Seeing like a Pirate: The Entrepreneurship of Piracy in Southeast Asia

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Keywords
Crime, Governance, Law Enforcement, Maritime Piracy, Security, Southeast Asia

Abstract
Why has piracy flourished in Southeast Asia over the past decade? What are the underlying incentives for pirates, and how do these forces influence their operations? This paper explores these questions through the lens of enterprise theory, an approach that posits that piracy, much like any business venture, is run by risk-taking entrepreneurs who make decisions in reaction to market demands and economic opportunities. By framing pirates as entrepreneurs and piracy as a business, this paper argues that treating piracy as a rational, market-driven enterprise is crucial to deciphering the persistence and resilience of these criminal syndicates. In support of this thesis, the paper delves into the economic underpinnings of piracy, analyzing how market demand for commodities drives piracy. It also examines how pirates have adapted their organizational structure and operational strategies to the changing security and economic landscape. Concluding, this paper recommends that counterpiracy should focus on denying pirates access to necessary inputs for their business and reducing the economic incentives for piracy.

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First submission received: 10th September 2024
Revised submission received: 7th October 2024
Accepted: 22nd November 2024

Introduction

The emergence of contemporary piracy in Southeast Asia since the 1990s poses a significant threat to both human security and commercial interests. While modern-day piracy is more commonly associated with the African continent, particularly off the coast of Somalia, the world's most perilous seas are in fact those of Southeast Asia. The International Maritime Bureau (IMB) reports that nearly 60% of all maritime piracy incidents between 1993 and 2015 occurred in Southeast Asia, with Indonesia alone accounting for over 20% of these incidents. By contrast, Somali pirates accounted for only 17% in the same period. More worryingly, Figure 1 below shows that while piracy in Africa is trending downwards, piracy in Southeast Asia remains at an all-time high.

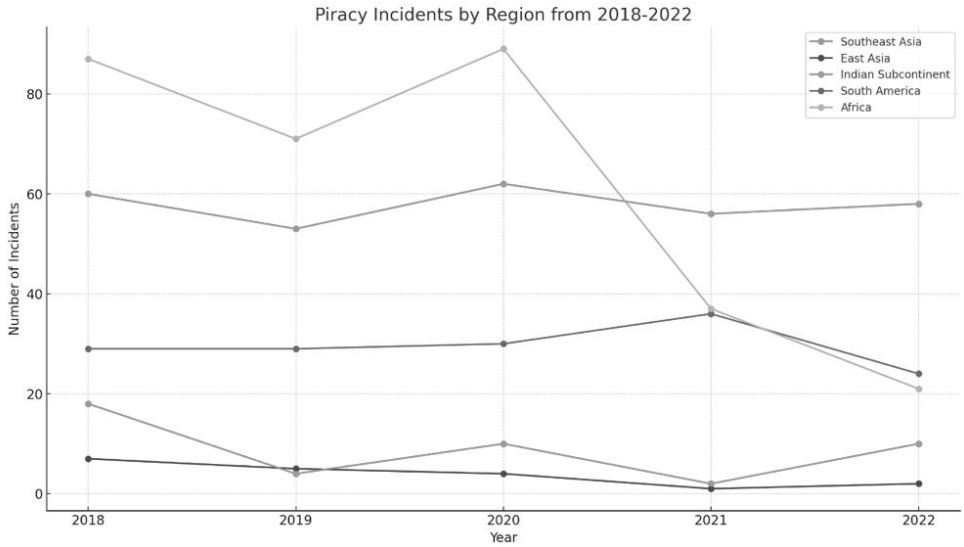

Figure 1: Piracy Incidents by Region from 2018-2022[i]

The rise in piracy in Southeast Asia has led to significant human and economic costs. Between 1995 and 2013, 136 seafarers were killed in Southeast Asian waters as a result of piracy. This is double the number of fatalities in the Horn of Africa and more than the total number of fatalities suffered in West Africa combined.[ii] Economically, piracy in Southeast Asia costs the world approximately $25 billion annually. Piracy also reduces the volume of traded goods, with each additional attack leading to a 1% decrease in export volume between affected countries.[iii]

In response to the surge in piracy, Southeast Asian countries and international partners have implemented various counterpiracy measures. Notably, the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) was established in 2006 to enhance intergovernmental cooperation against piracy. These efforts have included enhanced naval patrolling, the establishment of maritime surveillance systems, and legal reforms to prosecute pirates more effectively.[iv] Despite these efforts, piracy in Southeast Asia has shown no signs of waning. This apparent immunity to enforcement efforts highlights a critical gap in our current understanding and approach to combating piracy. This research aims to fill this gap by applying the enterprise theory of organized crime to pirate syndicates in Southeast Asia.

