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Maritime Sector as a Growth Engine for Vietnam: A Case Study

Nitin Agarwala

Structured Abstract

Article Type: Research Paper

Purpose—The “Doi Moi” (renovation), or economic reform program, of the mid-eighties helped Vietnam to transition from a centrally planned economy to the fastest-growing economy in Asia and to remove poverty from the country. With a coastline of more than 3,260 km, it was natural for Vietnam to exploit the “maritime sector” for socio-economic development. As a result, the economic contribution from the sea and coastal areas rose to nearly half of the total GDP in 2010–15. In order to emulate this economic growth from the maritime sector elsewhere, Vietnam needs to be studied to draw out lessons for other maritime nations.

Design, Methodology, Approach—Using desk-based qualitative research, the author analyzes Vietnam’s maritime sector as an “engine of economic growth” and the areas developed. Eventually, lessons are drawn out for other maritime nations who wish to use the maritime sector as an “engine for growth” for their own economies.

Findings—Vietnam made substantial land-based economic advances as a result of “Doi Moi.” To sustain and enhance the development curve, the government began focusing on the maritime sector. While growth has been stupendous, in many cases it has not met its planned targets. The model used, however, provides lessons for others to emulate and adapt for their own growth.

Practical Implications—The contribution explains how the maritime sector can be used for the economic development of a nation and the pitfalls that loom large in this effort. It also provides some lessons for other maritime nations who wish to encourage their own economic development through this sector.

Originality, Value—This contribution examines how the maritime sector has helped economic development in Vietnam and how this model can be used successfully by other maritime nations.

Keywords: Doi Moi, economic growth, maritime-sector, Vietnam

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Table of Acronyms

b/d	barrels per day
dwt	deadweight
ha	hectares (~ 0.01 sq km)
km	kilometers
ASEAN	Association of Southeast Asian Nations
GDP	gross domestic product
EEZ	Exclusive Economic Zone
ESRT	Environmentally and Socially Responsible Tourism (EU-funded)
EU	European Union
FDI	foreign direct investment
ILO	International Labor Organization
IUU	illegal, unreported and unregulated
NM	nautical mile (~1.15 miles)
MNC	multinational corporation
MOLISA	Ministry of Labor Invalids and Social Affairs
SBIC	Shipbuilding Industry Corporation
SCS	South China Sea
SEZ	Special Economic Zone
SME	small and medium enterprises
SOE	state owned enterprise
VIMA	Vietnam Inland Waterways Administration
VIMC	Vietnam Maritime Corporation
VINALINES	Vietnam National Shipping Lines
VINAMARINE	Vietnam National Maritime Bureau
VINASHIN	Vietnam Shipbuilding Industry Corporation
VNAT	Vietnam National Administration of Tourism
U.S.	United States
USSR	Union of Soviet Socialist Republics

I. Introduction

In 1980, with inflation soaring to over 700 percent, slow economic growth, import spending greater than the export revenues, a reduction in Soviet aid and increasing international isolation, the sixth National Congress of the Communist Party of Vietnam brought about major changes in Vietnam's planning system and in 1986, introduced the "Đổi Mới" (hereafter Doi Moi) by launching free-market reforms. These reforms aimed to decentralize the government, devalue the dong, end price control, encourage private businesses, encourage free markets, disband collective farming while giving land titles to farmers, encourage foreign investors, streamline bureaucracy, close inefficient government monopolies, and open farming and small service industries to individuals and

families.¹ The reforms to follow in the agricultural sector, policies, programs and priorities that included partial privatization (equitization)² of state-owned enterprises, liberalization of the trade and investment regimes, and modernization of the financial sector growth were possible only due to the development of small and medium enterprises (SMEs). These reforms helped Vietnam become a major agricultural exporter and an important destination for foreign investment in this part of the world. It helped Vietnam join the World Trade Organization in 2007 and to achieve the highest economic growth rate in the world continuously since 2000. In 2011, Vietnam was identified as the nation with the highest growth potential and most profitable investment opportunities among 11 major economies shortlisted and studied by Citigroup.³ In the first half of 2018, Vietnam's economy grew at 7.1 percent year over year and manufacturing boomed at 12.9 percent. The construction sector grew at 9.1 percent, while agriculture and services grew at 3.9 and 6.9 percent, respectively.⁴

As history has revealed, countries that have developed a maritime economy have shown even greater economic prosperity and created millions of jobs. The U.S., China, South Korea, Japan, Russia, and Europe have all relied extensively on the oceans to develop their economies.⁵ This has made the maritime sector a key investment area for countries wishing to enhance their economic development. In this regard, Vietnam is no different. Having developed a healthy internal economy, Vietnam began to look outwards and realized that the maritime sector had a great potential for impacting their economy. With an aim to enhance their sea-based economy and protect national sovereignty over islands and seas, the 10th Party Central Committee in 2007 adopted "Vietnam's Maritime Strategy Towards 2020."⁶ A myriad of guidelines, policies, and generous investments for sectors reliant on the sea helped turbo-charge Vietnam's coastal economic growth.

In order to examine this growth, this article first looks at the geographical location of Vietnam before studying the contribution of the maritime sector as a "growth engine" of the economy of Vietnam and how the government policies have supported this growth. It analyzes the downside of this growth and the weaknesses that inhibit this sector from realizing its full potential. Finally, it concludes by providing some lessons for other maritime nations who wish to use the maritime sector for their own economic growth.

II. Background

Vietnam occupies the easternmost location in the Indochina peninsula. It is a Southeast Asian country that is S-shaped, as seen in figure 1. It spans a north-south distance of 1,650 km and has an east-west width of 50 km at the narrowest point. Its coastline, which stretches over 3,260 km, oversees the linking of the Pacific Ocean and the Indian Ocean. The seas of Vietnam are rich in natural resources, both living and non-living. The Gulf of Tonkin (Bắc Bộ Gulf) and the South China Sea (referred to as the Eastern Sea in Vietnam), which wash the eastern shores of Vietnam, are the world's second busiest in shipping, accounting for nearly a quarter of global ship traffic,⁷ while the Gulf of Thailand in the southwest provides economical fishing grounds and water-based adventure activities such as diving and snorkeling (at Phú Quốc) due to shallow and clear waters.



