gulf of Guinea look like? Most likely it would resemble the recently announced U.S. State Department's counter-piracy strategy for Somalia.²¹⁰ First and foremost, a credible and capable multi-national U.S. led military presence. This would demonstrate resolve and a commitment to providing the appropriate resources to confront the problem. Secondly, increase diplomatic engagement with the government of Nigeria. This could include a diplomatic team and the continued funding of programs that assist Nigerian leadership to address security concerns, provide just governance and democratic values, and meet the needs of its citizens. With these steps the U.S. could establish a foundation on which to promote a long-term maritime security strategy.

MILITARY INTERVENTION

Military intervention to oppose piracy in Nigeria and the Guinea Gulf would be centered on the task of establishing maritime dominance with a credible naval force and a smaller but highly professional expeditionary force. Building on experiences gained

²⁰⁹ A strategy to conduct COIN operations in the Niger Delta is another Masters of Defence Studies paper in itself. In the case of this paper, we will discuss an anti-piracy strategy in general that addresses factors which support piracy as identified earlier.

²¹⁰ Statement by Secretary of State, Hillary Clinton. U.S. Department of State, "Announcement of Counter-Piracy Initiatives," <http://www.state.gov/secretary/rm/2009a/04/121758.htm>; Internet; accessed 15 April 2009, n.p.

from Combined Task Force 151 operations off of Somalia, the U.S. could create an anti-piracy task force in the Gulf Guinea under the leadership of Africa Command (AFRICOM). AFRICOM could expand upon Africa Partnership Station (APS), a U.S. led program that provides military-to-military and civilian-to-military maritime training to nine West and Central African countries.²¹¹ The cooperation of regional forces in a military venture to suppress piracy would be critical to establishing the legitimacy of the operation, as well as building the capacity of African partners to meet their own security needs.

The role of the U.S. military intervention would be two fold; conduct defensive and offensive operations, and execute Security Assistance programs. Successful application of these roles would improve regional maritime security in the coastal waters and delta region by: reducing conflict and disorder through increased government presence; decreasing legal and jurisdictional weakness through a multi-national coalition capable of pursuing pirates; delivering an improved Nigerian military and law enforcement capability; and, reducing the promise of reward by increasing the pirate's risk of being captured or killed.

Defensive and Offensive Operations

Through direct action, these multi-national forces would seek to establish maritime dominance over the Gulf of Guinea and the coastal waters of Nigeria. Michael

²¹¹ John J. Kruzel, "Africa Partnership Station Aims to Boost Maritime Security," *American Forces Press Service*, 15 January 2008, available from <http://www.africom.mil/getArticle.asp?art=1617>; Internet; accessed 15 April 2009.

Howlett, divisional director of the IMB, stated that the decline in pirate attacks off of Somalia were directly attributed to the activities of CTF 151 and added that "... navies are the only effective response against piracy."²¹² The Strait of Malacca has also seen a similar decrease in pirate attacks since 2003, attributed to increased vigilance and patrolling by the military of the littoral nations.²¹³ It is logical to expect similar results in the Gulf of Guinea. Increased presence of military and law enforcement vessels would immediately enhance regional security by deterring or, as necessary, defeating individual acts of piracy.

Closer to shore, the U.S. could also capitalize on the experience of units charged with securing the oil infrastructure in Iraq and/or defending U.S. ports and harbors. Since the invasion of Iraq in 2003, Coast Guard Port Security Units and Navy Mobile Security Force Detachments have defended the Mina Al Bakr and Khor Al Amaya Iraqi oil terminals.²¹⁴ Naval Coastal Warfare Groups have also garnered extensive experience in harbor defense and could be utilized to secure port areas. These units and their skill sets have since been incorporated into the Navy's Expeditionary Combat Command (NECC), responsible for operations in the near-coast, inshore and riparian environments.²¹⁵

²¹² Joe Sterling, "Navy creates force devoted to fighting piracy," *Cable News Network*, 08 January 2009, available from <http://www.cnn.com/2009/WORLD/africa/01/08/piracy.task.force/index.html>; Internet; accessed 15 April 2009.

²¹³ International Chamber of Commerce International Maritime Bureau, *Piracy And Armed Robbery Against Ships Annual Report 2008*, 27.

²¹⁴ Jim Garamone, "Sailors, Iraqi Marines Defend Offshore Terminals," *American Forces Press Service*, 02 May 2006, available from <http://www.defenselink.mil/news/newsarticle.aspx?id=15891>; Internet; accessed 16 April 2009. Also see Basil Tripsas, Patrick Roth and Renee Fye, *Coast Guard Operations During Operation Iraqi Freedom*, Report prepared for the Coast guard Historian's office (Alexandria, Virginia: Center for Naval Analysis, October 2004 available from http://www.uscg.mil/history/articles/OIF_D0010862.pdf; Internet; accessed 16 April 2009.