Literature Review

Under international law, piracy is defined as '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 against another ship on the high seas.'[v] Its maritime nature requires some degree of sophistication, technical know-how, and planning, which differentiates it from common robbery or theft. As such, piracy is a distinct form of illicit activity that requires its own conceptual framework to understand. This section will provide an overview of existing theoretical paradigms offered by scholars.

Paradigm 1: Pirates as Insurgents

The prevailing consensus argues that it is mistaken to treat piracy simply as a criminal activity which requires a law enforcement-focused approach to eliminate.[vi] While these measures are useful, they are far

from a viable long-term solution. Instead, there is a growing realization that addressing the root causes of piracy, such as poverty, unemployment, and lack of legal economic opportunities, is essential for a sustainable solution. Although they are not driven by ideology, Edward Lucas argues that pirates should be viewed as 'commercialist' insurgents who use coercive power to amass as much wealth as possible.[vii] By framing piracy through the lens of an insurgency, scholars and policymakers alike are brought to confront the economic and societal drivers of piracy. The existing wealth of literature on insurgency and counterinsurgency provides a functional framework for examining the sociological, geographic, economic, and political conditions for piracy.

The traditional argument put forward to explain the causes of insurgency is the interaction of greed and grievance. In Paul Collier and Anke Hoeffler's seminal World Bank paper, the argument is put forward that armed conflict is a direct result of a combatant's desire for self-enrichment through the control of valuable goods and resources.[viii] While their paper focuses on natural resources, it is possible to view merchant shipping in the same manner. Each vessel that transits through the waters of the Malacca Straits or the Sulu Sea represents a highly valuable lootable resource. Thus, the desire to control these resources can provide ample incentives for the inception of an insurgency. This framework is supported by Carolin Liss, who argues that large increases in commercial maritime shipping brought about by globalization have provided an ever-increasing supply of lucrative targets for pirates.[ix] Studies have shown that a successful attack in Indonesia typically yields between $900 and $4,000 per pirate, or up to 30 times the average monthly income for fishermen.[x] When such lucrative resources are within easy grasp, the opportunity cost for fishermen and local traders to not engage in piracy increases dramatically.

When such greed is coupled with grievances stemming from poverty, income inequality, unemployment, and insecurity, piracy flourishes. Faced with sudden and severe impoverishment, coastal seafaring communities are pushed to undertake illicit activity out of desperation. For example, studies have shown that the increase in number of piracy attacks in Indonesia's waters in the past ten years may be attributed to its sharp economic downturn and domestic instability in the wake of the 1997 Asian Financial Crisis.[xi] More specifically, Raj Desai and George Shambaugh argue that the incidence of piracy is directly associated with a loss of income due to Illegal, Unreported, and Unregulated (IUU) fishing.[xii] Since crime syndicates usually draw workers from sectors with relevant and transferable skills, small-scale fishermen who have seafaring abilities and navigational knowledge of local waters are more likely to turn to piracy when they face falling incomes due to IUU fishing. Furthermore, Carolin Liss argues that the widening income and wealth gap as a result of globalization creates grievances for those who were left out of the global economic boom. In such an economically diverse region like Southeast Asia where those living below the poverty line are a stone's throw away from towering metropolises, one cannot discount the grievances of inequality that motivate piracy. As one Indonesian pirate states in an interview, 'Singapore was rich; we were poor. So, we went to pillage the areas [around] Singapore.'[xiii] Thus, both the greed and grievance argument provide a baseline explanation of what motivates people to turn to a life of piracy.