Figure 1: Geographical location of Vietnam (Source: NgaViet⁸)

Vietnam's terrestrial topology is fairly diverse, including green mountains, fertile deltas, and tropical rainforests. The north has plateaus and the Red River Delta; the central region has coastal lowland and highlands, and the south has the Mekong River Delta, of which only 17 percent is arable land.

For many years, historians of Vietnam disregarded oceans as a possible source of economic growth and hence paid little attention to the linkages between maritime activity and

the economy of the country.⁹ Their history has shown that since the age of sail, Central Vietnam has played a strategic role, as ships transiting the South China Sea had to hug the central coast to avoid the dangerous shoals of the Paracel (Hoàng Sa) and Spratly (Trường Sa) islands. This importance led to various clans' and rulers' vying for control over the central region. There was a time when this region provided seafarers and pirates alike to the world of shipping.¹⁰ Things changed in the 15th century due to Chinese isolationist policies that led to the stoppage of movement to and from China. This reduced the movement of ships in the South China Sea and hence the influence of Vietnam. Later, with availability of modern navigation techniques that allowed for safer navigation, the need to visit central Vietnam was lost. As a result, the maritime history of Vietnam and its importance in the global maritime economy was forgotten. This led historians to regard Vietnam as a land-based country for many years. In 2006, this land-based gaze was challenged by various historians¹¹ who showed that commerce and interaction with people from the sea were common sights in Vietnam's past. Such commerce and interaction greatly contributed to the overall economic development of the nation.

III. Maritime Sector

From 1986 to nearly 2000, Vietnam's economy stabilized due to changing policies that were primarily inward-looking. With a stable internal economy, the country began to look outward, and it became essential to reconsider the sea-based economy. To ensure that the sea-based sector contributed to the national economy and ensured national defense and security, Vietnam's "Maritime Strategy Towards 2020"¹² was adopted in 2007. This strategy focused on prioritizing the sustainable development of a sea-based economy.¹³ Subsequently, realizing that the committed targets of development had not been achieved and to incorporate sustainability in the growth targets in line with the UN Sustainable Development Goals (SDG) 2030 (adopted by the UN in 2015), the 12th Party Central Committee reviewed the strategy to adopt the "Maritime Strategy Until 2030, with Vision Until 2045," in 2018.¹⁴

The 2007 strategy set out two goals to be achieved by 2020. One of raising the ocean-based economy to 53–55 percent of the country's GDP and the second, to double the per capita income of the coastal communities as compared with the average of the entire country. The strategy of 2018, which followed, targeted the maritime sector to contribute 10 percent of the GDP and the 28 coastal cities and provinces to contribute 65–70 percent of the nation's GDP by 2030. With such policy-based focus and support from the government for maritime development, this sector saw growth and has contributed considerably to Vietnam's economy over the last 20 years, making it a growth engine for the economy of Vietnam.

In order to appreciate the economic development achieved by Vietnam due to the maritime sector, we need to look at the priority areas laid out by Vietnam's "Maritime Strategy Towards 2020." These include:

- (a) Oil and gas (as ocean mineral resource)
- (b) Fisheries/aquaculture (as living resources to include sea plants)
- (c) Shipping (for transportation and shipbuilding)

- (d) Marine tourism (as leisure services)
- (e) Economic zones (as per the Law of the Sea of Vietnam)
- (f) Marine education (for preparing future generations)
- (g) Inland and coastal waterways (for internal transportation of cargo and people)

3.1 Oil and Gas Sector

Offshore oil production has helped the overall economy of Vietnam. In 1989, Vietnam bought petroleum products valued at 387 million rubles from the USSR, and its overall trade deficit with Moscow was at about 871 million rubles. In 1990, with major help from sales of offshore oil produced in Vietnam, the trade deficit fell to slightly more than 400 million rubles. By the mid-1990s, Vietnam attained a favorable trade balance with the USSR. Since then, with more than 30 years of construction and development, Vietnam's oil and gas industry has achieved remarkable progress. Vietnam's crude oil reserves, primarily located in the south, are the second largest in East Asia. Vietnam is also rich in natural gas. It has proven gas reserves of almost 7 trillion cubic feet in several fields, while many newly discovered gas fields are leading to a rapidly increasing overall oil and gas output.¹⁵ The total investments in this industry are about US\$7 billion, with over a dozen Vietnamese oil companies producing nearly 5 percent of global oil and gas.

Vietnam as a nation is a net exporter of crude oil but is a net importer of oil products. These imports are on the rise, with oil demand increasing from 250,000 barrels/day (b/d) to an estimated 445,000 b/d between 2006 and 2016.¹⁶ To reduce imports, Vietnam has built two refineries. Dung Quất has been operating since 2009 and has a capacity of 130,000 b/d, which by 2022 will increase by 40,000 b/d. After achieving this increase, the refinery would be able to provide fuel to Euro IV standards and handle a broader range of crude grades. The Nghi Sơn Refinery began refining in 2017 and has a capacity of 200,000 b/d.¹⁷

While other refinery projects are being planned, they lack financial resources for execution. Other challenges experienced by the industry include bureaucratic systems, approval procedures that are long and invariably lead to project delays, incompetence of both the design and the project teams, and insufficient tendering.¹⁸ However, vast resources, a well-educated workforce, and changes in government policies to address systemic shortcomings and allow foreign ownership and significant investment in infrastructure have attracted foreign investors in the oil and gas industry. This has made the oil and gas sector Vietnam's biggest foreign currency earner and one of the main importers of technology. Currently, this industry contributes US\$1 billion to the state budget every year. The number of employees in this industry has increased steadily from 2,000 in 1975 to 21,000 in 2005, 35,000 in 2009, 44,000 in 2010, and 60,000 in 2011.¹⁹

3.2 Fisheries Sector

Vietnam has a coastline of over 3,260 km. It has more than 3,000 islands and islets and up to 2,860 rivers and estuaries. These features provide Vietnam with ideal conditions for the fisheries sector to be successful. It has water bodies of 1,700,000 hectares (ha) (freshwater, 811,700 ha; brackish, 635,400 ha; coves, 125,700 ha; and wetlands, 300,000–400,000 ha)

that can be used by this sector.²⁰ Traditional fishing in Vietnam is comprised of *in-shore* (in rivers, lagoons and up to 4–5 NM from the coast) and *coastal* (up to the edge of the continental shelf) fishing.