²¹⁵ Navy Expeditionary Combat Command (NECC), "About Us," <http://www.necc.navy.mil/>; Internet; accessed 21 April 2009.

Utilizing units with these skills could provide area security for Nigeria's oil terminals and deter piracy against vessels close to the coast.

Operations combating piracy inside the Niger River Delta would be a much more complex issue and most likely would not succeed without the participation of the Nigerian government. Sovereignty issues, civil unrest and the negative impact of a foreign military presence in regions known for ethnic resistance to military forces would demand a highly skilled force specialized in riverine operations. These forces should be capable of exercising river control and river denial operations, security escort, raids, and pursuit of pirates.

Since the end of the Vietnam War the U.S. military, the Navy in particular, largely ignored conventional riverine operations. Only certain special warfare units and specialized Marine Corps units maintained any capabilities. It has only been recently during operations in South America and Iraq that the requirement for a capable riverine force was brought to the fore. With no Navy units capable of controlling the waterways of Iraq, the U.S. Army and U.S. Marine Corps both utilized their own units to patrol the Euphrates and Tigris rivers. The U.S. Navy belatedly developed the NECC's Riverine Group. The Riverine Group possesses the required skill set for operations in the Niger Delta, an area identified by NECC's commanding officer, RADM Donald K. Bullard, in 2005 as a potential area of future conflict.²¹⁶ Use of Navy SEALs and Special Boat

²¹⁶ See figure 7 and figure 8 of the study by R. Benbow, F. Ensminger, P. Swartz, S. Savitz and D. Stimpson, *Renewal of Navy's Riverine Capability: A Preliminary Examination of Past, Current and Future Capabilities*. Report Prepared for the Director of Deep Blue (Office of the Chief of Naval Operations N3/5) (Alexandria, Virginia: Center for Naval Analysis, March 2006), available from <http://www.cna.org/documents/D0013241.A5.pdf>; Internet; accessed 15 April 2009, 77-78.

Team 22, both capable of riverine operations, to conduct raids, ambushes, snatch-and-grabs and other special operations would also enhance anti-piracy operations.

The major shortcoming of the U.S. military in riverine operations was identified by the Center for Naval Analysis (CNA) in a 2006 study titled *Renewal of Navy's Riverine Capability: A Preliminary Examination of Past, Current and Future Capabilities*. The current construct of NECC's three riverine squadrons, which consists of 12 boats each, is too small and would have a limited capability in support of major combat operations, such as those that might take place during anti-piracy operations in Nigeria. The projected number of boats required for major combat operations in the Niger Delta would be roughly 350, nearly ten times the authorized number of craft for NECC.²¹⁷ For operations involving area security for one facility, the CNA estimates that 60% of the forces assigned to a single squadron would be needed.²¹⁸ If Nigeria is to truly be an area identified for operations then the capabilities to operate and succeed should be developed.

Yet the U.S. military is well positioned to expand its riverine forces. Lessons learned from Vietnam, South America and Iraq have been incorporated into training, tactics and procedures (TTP), and doctrine is well established to facilitate operations. In 1990 Rear Admiral George Worthington of Naval Special Warfare Command put forth a proposal to build a battalion sized riverine force from existing Navy and Marine Corps capabilities with a headquarters unit, Marine Air-Ground Task Force, and a riverine

²¹⁷ *Ibid.*, 77.

²¹⁸ *Ibid.*, 70.

assault group.²¹⁹ The document was shelved during the draw down of the 1990s, but it provides a ready-made blueprint for expansion.

The U.S. military is ready today to lead a multi-national force capable of defeating pirates kinetically in the open ocean and coastal waters of Nigeria. Though the lack of forces capable of riverine operations in the Niger delta is an identified deficiency, the U.S. Navy is well positioned to expand on current forces.

Security Assistance

Security Assistance programs offered by the U.S. State Department and implemented by the Department of Defense would be important to enabling regional stability. Programs such as International Military Education and Training, Foreign Military Sales, and Foreign Military Financing allow for the delivery of military equipment and services to foreign governments. Through these programs, the U.S. could assist Nigeria in improving their defense capabilities and contribute to maritime security in the region.