Paradigm 2: Pirates as Rational Actors

Moving beyond the 'pirates as insurgents' paradigm, Ursula Daxecker and Brandon Prins conceptualize pirates as opportunists who take advantage of weak state capacity.[xiv] Taking pirates as rational actors who weigh the costs and benefits in their decisions, the risk of detection and capture by government forces play a significant role in their decision-making. As such, pirates tend to operate in areas where the gains from piracy outweigh the risks and where they can evade government authority. Using data from the IMB, their study finds that piracy clusters in areas where the state's ability to project power and maintain control is weak. However, concluding that state failure is a key driver of piracy is too

simplistic of a view, as a certain level of governance and development is still indispensable for sophisticated criminal activity. David Anderson argues that piracy is not a function of state failure – in fact, the reinvigoration of Somali piracy was connected to the reconstruction of the state rather than its collapse.[xv] Instead, piracy flourishes in weak states where ineffective governance gives rise to opportunities for collusion with local state and non-state actors. Furthermore, pirates need access to markets and infrastructure to sell their stolen goods. This suggests that pirates need at least a minimum level of development to operate, which means that opportunities for piracy are greatest in areas where the state is weak, but not absent. The geographical incidence of piracy, therefore, is closely tied to the extent of corruption among local actors and the sufficiency of markets and infrastructure to sustain organized pirate activity.

Limitations of Existing Paradigms

This paper finds that existing literature falls short in explaining the dynamics of piracy. Firstly, while the 'pirates as insurgents' paradigms offer insights into the environmental factors that motivate people to take up arms, the similarities between pirates and insurgents stop there. Beyond initial motivations, the organization and functioning of insurgent movements diverge significantly from the operation of pirate syndicates. Not only do their recruitment strategies, organizational leadership, and use of force differ, but their goals are also fundamentally different. Thus, this paradigm offers limited value for examining the dynamics of piracy. Secondly, while Daxecker and Prins provide a novel approach to conceptualizing pirates as rational opportunists, their study is limited to understanding the geographical incidence of piracy, rather than their operations. This points to the need for a deeper investigation into the operational strategies of pirate syndicates, rather than just their motivations, to comprehend why piracy remains rampant. Thus, this paper aims to address this existing gap in literature by drawing from organized crime literature to conceptualize pirate syndicates as profit-motivated enterprises that respond to market demands.

Pirates as Entrepreneurs: The Enterprise Theory of Organized Crime

Firstly, it is important to address the question of whether piracy counts as a form of organized crime. Recognizing that multiple definitions of organized crime have been offered over the years, this paper draws on the work of Jay Albanese, which offers a consensus definition of organized crime as 'a continuing criminal enterprise that rationally works to profit from illicit activities that are often in great public demand.'[xvi] Its continuing existence is maintained through the use of force, threats, and corruption of public officials for immunity. As established by past authors, pirates are indeed rational actors who seek to maximize their profits by weighing the costs and benefits of their actions. Pirates engage in the use of force as their core business strategy and collusion with local state and non-state actors to achieve their goals and avoid persecution. Thus, the behavior of pirates aligns with that of organized criminals.

The central dynamic that we are interested in exploring is the notion of organized crime as entrepreneurship, which involves risk-taking individuals who use illegal activities as their core business strategy for profit-making.[xvii] Recent literature has emphasized the utility of framing organized crime as a business enterprise involving illegal entrepreneurialism. As Dwight Smith points out, organized crime operates on 'the same fundamental assumptions that govern entrepreneurship in the legitimate marketplace.'[xviii] Such assumptions are summarized in the enterprise theory of organized crime, which states that organized criminal groups form and thrive in the same way legitimate businesses do, making rational business decisions that maximize profits given existing market demands.[xix] While enterprise theory has traditionally been applied to legitimate businesses, organized crime scholars argue that its basic

assumptions undergird the operations of both licit and illicit enterprises.[xx] Enterprise theory is valuable as it offers researchers a way to model criminal behavior by treating them as profit-maximizing and risk-taking entrepreneurs. It also allows researchers and policymakers to view organized crime as more than just the criminal act itself, creating a macro-picture of how the crime syndicate operates and the external market forces that drive its decision-making. This paper will utilize enterprise theory as the focal framework for understanding the operations of pirate syndicates. The following sections will first consider the market forces driving piracy in Southeast Asia, followed by an analysis of how pirates establish and run their business.