It was only in 2007 that *offshore* fishing, under the “Program on Offshore Fishing of 1997,” driven by the country’s political aspirations to elevate itself to a status of “regional maritime power,”²¹ was developed. At the beginning of the millennium, in-shore fisheries represented about 70 percent of the catch, but by the end of 2007, offshore fisheries had caught up, representing half of all catches. These changes came about due to an increase in vessel size and the growing professionalism of fishermen.²² Today, Vietnam is the third-largest seafood exporter worldwide.²³ At an annual growth rate of 12.6 percent, the export value has risen from US\$2,444 billion in 2004 to US\$8,029 billion in 2014.²⁴ By 2012, more than 5 million people were directly employed by this sector, and around 8 million, or about 10 percent of the country’s population, derived their main income from fisheries.²⁵

Much of the growth in the fishery sector can be attributed to the growth of aquaculture (freshwater, approximately 65–70 percent; brackish water [mainly shrimp], more than 40 percent of the overall value of production; crab, marine fish, and mollusc, the remainder). The overall production of the fishing sector grew at an average rate of 7.05 percent from 1991 to 2000, and 10.25 percent from 2001 to 2010, while that of aquaculture increased from 30 percent in 1990 to 52 percent in 2010. This growth is attributed to a growing domestic market and a strong export market. With 500 processing centers qualified to export products to markets in Japan, the EU and the U.S., this sector is one of the fastest-growing of all sea-based sectors. Aquaculture has seen an increase in the total output from 2.07 million metric tons in 2007 to 3.19 million metric tons in 2017.²⁶

According to the “Master Plan” issued on August 16, 2013,²⁷ the total fisheries production is to reach 7 million tons by 2020 and 9 million tons by 2030, of which aquaculture production will account for 65 and 70 percent, respectively. The value of seafood export will be around US\$11 billion by 2020, with average growth rates of 7–8 percent, and then, by 2030, this value will reach US\$20 billion, with slower growth rates of 6–7 percent. Moreover, this sector is to provide training to 50 percent of fishery laborers by 2020 and 80 percent by 2030.²⁸

The current advancement of the fisheries sector has faced a number of constraints and deficiencies. These were primarily due to natural hazards, lack of awareness or knowledge (in what to catch and the available biologic resources), lack of fishing vessels (to handle various types of fish), underdeveloped shore facilities (such as storage, depuration facilities, “cold chain” facilities, and marketing facilities), lack of access to credit (to help fishermen purchase boats and equipment), low hygienic standards among farmers and processors (making the processing industry unacceptable to foreign markets), and lack of quality tools and chemical monitoring (thereby reducing output), to name a few. While most of these difficulties have been overcome, some are recurring, and there are some, like overcoming the mindset of people to “exploit” rather than “sustainably exploit,”²⁹ which remain to be addressed.

To assist in the development of this sector, the Vietnamese government has introduced several policies. These include generous credit lines for fishermen to build ships capable of offshore fishing, ensuring that all fishing vessels have information-communication devices to monitor and ward off illegal, unreported, and unregulated (IUU) fishing, building

support infrastructure including ports and shelters, and providing financial support to compensate for post-harvest losses. Further, various government policies have helped increase the number of iron-clad and wood-clad fishing vessels for offshore fishing. For entrepreneurs, government support and the possibility to diversify into clams, oysters, and mussels are big incentives. Furthermore, since the government plans to invest in developing ports and to integrate and modernize logistics services for fishing, the offshore fishing sector is likely to attract further investment.³⁰

3.3 Shipping Sector

The main components encompassing the shipping sector include *ships*, *ports*, and *shipbuilding*. For the comprehensive industrialization and modernization of a nation, a functional and developed shipping sector is considered essential. Such a developed shipping system lays the foundation for better integration of the country into the global economy and helps to provide a competitive edge in sea transport over regional and global players. Of these components, seaports are the interface between the world and the country for moving cargo and people. Ships are required to ensure the movement of this cargo and passengers to and from these ports, and shipbuilding ensures the availability of ships for domestic use and for foreign buyers.

In one of the main thrusts of the maritime strategy, the aim of the government is to restructure the shipping industry and expand the deadweight (dwt) capacity of the fleet to 6.8–7.5 million dwt. In addition, they plan to increase the seagoing cargo carried to 21–25 percent and passengers to 0.07 percent by 2020. This increase has helped the marine economy to expand in the fields of transportation, port services, and shipbuilding by 22 percent each year from 2007 to 2010 and by 13 percent from 2011 to 2015.³¹

With approximately 80 percent of global commodities being transported by sea,³² *ships* are considered the key mode of transportation. This has allowed them to become a major driver for the development of nations and globalization. With this in mind, Vietnam has paid due attention to the development of its maritime transport. According to the Vietnam Maritime Administration, the country had, by the end of 2018, a fleet of nearly 1,600 ships (dwt ~7.8 million metric tons) consisting of only 42 container ships, which put its fleet in fourth place among ASEAN countries and 30th in the world.³³ These ships can handle 144.5 million metric tons or 55.6 percent of total cargo handled in a year. They are mainly used for domestic trade,³⁴ with only 10–12 percent of total bulk cargo being carried on bulk carriers to Europe. Since the country lacks seagoing ships, the available ships are used for short hauls only.