Formal training for foreign military personnel by U.S. service schools is available through International Military Education and Training. This program offers over 2,000 courses of instruction at 150 school houses and also offers mobile education teams

²¹⁹ Daniel A. Hancock, "The Navy's Not Serious About Riverine Warfare," U.S. Naval Institute, vol. 134, no. 1 (January, 2008) available from http://www.usni.org/magazines/proceedings/archive/story.asp?STORY_ID=1310; Internet; accessed 16 April 2009.

capable of deploying to host nations.²²⁰ The Navy Small Craft Instruction and Technical Training School (NAVSCIATTS) can provide courses that cover all aspects of patrol craft operations.²²¹ Although originally oriented towards operation in South America, it would take little modification to target operations in Nigeria's delta or coastal waters. NECC's Expeditionary Training Command possesses a robust school house capable of delivering courses across the full spectrum of military operations including naval construction, maritime civil affairs, maritime expeditionary security, riverine, expeditionary logistics, explosive ordnance disposal, mobile diving and salvage, and naval coastal warfare.²²² Through these programs the U.S. can strengthen Nigeria's military capabilities and improve security in the delta and Gulf of Guinea.

The Foreign Military Sales program allows for the sale of military arms between the U.S. and foreign governments. By providing modern equipment and weapon systems to Nigeria, it strengthens relations, supports coalition building and increases interoperability.²²³ Communications and radar facilities have already been delivered to improve situational awareness of territorial waters and the Gulf of Guinea.²²⁴ The

²²⁰ Defense Security Cooperation Agency, "International Military Education and Training (IMET)," http://www.dsca.mil/home/international_military_education_training.htm; Internet; accessed 17 April 2009.

²²¹ Naval Small Craft Instruction and Technical Training School, "NAVSCIATTS," <http://www.navsoc.socom.mil/NAVSCIATTS/welcome.htm>; Internet; accessed 17 April 2009.

²²² NECC, "Expeditionary Training Command," <http://www.necc.navy.mil/>; Internet; accessed 17 April 2009.

²²³ Defense Security Cooperation Agency, "Foreign Military Sales (FMS)," http://www.dsca.mil/home/foreign_military_sales.htm; Internet; accessed 17 April 2009.

²²⁴ John C. K. Daly, "Nigeria continues slide towards instability," *Terrorism Monitor*, vol. 4, no. 24 (December, 2006) [journal on-line]; available from http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=1000; Internet; accessed 16 April 2009.

Nigerian Navy has also received seventeen Defender class response boats and four coast guard buoy tenders to aid in stemming the conflict and disorder in the delta and coastal areas.²²⁵ By equipping Nigeria with the right tools, forces are able to build capability which increases local security and protects global security interests.²²⁶

Foreign Military Financing is a program that assists foreign nations in meeting their legitimate defense needs. By providing funds through loans or grants the U.S. aids foreign nations in purchasing U.S. military arms, equipment and training. This promotes cooperative bilateral relationships and strengthens coalitions. In 2009 the U.S. will provide \$1.4 million in Foreign Military Financing for Nigeria. In addition the Department of Defense allocated \$6.5 million, available to Nigeria and Sao Tome, for Gulf of Guinea security authorized under the 2006 National Defense Authorization Act Section 1206.²²⁷ The monies provided by these programs are required to go towards U.S. military equipment and training focused on peace keeping, counter narcotics, law enforcement and counterterrorism. Yet, with the increasing threat of piracy in the Gulf of Guinea region, it is unlikely that the skills and equipment for fighting piracy would be difficult to obtain from the U.S. this funding.

²²⁵ News Blaze, "U.S. Partners with Nigeria on Security for Oil-Rich Delta Region."

²²⁶ Edward Lundquist, "Good business is good policy," *Armed Forces Journal* available from <http://www.afji.com/2009/01/3810243>; Internet; accessed 16 April 2009.

²²⁷ Projects for FY2009 were not yet identified before publication of the report although funding for the Act has been budgeted through 2011. Nine M. Serafino, "Section 1206 of the National Defense Authorization Act FY2006: A Fact Sheet on Department of Defense Authority to Train and Equip Foreign Military Forces," *Congressional Research Service* 19 March 2009 available from <http://www.fas.org/sgp/crs/natsec/RS22855.pdf>; Internet; accessed 16 April 2009, 3.