Economic Drivers of Piracy

The economic basis for establishing any business is the existence of demand. Enterprise theory states that organized crime emerges when legitimate markets are unable to satisfy customers, either due to low supply or high prices.[xxi] High demand for a particular good or service results in high profits, which creates a conducive environment for entrepreneurial criminals to enter the market. In the case of Southeast Asia, the rise in piracy has been a response to an increase in demand for commodities, specifically for crude palm oil (CPO).

Historically, piracy in Southeast Asia was driven by a combination of high prices and demand for petroleum from Chinese buyers eager to purchase at below-market prices. In 2015, it was reported that 80% of all hijacking incidents in the region were for petroleum products.[xxii] However, a sharp fall in petroleum prices in 2015 made the existing business model unprofitable. Today, the emergence of Indonesia and Malaysia as the world's largest producers and exporters of palm oil has driven a new wave of piracy – this time with much more sophistication and professionalism in their operations. Pirates prefer to target CPO as, unlike petroleum tankers, CPO ships are usually locally owned and tend not to report hijacking incidents to avoid higher insurance premiums. Thus, as palm oil production continued to grow, so too did the sophistication of the pirate syndicates that preyed upon CPO tankers. From relatively opportunistic brigands, they became complex professional syndicates with bosses who run the operations, investors who finance it, insiders who provide intelligence, and buyers prepared to launder the stolen product. Today, it is reported that at any time there are some 20 CPO barges on the water along the coasts of Indonesia and Malaysia, and 18 pirate syndicates are in the business of stealing their cargoes.[xxiii]

A brief look at the pirates' financial statements' also suggests a high degree of profitability. A report by the Global Initiative Against Transnational Organized Crime finds that at an average market CPO price of SGD 1,000/ton, hijacked CPO is often sold in the black market at a 40% discount, or SGD 600/ton. After subtracting the estimated cost of a pirate attack, including upfront costs for ship rentals, payments to insiders, and bribes to officials, a successful hijack nets a profit of SGD 1.2 million while a failed hijack loses some SGD 600,000.[xxiv] Recent data suggest that 30% of attempted hijackings fail, and roughly 20% are aborted due to the presence of maritime law enforcement.[xxv] Thus, with a 50% success rate, the expected value of a pirate attack is SGD 300,000, which makes it a very attractive proposition for pirates. As long as demand for CPO remains high, there will always be pirates willing and able to supply it for cheap.

Establishing the Business

Now that we have established that piracy in Southeast Asia is indeed a lucrative business model, how does an entrepreneurial pirate go about establishing the business? Just like a company, establishing a pirate syndicate requires someone to acquire 'start-up' resources like money, people, and equipment. Although past literature has focused on the hijackers themselves, they are in fact the lowest rung of the criminal syndicate and do not play a direct role in leading the criminal organization. Instead, the true entrepreneur

of the enterprise is the 'big boss,' who oversees the sourcing of investors, recruitment of labor, and obtaining insiders. This aligns with enterprise theory, which states that the leader's efforts should be wholly concentrated on the creation and utilization of resources.[xxvi]

To begin with, the big boss will need to seek out an investor to fund their operations. These investors will cover the upfront costs, which can include payments to insiders, charges for a forger to certify the stolen goods as legitimate, bribes to pay off the police and navy, and a slush fund of cash should the operation fail and it be necessary to bribe the judges and public prosecutors.[xxvii] While current data on pirate financing is extremely limited, there potentially exists a 'pirate stock exchange' similar to that of Somalia, where multiple local investors can invest in a pirate operation, thus distributing the risk.[xxviii] These financiers also provide syndicate heads with information about a ship's identity, its location at a given time, its destination, and sometimes even inserts a mole on board the ship.[xxix] While the exact technique used to obtain this information differs from financier to financier, they at the very least have an insider inside a shipping company or the port. Evidence supports that some of these financiers are people involved in the shipping industry who can flip their legitimate networks and knowledge to criminal ends. Financiers come from both strong and weak states, including Indonesia, Singapore, Bangkok, Hong Kong, and the Philippines. Just as with legitimate entrepreneurial ventures, the financing stage is crucial to the success of the pirate enterprise – and our current lack of visibility over it is a worrying sign. A holistic regional counterpiracy strategy must incorporate greater research and crackdowns on illicit financial flows.