To support larger ships, *ports* that can accommodate ships of 100,000 metric tons and modern container ships have been built, and existing ports have been upgraded to handle ships of 10,000 metric tons. Similarly, many international passenger ports and specialized ports for industrial parks have been built to attract investment and bolster the economy of coastal localities. Today, Vietnam has a total of 44 seaports, including 166 terminals through which cargo moves, accounting for 90 percent of its imports and exports by volume.³⁵ This has allowed the sea cargo throughput to increase from 172.97 million metric tons in 2012 to 293.14 million metric tons in 2018.³⁶ As for the available port infrastructure, the World Economic Forum ranks Vietnam's port infrastructure at 3.8 on a scale of 7, indicating that improvements need to be made.³⁷

Shipbuilding is considered to be one of the major industries in the economic development strategy of Vietnam. Accordingly, ambitious plans were adopted to improve competitiveness in the international market for shipbuilding and maritime transportation industries. The government decided to support the shipbuilding sector to make Vietnam one of the major shipbuilding nations to attract enterprises specializing in maritime facilities as well as in the production of high-grade components and materials.³⁸ From 2006 to 2010, the shipbuilding industry hired foreign experts to help Vietnamese shipbuilding to build big ships for export. This helped them build containers and bulk carriers of capacity 30,000 to 50,000 dwt and oil tankers of 100,000 dwt capacity.³⁹ Today, countries including the Netherlands (at Song Cam shipyard),⁴⁰ Poland (at Ha Long shipyard),⁴¹ Finland (at Pha Rung shipyard), Korea (through Hyundai-Vinashin)⁴² and Australia⁴³ build ships in Vietnam through active collaboration. Similarly, Vietnamese shipbuilding has been supported by various foreign design institutes such as Hitachi Zosen (Japan), Carl Bro (Denmark), Kitada Ship Design Co. (Japan) and CTO (Poland) and active marine equipment manufacturers such as Denmark's MAN B&W Diesel A/S, Mitsubishi Heavy Industries, Ltd. (MHI), Wartsila Switzerland, Ltd., the German firm Thyssen-Krupp AG, Finland's Macgregor Group, and the Danish Aalborg Industries.⁴⁴

3.4 Maritime Tourism Sector

The world over, the tourism industry is witnessing a boom. For Vietnam, from 1960 to 1975, tourism was developed for political reasons. It was only between 1976 and 1990 that its economic potential was realized. Since the 1990s, tourism has been supported as a tool of economic growth, a major source of job creation, and a means of poverty alleviation to help the country move from its focus on small-holding agriculture to a service-oriented economy that includes logistics, transport, trade, communication, services, and banking.⁴⁵ It has been estimated that in the core tourism industry, for every one job nearly 1.5 additional jobs are created in a related field.⁴⁶ In order to link the hinterland community with the coastal community for a holistic development of the nation, a number of initiatives are being made by the International Labor Organization (ILO). These initiatives are aimed at ensuring that poor and isolated communities can connect with the tourism industry and sell their hand-crafts. However, as of today, the 28 coastal cities and provinces are the ones generating 70 percent of the overall revenue.⁴⁷ Currently, the growth of tourism in Vietnam is mainly a result of urban transformations that have allowed FDI in the hotel industry.

Since Vietnam has 125 tourist beaches that boast the greatest sea and island potential among the Southeast Asian nations, in August 2013, the Ministry of Culture, Sports, and Tourism signed on to the project for "Development of Vietnam's Islands, Sea, and Coastal Region Tourism by 2020." This project has drawn a large number of foreign and domestic investors that account for 70 percent of the sector's total investment. Similarly, another area set for development by 2030 is cruise tourism. This sector in Vietnam is still in its nascent stages of development, as it has reported annual growth of only 2 to 3 percent, a contrast to the significantly higher rates of other Asian countries.⁴⁸

The challenges that the industry faces include the failure of local authorities to maintain pristine attractions, an increase in pollution and traffic, lack of personal safety due to robberies, thefts, and mugging, an increase of visa fees, and the high cost of accommodation and general travel. To address these challenges, the Vietnam National Administration

of Tourism (VNAT) initiated a capacity-development program with the EU-funded Environmentally and Socially Responsible Tourism (ESRT) in 2012.⁴⁹ This effort helped develop an action-oriented and practical strategic marketing plan to provide direction, priority, and finer detail to Vietnam's tourism marketing activities over the medium to long term. The objectives of this program as given in the "Vietnam Tourism Marketing Strategy to 2020 and Action Plan 2013–2015"⁵⁰ are as follows:

(a) *Economic*—To attract 10–10.5 million international visitors by 2020 (7.6 percent annual increase) and serve 48 million domestic tourists (5.3 percent annual increase) so as to increase tourism revenue to US\$18–19 billion by 2020 (at a 12 percent annual increment). This would contribute 6.5–7 percent of GDP, attract an investment of US\$42.5 billion and increase room supply to 580,000 rooms by 2020.

(b) *Social*—To increase employment in tourism to over 3 million jobs, of which 870,000 are to be direct jobs so as to improve the lives of the people.

(c) *Environmental*—Develop green tourism activities so as to preserve and promote the value of natural resources and environmental protection to comply with environmental laws.

3.5 Economic Zones

By the end of 2017, 18 *coastal economic zones* (where foreign investors are willing to locate production bases while exporting 100 percent of their production) had been established on a total area of 845,000 ha, with an investment of around US\$78.6 billion. These were in addition to the 58 centralized *coastal industrial zones* (to accommodate foreign and local companies to cater to domestic and export markets) spread over 13,600 ha, 27 border economic zones, and 325 state-supported industrial parks. The coastal economic zones generated US\$14.3 billion in 2017, as compared to USD\$8 billion in 2016, and brought in USD\$1.3 billion in tax. Along with the industrial zones, new settlements were created to cater to the workers' accommodations and facilities. Modern resorts and residential areas were built for professionals and managers. These all created at least 130,000 jobs.⁵¹

Even though there is public resentment in Vietnam regarding Special Economic Zones (SEZs), the Vietnamese government sees these SEZs as an important source of momentum for future economic growth and institutional reforms. This is due to the outstanding developments of other SEZs in China, the UAE, and Singapore. In addition, developments such as the need for fresh initiatives for maintaining domestic economic growth amid global changes due to the Fourth Industrial Revolution and new-generation trade agreements have forced the Vietnamese government to support these SEZs. Furthermore, this support has become essential, as the government has already offered favorable incentives for establishing SEZs but has failed to attract high-end manufacturers, new technologies, or modern management know-how.⁵² Retreating now is not an acceptable option.