DIPLOMATIC INTERVENTION

The U.S. State Department succinctly identifies the challenges facing Nigeria today: poor governance, entrenched corruption, internal conflict, ineffective service delivery, and pervasive poverty.²²⁸ Diplomatic intervention in the nation to address piracy must seek to confront these challenges if a long-term maritime security strategy is to succeed. As the largest donor in Nigeria, providing nearly \$487 million in foreign assistance in 2009, the U.S. is already postured to eliminate the factors which promote piracy. Numerous U.S. government and non-government organizations are in Nigeria working to reform security forces, foster transparent and accountable governance, fight corruption, boost health and education services, increase the non-oil economy, and protect the environment. Through aggressive diplomatic engagement, pirates can be denied the conflict and disorder which cloaks their activities, the permissive political environment which facilitates their criminal acts and the cultural acceptance that condones piracy.

Improving Security

The people of the Niger River Delta have suffered decades of marginalization, oppression and civil conflict centered on controlling the oil profits of the region. Since 2006 fighting between militants and the Nigerian military has escalated in the delta

²²⁸ U.S. Department of State, "Background Note: Nigeria," <http://www.state.gov/r/pa/ei/bgn/2836.htm>; Internet; accessed 17 April 2009.

region. Pirates have benefitted from this fighting by using the regional instability as a front for their greed. To provide security for the populace, the U.S. strategy should focus on improving the professionalism of the Nigerian security forces and addressing long standing environmental and political grievances of the delta communities.

The proliferation of small arms fuels much of the violence in Nigeria. Despite the government's comprehensive laws against small arms, the laws are poorly enforced and security forces are unable to track possession and use of firearms.²²⁹ In addition, traditions of political violence, large community armories and failed disarmament programs have ensured a widespread feeling of insecurity.²³⁰

To improve the security of the region, Nigeria needs to reform the national police.²³¹ Decades of military dictatorship and heavy handed police forces have alienated delta communities with their authoritarian tactics. These tactics drove the observation by the President of the Movement for the Survival of Ogoni People (MASOP), Mr. Ledun Mitee, when he stated, "The predictable response of government to the violence is by unleashing superior violence...."²³² By reforming the police to enforce the law and respond to violence in a measured fashion, security in the Niger Delta could be improved. Though the U.S. currently lacks a unified program for training police,²³³ Congress has

²²⁹ Jennifer M. Hazen and Jonas Horner, "Small Arms, Armed Violence, and Insecurity in Nigeria: The Niger Delta in Perspective," 108.

²³⁰ *Ibid.*, 88-96.

²³¹ *Ibid.*, 108.

²³² Emeka Mamah, "Nigeria: Niger Delta Problem Must Be Addressed - Uduaghan, Mitee," *All Africa* 04 April 2009 available from <http://allafrica.com/stories/200904060014.html>; Internet; accessed 17 April 2009.

²³³ Walter C. Ladwig III, "Training Foreign Police: A Missing Aspect of Security Assistance to Counterinsurgency," *Comparative Strategy*, vol. 26 (2007), 285, available from <http://users.ox.ac.uk/~mert1769/Police%20and%20COIN.pdf>; Internet; accessed 17 April 2009.

recognized the critical role of indigenous police forces in establishing security and requested that the U.S. Defense and State Departments develop a coordinated, detailed plan.²³⁴ Leveraging lessons learned from the current missions in Iraq and Afghanistan, training national police should provide a solid foundation for future policy.

Another challenge to the security of the Niger Delta region is long standing grievances over environmental damage from oil production. Environmental damage in the Niger Delta is extensive; by some estimates over 400,000 tons of oil has been spilled in its waterways and soil.²³⁵ Nigeria's present administration appears to be taking steps to address oil pollution by holding the multi-national companies responsible for the cleanup.²³⁶ The U.S. could assist by providing a team of oil spill professionals, similar to operations in Lebanon in 2006,²³⁷ to coordinate with the Nigerian government in cleaning the roughly 1,150 identified spill sites.²³⁸ U.S. assistance could also provide equipment, train cleanup crews, and implement programs to revitalize the livelihoods of the delta

²³⁴ United States. Government Accountability Office. *Afghanistan Security: U.S. Efforts to Develop a Capable Afghan Police Forces Face Challenges and Need a Coordinated, Detailed Plan to Help Ensure Accountability*. Testimony before the Subcommittee on National Security and Foreign Affairs, Committee on Oversight and Government Affairs, House of Representatives (Washington D.C.: Government Accountability Office, 2008), 14, available from <http://www.gao.gov/new.items/d08883t.pdf>; Internet; accessed 17 April 2009.

²³⁵ Milieu Defensie, "Oil spills in the Niger Delta in Nigeria," <http://www.milieudedefensie.nl/english/publications/Oilspills%20in%20Nigeria-english.pdf>; Internet; accessed 18 April 2009, 1.