After securing the necessary finances for the operation, the big boss will need to recruit the labor. This usually begins with hiring a boarding-team leader who is generally well established and financially secure, with a long history of successful operations.[xxx] Through their kinship and friendship networks, the board-team leader then hires 'foot soldiers to form the pirate band of around nine strong. These pirates are drawn from local coastal communities and are usually small-scale fishermen who have seafaring abilities and navigation knowledge of local waters. The primary recruiting grounds are Batam, Pontianak, and Medan.[xxxi] Given that pirates are hired entirely through personal networks, reputation plays an important role in determining future employment. One aspect of reputation is a strict adherence to the 'pirate's code,' that if arrested, they never sell out their fellow teammates or bosses. Convicted pirates in Indonesia have claimed that, if they stick to the code, they will only serve approximately 10% of their jail term as their bosses will bribe the public prosecutor and judge.[xxxii] This behavior suggests a high degree of trust between both members within the pirate band and with their bosses, whom they have possibly never met before. Indeed, enterprise theory stresses that relational capital, or the ability to build social networks and engender trust, is a key factor to any successful business.[xxxiii] Networking and word of mouth are the primary means of linkage between the financiers, bosses, and pirates, and as such, trust is a key pre-requisite for successful pirate operations.

Running the Business

Having secured the necessary finances and labor, the enterprise can now go about deciding its business modus operandi. Unlike legitimate enterprises, illegal businesses operate in an inherently hostile environment and are hence much more sensitive to risk. As Petrus van Duyne writes, 'Criminal entrepreneurship is enterprising in an enduring hostile landscape … for the crime-entrepreneurs it means that the daily organization of their trade is not only focused on money, but at the same time on a highly elaborate risk avoidance strategy.'[xxxiv] Therefore, a criminal must exercise entrepreneurial judgement by making business decisions that maximize profits while minimizing the risk of detection and capture by law enforcement. In the case of pirates, their operations are subject to two main constraints.[xxxv] First, pirates need space and time on the high seas to carry out their operations before the arrival of law enforcement.

Second, they are constrained by the availability of land-based logistical and economic infrastructure to support their operations. In deciding what type of attack to carry out, the pirate needs to assess the availability of these inputs.

The 'traditional' modus operandi of pirates is to kidnap the crew of a ship and demand ransom. This strategy is best for pirates who have minimal access to infrastructural support, funding, or planning. It requires little intelligence of what type of ship they are attacking or the cargo it's carrying and relies heavily on the use of force and violence. However, kidnappings require a significant amount of time on the high seas, especially in cases where the pirates are demanding high ransom amounts.[xxxvi] Thus, this strategy has remained unpopular with pirates in Southeast Asia due to counterpiracy efforts in the region which are designed to reduce the availability of time for the pirates. This hypothesis is supported by data from the International Maritime Organization (IMO) in Figure 2, which shows that pirates have generally preferred operations that target commercial vessels for their cargo rather than their crew.

Figure 2: Total Ship/Cargo Seizures and Kidnappings in Southeast Asia (1996-2018)[xxxvii]

Unlike kidnappings for ransom, ship and cargo seizures require much less space and time but require much more supporting infrastructure, intelligence, and planning. For ship seizures, the pirate usually hijacks the ship and commandeers it to a pre-agreed port to be offloaded, disguised, and re-registered, implying the need for a compliant port authority. Since it is impossible to sell cargo straight off a hijacked ship, the cargo itself must also be transported to a separate warehouse, stored, and handed over to the buyer. All these distribution channels must be arranged beforehand, indicating a high degree of sophistication for these pirate syndicates. However, ship seizures are highly risky as law enforcement can identify seized ships even after attempts to disguise them. For example, during the Orkim Harmony incident in 2015, pirates seized and attempted to disguise the ship by repainting it and renaming it Kim Harmon. They only managed to evade detection for six days before being arrested by law enforcement.[xxxviii] Nevertheless, ship seizure was the most popular modus operandi for pirates in the region, until 2014 when pirates began to shift to only seizing the cargo instead of the ship. Figure 3 shows that before 2014, pirates

consistently preferred to take the hijacked ship instead of leaving it. However, after 2014, pirates shifted their strategy to completely ignoring the ship and only seizing its cargo.