3.6 Marine Education

Before 2006, Vietnamese human resources were widely regarded as inadequate, both in terms of quality and quantity, to address the growth of the maritime economy. The

management-level officials lacked professional skills, the sailors were considered fit for only coastal waters and the researchers and scientists were insufficient in number. In order to make corrections, the government issued several policies. The Ministry of Education and Training introduced incentives and support for college students or researchers coming from economically challenged coastal areas and islands. This allowed them to expand the list of majors related to “sea and islands” to a total of 20 at the undergraduate and graduate levels. Similarly, the Ministry of Labor Invalids and Social Affairs added 15 occupations to the existing list to support training. By 2016, training was provided to nearly 30 percent of eligible offshore fishermen (nearly 20,000 in total). With time, the number of vocational institutes increased to 90 colleges, 133 high schools and 454 centers. Many universities have added sea economy and management majors to their curriculums and some medical schools have started programs dedicated to training marine medicine professionals and doctors. Additionally, to provide technical assistance and technology transfer in the field of marine ecology and natural resources, the Vietnamese government has signed agreements with Japan.⁵³

3.7 Inland and Coastal Waterways

Vietnam has many inland waterways. Waterways have been used for the transportation of goods since the early civilization, and they continue to be used by nearly all countries to meet their domestic transportation requirements of goods and people. However, in most countries, due to continual neglect, the waterways have become constrained due to inadequate depth and width and unprotected banks. The same is the case with inland waterways in Vietnam. It is due to this degradation of waterways that expanding and preserving the road network uses close to 80 percent of public spending.⁵⁴ Understanding the potential of the inland waterways and the benefits they can provide to the nation and the environment, the Vietnamese government wants to develop the inland and coastal waterways.

Vietnam has 80,000 km of rivers of which 41,900 km are navigable. Of this, only 6,230 km are managed by the Vietnam Inland Waterways Administration (VIWA) and the rest by local governments. Though these waterways carry close to 17.8 percent of the total cargo of Vietnam and the government wants them to be developed, a lack of funding prevents their getting adequate attention.⁵⁵ While the target was to increase cargo-carrying by these waterways to 32 percent by 2020, this has yet to be achieved. In order to ensure better progress, the inland and coastal waterways are being privatized for both development and use.

IV. Impact of Policies on the Maritime Economy

In the foregoing discussion, the major policies of Vietnam to achieve economic growth by focusing on the maritime sector have been discussed. While the “Maritime Strategy Towards 2020,” adopted in 2007, and the “Maritime Strategy Until 2030, with Vision Until 2045,” adopted in 2018, are the two main guiding policies, they have been supported by numerous decrees, resolutions, and specialized laws to manage and implement the policies, strategies, schemes, and programs for the overall socio-economic development and security of Vietnam. Some of these are the “Law of the Sea of Vietnam” (2012), the “Law on

Sea and Island Natural Resources and Environment” (2015), the “Maritime Code of Vietnam” (1980 and amended in 2005 and 2015), the “Law on Fisheries” (2003 and amended in 2017),⁵⁶ the “Petroleum Law” (1993 and revised in 2000, 2008 and 2014), the “Law on Environmental Protection” (1993 and amended in 2014), the “Criminal Code” (2015), the “Law on the Vietnam Coast Guard” (1998 and amended in 2008 and 2018), and the “Law on Militia and Self-Defense Forces” (2009)⁵⁷ along with numerous other regulations related to the seas and islands. While the 2007 strategy aimed to make Vietnam a powerful and prosperous maritime nation by firmly ensuring national sovereignty and sovereign rights on the sea and islands, the 2018 strategy aimed to achieve the same goals as those of the 2007 strategy, by incorporating the concept of sustainability in line with those promulgated by the UN as part of SDG 2030.

Though the strategies laid out by Vietnam for growth using the maritime sector have been successful to a large extent, they have failed to achieve their full potential due to conflicts in the South China Sea (SCS) caused by a lack of resource-sharing treaties and delimitation of maritime boundaries. It is important to understand that these disputes have a “historical connect,” as is explained in the succeeding paragraphs. Such disputes have forced Vietnam to redirect a major portion of its available resources and efforts towards maritime security and dispute management rather than the realization of the maritime economy.

4.1 The Law of the Sea of Vietnam

Former South Vietnam was involved in developing UNCLOS until the unification of Vietnam in 1975. Subsequently, unified Vietnam continued the negotiations and was one of the initial signatories in 1982. Being one of the primary negotiators, Vietnam claimed the whole range of maritime zones, viz. a 12-nautical mile territorial sea, a 12-mile contiguous zone, and a 200-mile EEZ including a major part of the Gulf of Thailand and the Tonkin Gulf, as “historical waters”⁵⁸ and ratified UNCLOS well before any other country.

Under UNCLOS, coastal states can either bend the rules to maximize national interests or can justifiably interpret UNCLOS. Accordingly, initially, Vietnam followed the first approach and considered the Paracel and Spratly archipelagos as two distinct territories and stretched the “Law of the Sea” when defining its own coastline. It drew straight baselines along its coast using its islands, thereby subsuming huge areas of sea as internal waters where ships of other nations did not have a right of innocent passage. On a similar note, the waters of the Gulf of Thailand and the Tonkin Gulf were considered shared internal waters between two countries, while the strait of the Tonkin Gulf was considered internal “Chinese” waters. This radical interpretation of the “Law of the Sea” by Vietnam actually proved counterproductive, as it contributed to legitimizing the claims of countries like China by bending international law and giving rise to the maritime territorial disputes in the SCS.

Finally, the danger of stretching international law to benefit individual national interest was understood by Vietnamese legal experts in the early 1990s and this forced them to take the provisions of UNCLOS more seriously. This has forced them to accept and maintain that the islets of the Spratly Islands have only a 12-mile territorial zone. This realization has helped Vietnam to resolve differences with Malaysia and Thailand, and to complete negotiations with China concerning the delimitation of the Tonkin Gulf.⁵⁹