²³⁶ Lauren Ploch, *Nigeria*, Report prepared for Members and Committees of Congress (Washington D.C.: Congressional Research Service, 2009), 16, available from http://assets.opencrs.com/rpts/RL33964_20090220.pdf; Internet; accessed 17 April 2009.

²³⁷ The team was led by the Department's Bureau of Oceans, Environment, and Science, with expertise contributed by National Oceanic and Atmospheric Administration, the U.S. Coast Guard, Environmental Protection Agency, and USAID. Media note delivered 24 August 2006. U.S. Department of State, "United States Offers Emergency Aid to Clean Up Lebanon Oil Spill," available from <http://merln.ndu.edu/archivepdf/syria/State/71503.pdf>; Internet; accessed 18 April 2009.

²³⁸ Milieu Defensie, "Oil spills in the Niger Delta in Nigeria," 1.

communities.²³⁹ Lastly, a U.S. diplomatic team could provide mediation between the multi-national oil companies and the Nigerian government in order to resolve disputes over oil spill responsibilities.²⁴⁰

The most contentious security challenge is addressing the political grievances over oil revenues for the delta states. These grievances are the primary fuel of the militancy. The current federal system provides delta states with 13% of revenues from oil sales.²⁴¹ Yet the 1960 constitution stated that the states should receive 50%.²⁴² The disagreement on the percentage of revenues for each state between the government, militants and delta communities is considerable and has prevented achieving a lasting peace.

The solution to this problem cannot be achieved militarily. A diplomatic team prepared to provide a forum for mediation between the groups is likely the best course of action.²⁴³ The U.S. has a long history of diplomatic missions to mediate conflicts and would be able to provide experience and leadership in negotiations.

²³⁹ U.S Department of State, “United States Offers Emergency Aid to Clean Up Lebanon Oil Spill.”

²⁴⁰ Andrew Donoghue, Shell faces Dutch lawsuit over oil spills,” *Business Green* 06 November 2008 available from <http://www.businessgreen.com/business-green/news/2229998/shell-dutch-lawsuit-nigerian>; Internet; accessed 17 April 2009.

²⁴¹ Lauren Ploch, *Nigeria*, 17.

²⁴² *Ibid.*.

²⁴³ International Crisis Group, “Fueling the Niger Delta Crisis: Executive Summary and Recommendations,” <http://www.crisisgroup.org/home/index.cfm?id=4394&l=1>; Internet; accessed 18 April 2009.

Just Governance and Democratic Values

Nigeria's government suffers from the broad national issue of corruption. Since 1999 high oil prices have facilitated economic reform, the write-off of \$35 billion in debt and brought in foreign investors.²⁴⁴ Yet, little of the money from these same oil revenues earmarked for delta infrastructure ever reached the communities. In 2008 Transparency International ranked Nigeria in the bottom third of 180 countries for perceived corruption.²⁴⁵ Even the last two democratic elections held in 2003 and 2007 were broadly condemned as flawed. As mentioned earlier, the systemic corruption in the Nigerian government has decreased security by reducing the public's faith in their legislative, judiciary and executive branches of government. Simply put, few Nigerians believe that members of the government can be trusted not to embezzle funds or refuse bribes.

Today Nigeria's elected government is working towards anti-corruption reform at the national and local levels. The Nigerian efforts to fight corruption are evidenced by a 2008 proposal to remove the immunity from prosecution clause from the constitution for senior government officials, review all privatization of state services agreements made in the last eight years, and the presidential backing of the Economic and Financial Crimes Commission to investigate charges of fraud and corruption. The Africa Anti-Corruption Initiative, headed by the United States Agency for International Development (USAID),

²⁴⁴ Anonymous, "Niger Delta Chaos," *International Institute for Strategic Studies*, 1.

²⁴⁵ International Transparency, "2008 Corruption Perception Index," http://www.transparency.org/news_room/in_focus/2008/cpi2008/cpi_2008_table; Internet; accessed 17 April 2009.

is already supporting Nigerian efforts.²⁴⁶ In 2008 the U.S. provided \$10.6 million for programs strengthening democratic governance and will increase funding to \$14.3 million in 2009.²⁴⁷ These funds will strengthen, according to a report delivered to the U.S. Congress in February 2009, "...the capacity, transparency, and independence of the judiciary; improving anti-corruption efforts; enhancing government responsiveness in the areas of service delivery and fiscal management and oversight; and building civil society capacity."²⁴⁸ Increasing civil society's ability to provide effective oversight of government and industry will aid in stemming corruption and also paves the path for fair and free elections in 2011.