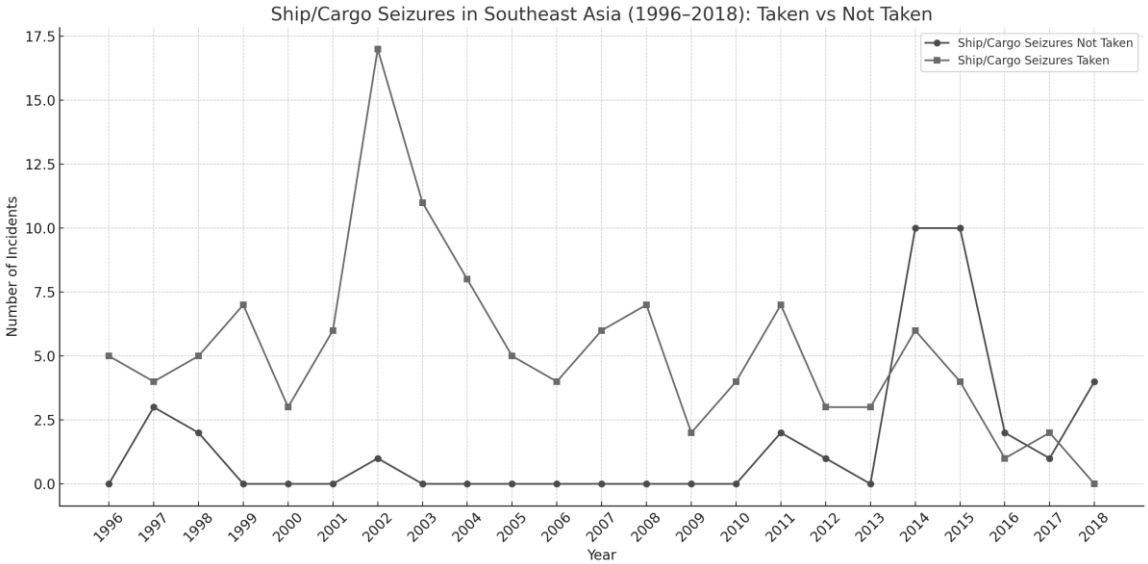

Figure 3: Ship/Cargo Seizures in Southeast Asia (1996-2018): Taken vs Not Taken[xxxix]

This shift in strategy represents a significant innovation by the pirates. Instead of bringing the hijacked vessel into port, the pirates would sail it to a rendezvous point where the cargo (usually fuel/oil) is siphoned off by an unregistered 'phantom' tanker owned by the syndicate. Along with transferring the cargo, the pirates often destroy the communications and navigation equipment so that the crew cannot call for help or move the ship after the pirates' escape.[xl] This new strategy has advantages for the pirates. By ignoring the ship itself, pirates can significantly lower the risk of detection and capture by law enforcement as discussed above. Since they do not have to disguise the ship, take it to port, or furnish it with forged registration papers, pirates also save significant costs in their operations. CPO and other oils are the most popular targets for these cargo seizures as they are easy to siphon off and difficult to track once stolen. Together with the existing high demand for CPO in the illicit market, this strategy represents a promising new business strategy for pirates in Southeast Asia.

Key Findings

This paper's exploration of piracy as an enterprise has led to several new insights. **Firstly, piracy should be seen not just as isolated criminal acts but as a comprehensive business ecosystem.** This ecosystem services a range of customers, from those demanding commodities at lower-than-market prices to the network of entrepreneurs who are willing and able to meet these demands. This chain includes suppliers who launder commodities from the illicit to licit markets, financiers who fund pirate syndicates, big bosses who organize pirate attacks, and finally boarding team leaders who recruit and lead foot soldiers to execute the attack. Each player is a profit-motivated, risk-taking entrepreneur who forms a key link in the chain of piracy. Thus, instead of purely focusing on the lowest-level players, as existing counterpiracy efforts have done, disrupting the profit incentives at each level of the business may prove to be more fruitful in reducing the demand for pirates. *Piracy will continue to flourish as long as demand for their services exists.*