4.2 Regional Conflicts

Vietnam has a long coastline in the SCS and claims 29 islands⁶⁰ in this ocean space, the largest number of the many claimants in the region. However, with no formal delimitation or treaties for resource sharing with other claimant nations, conflict in the exploitation of resources of the SCS is natural. This has put Vietnam on a confrontational path with its neighbors, primarily China, on more than one occasion, due to overlapping claims creating a dispute for maritime territory, fisheries and hydrocarbons in the resource rich SCS. The naval bases in northern, central, south central and southern Vietnam are insufficient to address the existing maritime vulnerabilities of protecting its huge Exclusive Economic Zone (EEZ). To add to this, Vietnam has been involved in two major maritime disputes: overlapping sovereignty claims over the whole or parts of the Spratly Islands with China, Brunei, Malaysia, the Philippines and Taiwan and the dispute in the Gulf of Thailand with Malaysia and Thailand. These have thus forced Vietnam to focus on “marine economy” and “strategic utility” as a part of its maritime doctrine. Even though Vietnam follows a policy of dispute resolution through dialogue in the ambit of the international rules and regulation, in order to achieve recognition of its autonomy, Vietnam has stood up to China’s assertiveness in the SCS, as seen in the maritime crises of 2014, 2011–12, 2005 and 1994.⁶¹ While Vietnam has been assertive, it has maintained China to be its “comprehensive strategic cooperative partner” and conducted annual joint coast guard patrols in the Gulf of Tonkin, even though the territorial delimitation in the gulf was mutually resolved in 2000.⁶²

It is, however, essential to mention that if these disputes are not resolved at an early date, defending the citizens from natural disasters, protecting mangroves and corals, ensuring sustainable fishing, preventing pollution and climate change, and ensuring the development of a maritime economy for the prosperity of the people will be difficult.

4.3 Maritime Security

Since China has strengthened its maritime forces, Vietnam too has modernized and strengthened its navy and maritime law enforcement capabilities. With a belief in public participation in national security, the fisheries surveillance force, the marine militia, and the self-defense forces have been restored. These forces, along with the strengthened coast guard, defend the country’s maritime sovereignty, rights and jurisdiction, prevent illegal activities in the waters of Vietnam, and enforce the law in the EEZ and the Continental shelf so as to address non-traditional maritime security concerns such as piracy, IUU fishing, smuggling and the impact of climate change, while ensuring protection of the oil fields and oil extraction activities in the SCS.

In addition, to strengthen Vietnam’s maritime defense capabilities and increase its military credibility, a number of defense cooperation agreements with countries including the U.S., India, Russia, Japan, France, United Kingdom, Germany, and Italy have been put in place. This cooperation includes military exercises, purchases of military hardware, and cooperation in the construction of ships and submarines and is aimed at protecting Vietnam’s economic and strategic interests in the region to counterbalance the growth of China.

Knowing China’s growing might in the maritime domain, and to ensure that it does not offend China, Vietnam refrains from being part of any military alliance and has stopped

granting permanent access to its ports and facilities for foreign navies.⁶³ Furthermore, to tackle the issue with China, Vietnam has followed a multi-pronged strategy that includes (a) involving other affected countries for a joint response (Philippines, Malaysia), (b) creating an influence of effective negotiators (Indonesia and Singapore), (c) creating joint development zones (Malaysia, Cambodia), (d) creating a consensus of the regional states for a common front against China,⁶⁴ and (e) developing strategic partnerships with nations of the world so as to internationalize the conflict.

4.4 Reduced Sustainability

Maritime territorial disputes of the likes discussed in the preceding sections have created competition and standoffs between China, Vietnam, and the Philippines. The only cooperative mechanism among the three was from 2005 to 2008 and was allowed to expire due to political controversies. Since then, various discussions have happened, but none were conclusive. The task is even more complicated, as there is no provision for territorial disputes in UNCLOS like that for fisheries. Inability to resolve the impasse will hamper the economic growth and energy security of Vietnam since the oil and gas industry is largely responsible for a debt-free Vietnam, as discussed earlier.⁶⁵

Yet another area of impact of this maritime dispute is fisheries. With the SCS being the most productive fishing zone, seeing more than half of the world's fishing vessels, the region is prone to IUU, overfishing, clam harvesting, dredging for island construction, and other unsustainable means of resource harvesting. To add to these, oil and gas extraction in this region has increased the potential for environmental damage. These unsustainable means have destroyed coral reefs and depleted regional fish stocks. This is compounded by attacks, robberies, detainment, shooting, and sinking of fishing vessels due to the unresolved maritime territorial disputes in this region.⁶⁶ The entire SCS, including Vietnam, is thus in serious danger of an economic collapse due to prospective loss of livelihood for millions who depend on fishing for food and employment. There is hence a need for Vietnam and the other players in the SCS to address and stem this urgent decline.⁶⁷

4.5 Becoming a Regional Maritime Power

Due to its long coastline along the SCS and with the SCS being critical for both local and global maritime trade,⁶⁸ Vietnam's "Maritime Strategy 2007" gave a vision for Vietnam to become a "regional maritime power." Accordingly, Vietnam needs to exert control over its coast and influence maritime neighbors both near and far. The geographical location of Vietnam in the SCS is such that it can monitor and control the SCS. Accordingly, while its strategic location creates maritime security issues, it also offers a great opportunity for Vietnam to create bridges of maritime friendship with maritime powers such as the U.S., China, Japan, India, Russia, and Australia.

Furthermore, Vietnam realizes the importance of its location on the maritime trade route connecting the Pacific and Indian Oceans, and linking Europe, the Middle East, Africa, and Asia, and the need to ensure peace, stability, security, and freedom of maritime trade in SCS for the benefit of all. Hence, it is committed to a safe, secure, and peaceful SCS. Having been the chair of ASEAN (till November 2020) and also a non-permanent member of

the UN Security Council (2008-09 and 2020-21), Vietnam is a responsible nation and aims to ensure that conflict is avoided in the SCS with greater cooperation between the ASEAN nations.⁶⁹

Though Vietnam has been provoked by China on numerous occasions, its response has typically been calculated while at times being assertive and standing up to China's behavior. Realizing the importance, potential, and recent economic growth of Vietnam, the Trump-Kim summit of 2019 was hosted successfully in Vietnam.