Needs of the Citizens

Nigeria generated nearly \$2.2 billion in oil and gas revenue per month in 2008.²⁴⁹ Yet, the world's eighth largest exporter of oil possesses people who are among the poorest on the continent, suffer high rates of illiteracy, and have little or no health care. Nigeria is the second largest economy in Africa, yet the nation suffers from fuel shortages, idle industry and agricultural production that have been declining for years. How has Nigeria reached these lows? Nigeria's crippled social and economic

²⁴⁶ U.S. Agency for International Development is an independent federal government agency that receives overall foreign policy guidance from the Secretary of State. USAID, "USAID's Anti-corruption Initiative in Africa," http://www.usaid.gov/locations/sub-saharan_africa/initiatives/anti_corruption.html; Internet; accessed 18 April 2009.

²⁴⁷ Lauren Ploch, *Nigeria*, 21.

²⁴⁸ *Ibid.*

²⁴⁹ Anonymous, "Official: Nigeria's Crude Oil Earning Crash by 50%."

development is the result of the last 50 years of economic mismanagement and corruption.²⁵⁰

Social conditions in Nigeria today are poor. In the United Nations Development Program's 2007/2008 Human Development report, Nigeria ranked 158 out of 177.²⁵¹ The education system is substandard with only 60% of children enrolled. Half of those will drop out before completing primary school.²⁵² Of those who reach 6th grade, only 40% are literate.²⁵³ Health care is equally as bad. Life expectancy is around 46.5 years and mortality rate for children under 5 is nearly 19%.²⁵⁴ Limited family planning and high fertility makes for unsustainable growth. Infectious diseases are prevalent in Nigeria with HIV/AIDS infecting 4 million people and the highest rate of tuberculosis in Africa.²⁵⁵ The deteriorated social conditions in Nigeria have constrained economic growth and trapped entire regions of the nation in poverty.

USAID's Social Sector Program has provided nearly \$58 million from 2005 through 2009 to address the challenges confronting Nigeria. Funding supports operations of U.S. and International organizations in Nigeria to confront basic education, health care, prevention and control of infectious diseases, family planning, reproductive health,

²⁵⁰ Congressional Research Service, "Nigeria," 10.

²⁵¹ Human Development Reports, "2007/2008 Human development Report: Nigeria," http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_NGA.html; Internet; accessed 17 April 2009.

²⁵² USAID, "SO3 – Basic Education," <http://www.usaid.gov/ng/so3.htm>; Internet; accessed 17 April 2009.

²⁵³ *Ibid.*.

²⁵⁴ United Nations International Children's Emergency Fund, "At a glance: Nigeria," http://www.unicef.org/infobycountry/nigeria_statistics.html; Internet; accessed 18 April 2009.

²⁵⁵ U.S. Department of State, "Background Note: Nigeria."

and child survival in Nigeria.²⁵⁶ Improving social conditions in Nigeria improves long-term regional stability by reducing the poverty driven incentive to commit piracy.

The economic potential of Africa's most populous nation has been restricted by inadequate infrastructure (roads, public utilities, railway and ports), corruption and macroeconomic mismanagement. Nigeria appears to suffer from the "resource curse", the theory that the presence of oil tends to hinder economic development. Since the 1970s, Nigeria has neglected their agricultural and light industry base in favor of the oil industry.²⁵⁷ The high price of oil in turn boosted the value of their currency, making the production of other goods for export uncompetitive.²⁵⁸ In addition, more and more workers shifted to the profitable oil industry, which subsequently drained manpower from other sectors of the economy. Government protectionism further eroded the agriculture and industrial base. Bans and high-tariffs on imported goods that could have been produced locally reduced competitiveness, which encouraged corrupt contracts that bloated costs.²⁵⁹ Meanwhile, corruption ensured that little of the oil wealth flowed to infrastructure or economic development. Instead, greedy politicians opted to line their pockets. The result is, outside of the oil industry, an atrophied economy with high

²⁵⁶ U.S. Agency for International Development, "Data Sheet," <http://www.usaid.gov/policy/budget/cbj2006/afr/pdf/ng620-013.pdf>; Internet; accessed 18 April 2009, 1-2.

²⁵⁷ U.S. Department of State, "Background Note: Nigeria".

²⁵⁸ Anonymous, "The Resource Curse: Why Africa's Oil Riches Don't Trickle Down to Africans," *Knowledge@Wharton* 31 October 2007 available from <http://knowledge.wharton.upenn.edu/articlepdf/1830.pdf?CFID=5868038&CFTOKEN=75811978&jsessionid=a8306310698901d574b022255436563e5075>; Internet; accessed 18 April 2009.