Secondly, pirates in Southeast Asia have become highly sophisticated and organized. In recent years, Southeast Asia has seen piracy transform from sporadic acts of robbery and violence into more organized and sophisticated criminal activities that are highly connected with global markets. Innovations in their modus operandi suggest that these pirates are now capable of precise planning, coordination, and intelligence gathering. As ReCAAP reports, their operations require 'good knowledge or insider information of the type of manifest onboard the victim vessel, the vessel's route … preferred location for conduct of siphoning to avoid detection by authorities, storage of the stolen fuel/oil and location to transfer the stolen fuel/oil to potential buyers.'[xli] Pirates also need accurate information on the level of market demand for each type and grade of oil and its market price to make business decisions of what ship to hijack. As pirates continue to refine their methods and tactics, we can expect that the success rate of these sophisticated attacks will increase in the coming years.

Thirdly, piracy is fundamentally a land-based operation. Despite the criminal act itself occurring at sea, all piracy operations begin and end on land. From the recruitment of pirates to cargo offloading and sale, piracy is intertwined with land-based infrastructure and requires significant collusion with state and non-state actors. Furthermore, in response to counterpiracy efforts, pirates are actively trying to reduce their maritime presence, opting for strategies that offer the least exposure time on open waters. This finding calls for a reevaluation of current maritime-focused counterpiracy strategies and emphasizes the importance of land-based measures such as anticorruption efforts and crackdowns on illicit financing and contraband transfer.

Lastly, sophisticated piracy is not driven by economic privation or poverty. Contrary to common perceptions, the shift toward greater sophistication and organization means that pirate attacks today are more often helmed by individuals who work in legitimate industries and have enough capital and financial resources to fund the operations.[xlii] Furthermore, financiers also need to have a positive outlook on the economy (and especially commodity price and demand) before investing in a pirate operation. Thus, an increase in economic privation (such as through a downturn in the economy or a decrease in fish stocks) could potentially lead to an increase in unsophisticated pirate attacks but is less able to explain a rise in sophisticated piracy attacks. As data shows, the global financial crisis in 2008 coincided with a trough in successful pirate attacks in the region.[xliii] This study suggests that piracy may in fact be more strongly correlated with economic upturns than downturns, as their profits are tied to market demand for commodities.

Conclusion and Recommendations

This paper has explored the dynamics of piracy through an entrepreneurial lens, emphasizing the necessity of understanding pirate syndicates as complex, market-driven enterprises. These syndicates operate with a level of sophistication and organization akin to legitimate businesses, driven by the economic demands of the global market. Furthermore, pirates are inherently profit-motivated entrepreneurs who have demonstrated the ability to respond to changes in the availability of inputs and prices of commodities by adjusting their modus operandi.

These findings have significant implications. Firstly, this paper finds that current frameworks fall short of capturing the evolving nature of piracy as an organized and sophisticated criminal enterprise. Thus, a paradigm shift in how we perceive and tackle piracy is a necessary first step. Secondly, there is an urgent need to shift the focus of counterpiracy efforts from reactive measures to proactive strategies that target the drivers of piracy. Counterpiracy should focus on denying pirates access to necessary inputs for their business and reducing the economic incentives for piracy. This includes targeting illicit financial flows, stringent regulations on contraband goods and cross-border flows, increased anticorruption efforts, and

improved land-based governance. These measures are intended to undercut the profit incentives for piracy, thereby reducing its prevalence. Lastly, more research needs to be done on the dynamics of piracy in the region. Unresolved issues include understanding the illicit financing of pirate syndicates, their cooperation with other transnational criminal groups, and the impact of technological advancements on piracy tactics and countermeasures.

In conclusion, this paper contributes to the existing body of literature by revealing the interplay between economic forces and operational strategies of piracy. It highlights how piracy in Southeast Asia is not mere acts of lawlessness, but calculated responses to market opportunities. As Southeast Asia continues to develop and integrate into global markets, increased economic activity and demand for commodities will lead to more incidents of sophisticated piracy. Therefore, a holistic approach that counters the drivers of piracy is essential for safeguarding both human and economic security in the region.

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