4.6 Developing the Maritime Industry through Equitization

Vietnam began its effort towards equitization in 1990 but found the progress slow due to the economic, political, and social interests of various concerned parties regarding state-owned enterprises (SOEs). The equitization effort for Vietnam was implemented in phases. The first one was from 1990 to 1996, wherein only five small SOEs that dealt in the shoes, machines, food processing, and transportation industries were equitized. The next phase began in 1996, aimed at small and medium enterprises (SMEs), and succeeded in equitizing another 10 SOEs by 1997. In 1998, the government provided clearer and comprehensive legal regulations but kept strategic industries out of the equitization process. After 2004, another 856 SOEs were equitized with yet another set of rules. The SOEs that remained in 2013 were difficult to equitize, of which the maritime industry under the Ministry of Transport and Communication was one.⁷⁰

The equitization process for the maritime industries too began in 1996. Prior to 1996, the VINAMARINE (Vietnam National Maritime Bureau) was responsible for both regulation of and operations related to the maritime industry. However, as part of the restructuring, the operations related to all ships and ports were moved to VINALINES (Vietnam National Shipping Lines) and the shipbuilding industries were shifted to VINASHIN (Vietnam Shipbuilding Industry Corporation).⁷¹ This was done primarily to improve their performance. However, both VINALINES and VINASHIN continued to register losses.⁷² Finally, the prime minister approved the equitization plan to sell a part of the existing state shares of VINALINES on June 20, 2018. The new company would be called VIMC (Vietnam Maritime Corporation).⁷³ The government planned to expand VIMC's shipping business and brand name in the region by 2030. On the other hand, the government tried to make VINASHIN globally competitive by connecting it to R&D in 2006. Due to bankruptcy in 2010, VINASHIN was divided into three parts. The mechanical engineering going to Petro Vietnam, marine transportation to VINALINES and shipbuilding and auxiliary industries remaining with VINASHIN. This too did not help, and the government was forced to take over direct management. By 2013, of the total 234 businesses, eight subsidiaries gave birth to Shipbuilding Industry Corporation (SBIC), 69 businesses were equitized or sold, and the remaining 165 were sold, dissolved, or became bankrupt.⁷⁴ In 2017, SBIC reported their shipbuilding value at VND 3.071 billion, ship repair at VND 488.3 billion, and supporting industry at VND 264.5 billion, indicating that SBIC had been revived greatly by the efforts of the government in ensuring that businesses not related to shipbuilding are delinked from the industry.⁷⁵

Although SOE reforms are essential to restructure the Vietnamese economy for sustained economic development and to be internationally competitive, reforming SOEs is a

sensitive matter. This essentially requires government ownership in some sectors, such as shipbuilding, maritime transportation, tobacco production, and petroleum product distribution and production, as seen in Vietnam.⁷⁶

V. Discussion and Analysis

In the preceding sections, we have seen how Vietnam as a nation first addressed its internal economic policies to achieve economic growth. Due to these concerted efforts, it was able to transition from a low-income nation to a lower-middle-income nation by 2012. However, to sustain this transition and remain in the lower-middle-income group, a continuous effort on the part of policymakers was considered essential and required that they create new, sustainable sources of future growth. However, such sustainable sources were feasible only if the maritime sector was tapped for exploitation. This led policymakers to begin looking outward and at the maritime sector for larger economic growth and globalization.

While Vietnam has been a maritime nation in the past, over the years, due to inward-looking policies and technological advances, the nation did not exploit the maritime sector for economic benefits. It was only in 2006 that the land-based gaze was challenged, and necessary corrections through the “Maritime Strategy Towards 2020” (adopted in 2007), followed by the “Maritime Strategy Until 2030, with Vision Until 2045” (adopted in 2018) were put in place.

The need for creating greater opportunity for its people through the maritime sector has been adequately supported by the Vietnamese government through policies and both direct and indirect investment since 2006. These efforts allowed the maritime sector to become an engine of economic growth for the nation from 2007 to 2015. Realizing that the growth was unsustainable in the long run, the policy was revised in 2018, as the planned growth till 2020 was not likely to be achieved. Some anticipated and achieved growth rate figures that have forced a course correction are as follows:

(a) Before the maritime strategy was announced in 2007, sea-based activities contributed 48 percent to the national GDP. However, this share reduced to 40.73 percent in 2010 and 30.19 percent in 2017.

(b) The per capita income in the coastal localities expanded from US\$627 in 2006 to US\$3,035 in 2016. However, these figures are slightly below the national averages of US\$637 and US\$3,049, respectively. This resulted in the number of poor communes from the coast and island doubling from 157 in 2004 to 320 in 2014.

(c) The contribution of the fisheries sector to the GDP has reduced to below 2 percent.

(d) The contribution of the oil and gas sector to the GDP has reduced from 10.83 percent in 2007–2010 to 2.76 percent in 2017.

Though these figures are worrying, they can be and have been addressed. According to Professor Nguyen Chu Hoi, former deputy head of the Vietnam Administration of Seas and Islands, nine weaknesses in the implementation of the national marine strategy exist. These include⁷⁷:

- (a) Insufficient awareness among the people of the need for sustainability.
- (b) Small-scale sea-based economy.
- (c) Unsustainable exploitation of sea resources using outdated technology.
- (d) A mindset that is geared more towards hoarding and destruction than sustainability.
- (e) Increasing scarcity of marine ecology and biodiversity due to overexploitation.
- (f) Military issues in the South China Sea that force the nation and financial resources to be focused on marine defense and security rather than on the economy.
- (g) Late commencement of exploitation of coastal areas in 2007 as compared to terrestrial areas that have been exploited for many years.
- (h) Misguided investments of the state wherein funds are being spent for infrastructure in place of social welfare.
- (i) The limited investment capacity of foreign investors.

While these weaknesses need to be addressed, there are some areas of concern that inhibit the all-out growth of the maritime sector in Vietnam. It is hence essential that the concepts of “blue economy” and “sustainable” growth are made integral to the maritime development policy of Vietnam. The areas of concern are as follows⁷⁸:

- (a) Exploitation of marine natural resources has led to rapid degradation of the natural environment and exhausted available resources faster than it should have. Even the country’s key resources of oil and gas and fisheries have faced this issue.
- (b) The ongoing maritime sector development lacks coordination in both policymaking and implementation among the various stakeholders that include local areas, regions, and industries. This has resulted in the development plans being ineffective even after concerted efforts and all-out support from the government.
- (c) Inadequate infrastructure for a high population does not permit sustainable development and is threatening the marine ecology, leading to irreparable damage.
- (d) Outdated maritime assets, old ships, and limited funding to encourage digitization⁷⁹ are slowing the Vietnamese ports’ future industry compliance.⁸⁰
- (e) The merchant fleet of Vietnam consists of ships of more than 15 years of age. This has led their numbers to decrease from 1,600 in 2018 to 1,568 in 2019. The fleet is likely to shrink further if induction of new ships is not undertaken.⁸¹
- (f) Inadequate dredging and low depths discourage inland and coastal water transportation and prevent bigger ships from entering their ports.