²⁵⁹ U.S. Agency for International Development, "USAID/Nigeria country Strategic Plan 2004-2009," <http://www.usaid.gov/ng/downloads/rfa/cspexternal.pdf>; Internet; accessed 20 April 2009, 4.

unemployment, especially in the Niger delta.²⁶⁰ The bleak economic conditions fueled piracy by luring the disaffected with promise of reward.

Through diplomatic assistance the U.S. can reduce the draw of piracy by improving economic conditions and increasing opportunities for alternative forms of employment. By the end of 2009, U.S. funded activities will increase agriculture productivity, marketing and the number of agro-processing enterprises by encouraging public-private partnership with banks, the oil industry and private sector investors.²⁶¹ The Private Sector Development program focuses on privatization of heavily subsidized state-owned enterprises that have historically been largely inefficient. Direct support by U.S. aid has transformed Nigeria's Bureau for Public Enterprise into a proficient and transparent organization that has successfully handed 92 state-run enterprises over to the private sector.²⁶² The success of this program leveraged an initial \$10 million in U.S. aid into \$127 million from the World Bank and other donors.²⁶³ USAID has also tackled the problems of infrastructure and public utilities by supporting the restructuring and privatizing of the energy sector, implementing civil aviation standards and enhancing the capacity of Nigerian ports.²⁶⁴

²⁶⁰ Anonymous, "Oil of Poverty in Niger Delta," African Network for Environment and Economic Justice available from <http://www.boellnigeria.org/documents/Oil%20of%20Poverty%20in%20Niger%20Delta.pdf>; Internet; accessed 18 April 2009, 5.

²⁶¹ U.S. Agency for International Development, "Data Sheet: Sustainable Agriculture and Economic Growth," <http://www.usaid.gov/policy/budget/cbj2006/afr/pdf/ng620-012.pdf>; Internet; accessed 19 April 2009.

²⁶² U.S. Agency for International Development, "SO2 – Economic Reform and Agriculture," <http://www.usaid.gov/ng/so2.htm>; Internet; accessed 20 April 2009.

²⁶³ *Ibid.*

²⁶⁴ U.S. Agency for International Development, "Sp01 – Energy and Infrastructure," <http://www.usaid.gov/ng/sp01.htm>; Internet; accessed 20 April 2009.

These initiatives aid Nigerian economic growth through diversification, privatization and improved agricultural and economic practices. Long term regional security is enhanced by the economic health of Nigeria. When jobs are readily available, the population will be less likely to resort to piracy to support them.

ANALYSIS

The U.S. is well suited for intervention to defeat piracy in the Gulf of Guinea and the Niger River Delta. The similarity in strategies between COIN operations and anti-piracy operations to sustain long-term regional security provides a useful blueprint to organize the mission. By utilizing a two pronged policy of military intervention coupled with diplomatic intervention and aid, the factors which sustain piracy in Nigeria can be best mitigated.

A military intervention against pirates would be relatively straight forward in international waters of the Gulf of Guinea and coastal waters of Nigeria. By leveraging lessons learned from fighting piracy off of Somalia and defending oil terminals off of Iraq, a multi-national coalition could be formed under AFRICOM to increase maritime security in the region. Yet, riverine operations inside the Niger River Delta environment pose a much more complex scenario and identified capability gaps would need to be addressed to maximize effectiveness. Existing Security Assistance programs should be maintained or increased to modernize the Nigerian military by providing training, state of the art equipment and funding to purchase required military items.

As the largest donor of foreign aid to Nigeria, diplomatic intervention would build on existent U.S. efforts. The reform of security forces to decrease violence and

proliferation of small arms in the Niger Delta would assist in providing a secure environment in the region. Though the U.S. currently lacks a coherent policy on training foreign police, U.S. rebuilding efforts in Iraq and Afghanistan again provide a significant experience base to found a program. The U.S. can also further negotiations between Niger Delta communities, the militants and the Nigerian government over environmental and political grievances by offering diplomatic mediators for talks between the parties to limit conflict in the delta. Funding provided by the U.S. is already working in Nigeria today to sustain anti-corruption reform in order to provide a transparent and fiscally accountable government. In addition, millions of dollars in aid goes toward meeting the needs of Nigerian citizens through improvement of social conditions and economic reform.