VI. Lessons for Other Nations

Today it is an accepted fact that the maritime sector is an engine of growth that has the potential to contribute both directly and as a facilitator for the economic growth of a nation. While we have seen how Vietnam used this sector to bring about economic growth in their nation, there are lessons for other maritime countries who strive for economic growth by exploiting the maritime sector. These are some of the lessons:

- (a) The maritime shipping sector holds great promise as a result of globalization and increasing trade between nations. However, the U.S.–China trade war and the

IMO 2020 regulations for clean fuel have created a certain amount of uncertainty for this sector. This notwithstanding, shipping remains a promising sector for ensuring economic growth through infrastructure development, job creation, and an increase in both domestic and international trade.

(b) Ocean renewable energy is an area of high potential for creating jobs and opportunities for a nation's economic growth, especially keeping in mind the agreed-upon UN-SDG 2030.

(c) Developing a sustainable and controlled fishing sector has the potential of creating not only jobs but also foreign revenue through exports. The ancillary industries of food processing, packaging, and export houses are some areas wherein economic growth can be targeted.

(d) Tourism is a major area that has the potential to attract foreign investment and foreign exchange around the year. However, care is to be taken that the development of tourism should not be *ad hoc* but planned. This is to ensure that the development to follow is sustainable, or else it may not be long-lasting due to pollution that has the potential to drive away tourists.

(e) Shipbuilding is another industry that can bring about major economic growth for a nation. This is possible through the development of various support industries for shipbuilding. These support industries could be a result of foreign direct investment (FDI), collaborations with multi-national corporations (MNCs), or domestic industry involvement. The success of the shipbuilding industry in a nation is highly dependent on support from internal demand for ships that are primarily dependent on internal trade. The larger the spread of the country, the greater is the expected internal trade and the commensurate need for strengthening maritime routes.

(f) There is a need for government support to encourage, develop and support maritime industries both through economic stimulus and policy recommendations.⁸² If the requisite support is not there, the suitable impetus for development would not exist, and the maritime domain would not act as a growth engine.

(g) Port development is another area that needs to be targeted. One needs to remember that with Shipping 4.0 and Port 4.0 gaining a foothold in the maritime industry, growth in port infrastructure and facilities would attract cargo movement. However, while investing in ports, it is essential that a detailed study of the prevailing market and the capacity of existing ports is undertaken, or else competition with already established hubs could lead to overcapacity and, eventually, economic loss in the venture.

(h) In all these sectoral developments, the involvement and development of the population in the hinterland must not be forgotten. After all, the hinterland population provides the actual bread through crops, industries, fruits, and vegetables for the sustenance of the country's population. If the hinterland people are forgotten, they too will move to the coastline to be a part of the economic growth through the maritime industry, thereby starving the nation for food and increasing the import spending of the nation to import the much required food grains.

(i) The models of growth and infrastructure followed in terrestrial regions cannot be followed blindly for similar growth in the coastal zones. The coastal

zones, being ecologically fragile, have to be handled with care while ensuring that coastal facilities are independent, complete, and self-sufficient.

(j) Inland and coastal waterways are essential for a nation to ensure economic and environmentally friendly movement of both cargo and people. Developing these waterways can be costly and hence may require the participation of private players.

(k) Last but not least, since no economic model is foolproof or able to bear the fruits of growth forever, the maritime sector too must be considered an “engine for economic growth” that cannot be taken for granted and is not self-sustaining. Simply put, the maritime domain can infuse life in the economy of the nation but cannot ensure that the economic growth to follow will continue forever.

VII. Conclusion

The economic growth of Vietnam since the time Doi Moi was implemented has been astounding and has brought economic prosperity to the nation. This economic growth allowed the country to look outward, wherein maritime growth became essential. Realizing the potential of the maritime sector, the government implemented the maritime strategy in 2007 and supported it with numerous other policies to use the sector as an engine of economic growth. Since then, the maritime sector has provided the necessary impetus and growth.

However, since the targeted growth was not achieved as planned due to certain weaknesses in the implementation of the strategy, as well as economic and political concerns, a revised strategy was promulgated to continue using the maritime sector as the economic growth engine for the nation. This article has discussed the developments made and the downsides of this growth. It has also discussed a way ahead for ensuring sustainable growth for Vietnam and for countries interested in using the maritime sector as an engine of growth for the economic growth of their country.

Vietnam as a nation has a huge dependence on the maritime domain due to its long coastline. This dependence is from both economic and security points of view, neither of which can be ignored. While the nation puts in serious effort towards developing and implementing strategies for sustainable economic development for its economic prosperity, it needs to ensure that it does not lose focus on the threats emerging in and from the maritime domain. Though Vietnam has preferred to follow the policy of the “three nos” (refrain from being part of any military alliance; refrain from entering alliances with foreign powers to balance another country; and refrain from granting permanent access to ports or facilities for use by foreign nations), it still needs the support of the world community to address the overtures of its strong neighbor China and thereby ensure harmonious relationships with countries including Russia, the U.S., the EU, India, Japan, South Korea, and Australia.

On the technology front, on many occasions Vietnam has accepted the support of the international community for a way ahead in establishing a strong maritime economy through joint ventures, transfers of technology, financial support, higher education, etc. This approach needs to be continued to solve problems related to improvements in science and technology, human resources, and the application of international laws. However, to realize the full potential of sustainable marine development along with the support of the

international community, awareness of the people and a change in their mindset towards the marine environment and marine industries is essential. Such a change needs to be initiated from within the nation.

On a similar note, while some lessons learnt from the Vietnamese experience have been discussed in the article for other aspiring nations to emulate, they are not “copy-paste” solutions but will have to be tweaked to meet the aspirations and limitations of the nation and its people prior to implementation.

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Biographical Statement

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