The U.S. possesses the military capability, diplomatic power and economic resources to succeed in defeating piracy in the Gulf of Guinea and Niger delta. Through military intervention the U.S. can decrease legal and jurisdictional weakness, reduce civil conflict and disorder, improve military and law enforcement capability to provide security, and reduce the draw of piracy. Diplomatic engagement with the leaders of Nigeria would compliment the military intervention and assist in reducing the conflict and disorder in the Niger Delta and Gulf of Guinea by providing long-term economic and social improvements. Aid money and diplomatic mediation can reduce the politically permissive environment and remove the factors which drive cultural acceptance of piracy. Through this strategy, the U.S. can reestablish maritime security and secure vital access to the oil rich Niger Delta and Gulf of Guinea.

CONCLUSION

Piracy in the Niger River Delta and Gulf of Guinea is of growing concern to the U.S. Over the last two years piracy has been on the rise in the oil rich region that provides the U.S. with a significant portion of its daily demand for oil. The pirates have grown increasingly daring and violent, attacking vessels and oil platforms within the delta and far out to sea with modern military weapons. These attacks pose a direct threat to the national security of the U.S. by threatening the oil supply which fuels its economy. As frequency of attacks increase, so does the pressure for a long-term strategy to bring maritime security to the region.

If the historical paradigm of piracy holds true, then the cycle of piracy will continue until an outside power breaks it, traditionally through military intervention by the hegemonic power of the era. Yet, in the modern times the scope of the problem has been convoluted by legal interpretations of what constitutes piracy. The lack of clarity in defining piracy has led to difficulty within international politics to apply the correct level of response. Through examination of the act of piracy and comparing the modern definitions with the historical paradigm, a more comprehensive definition was generated that covered all aspects of the crime.

...the undertaking of piratical acts and activities for financial gain within the maritime environment, using or against vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel, against coastal facilities or settlements, including tourist resorts, port areas and port towns or cities.

The definition provides a simple but useful understanding through which piracy in present-day Nigeria can be examined

Piracy in the Gulf of Guinea and the Niger Delta can be broken into two primary types. The first is the opportunist. Basically, these pirates are little more than petty thieves at sea who steal because they think they can get away with it. They can operate alone, but more often do so in small groups and use the night or busy period's onboard ships to cloak their crimes. These are not career pirates, and they will try to avoid confrontation when possible. Much more dangerous and prevalent in Nigeria is the organized pirate. These pirates typically operate in gangs and are well armed with modern assault rifles, speed boats and climbing equipment to get onboard moving vessels with high free-board. These are determined career pirates with a plan and the tactics to board, seize and control ships. Once ships are under their control they can rob it of valuables, kidnap crewmembers for ransom, hold the ship for ransom, or murder the crew and steal the entire ship and cargo. Although attacks typically target ships, in Nigeria attacks have also taken place by pirates from the sea against coastal towns and cities.

Piracy in Nigeria is sustained by economic, social, political and geographic factors which increase the opportunity for reward and decrease the risk of being caught. These factors are broken into: legal and jurisdictional weakness; favorable geography; conflict and disorder; under funded law enforcement / inadequate security; permissive political environment; cultural acceptability; and, promise of reward. To truly put an end to piracy these factors must be addressed.

The danger of piracy in Nigeria stems from attacks on the vessels and infrastructure of the multi-national oil corporations in the delta and Gulf of Guinea. As

the attacks increase, more and more oil is shut-in, removing it from the global market. Coupled with concerns over peak oil and the inability of the global oil supply system to meet demand in the event of disruption, the possibility of an oil shock seems a realistic scenario.

The effects of an oil shock would be devastating to the U.S. and global economy currently struggling out of a recession. Rapidly rising oil prices would cascade into all sectors of the economy. The percentage of family income spent on energy bills would increase, forcing a reduction in spending and a corresponding drop in demand for goods. Businesses would be forced to cut production, lay off employees and limit services in order to lower operating costs to stay in the black. Hardest hit would be the transportation sector; as fuel costs rose, so would the cost of shipping goods, threatening supply systems globally. The rising cost of everything would signal inflation and banks would tighten credit, reducing trade and investment in capital growth. Investor confidence would drop and the stock market would follow, further deepening the financial crisis. In short, the U.S. and global economy would likely slip back into recession.

Predations of the pirates in the Niger River Delta and the Gulf of Guinea can no longer be ignored. The threat to the recovering U.S. and global economy is serious. Nigeria is unable to stop the pirates that operate within its national territory. Only intervention by the U.S. can bring the military and diplomatic strength required to put an end to piracy in the region and protect vital energy resources. Using the COIN doctrine as a blueprint for anti-piracy operations, military and diplomatic action could be aimed at

eliminating or mitigating the factors which support piracy and reestablish regional maritime security.

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