

## ANALYSIS ON THE VOLUME OF VIETNAM'S SEABORNE TRADE IN THE CURRENT STATE

### ĐÁNH GIÁ THỰC TRẠNG KHỐI LƯỢNG HÀNG HÓA NGOẠI THƯƠNG ĐƯỜNG BIỂN VIỆT NAM

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#### Abstract

*It would appear that the diversification in method of international transport has made global trade much easier. With the outstanding advantages of cargo volume, shipping costs and safety for goods, sea transport always accounts for a high proportion in the export and import activities of coastal countries. The United Nations Conference on Trade and Development (UNCTAD) estimates that roughly 80 percent of global trade by volume and 70 percent by value is transported by sea. Therefore, today, seaborne trade is the main method of foreign trade in Vietnam and the world. In recent years, the volume of seaborne trade in Vietnam has increased significantly in terms of both exports and imports. Among the three main categories of seaborne trade, dry bulk and containerized goods both accounted for large proportions and had impressive growth. Liquid bulk has the lowest proportion in seaborne trade, liquid products for export have fallen sharply in recent years while liquid products imports have tended to increase.*

**Keywords:** Seaborne trade, seaborne exports, seaborne imports, Vietnam.

#### Tóm tắt

*Dù các phương tiện vận chuyển hàng hóa giữa các quốc gia ngày càng phong phú và đa dạng nhưng với những ưu điểm vượt trội về khối lượng hàng hóa, chi phí vận chuyển và độ an toàn đối với hàng hóa, đường biển vẫn luôn chiếm tỷ trọng cao trong hoạt động xuất và nhập khẩu của các nước có biển. Hội nghị Liên hợp quốc về Thương mại và Phát triển (UNCTAD) ước tính rằng khoảng 80% thương mại toàn cầu tính theo khối lượng và 70% giá trị được vận chuyển bằng đường biển. Chính vì vậy, hiện nay, phương thức ngoại thương đường biển là phương thức ngoại thương chủ yếu ở Việt Nam cũng như trên toàn thế giới. Trong thời gian qua, khối lượng hàng hóa*

*ngoại thương đường biển Việt Nam tăng đáng kể cả về khối lượng hàng hóa xuất khẩu và nhập khẩu. Trong ba loại hàng chính của ngoại thương đường biển, hàng khô và hàng container đều chiếm tỷ trọng lớn và tăng trưởng ấn tượng. Loại hàng lỏng có tỷ trọng thấp nhất, hàng lỏng xuất khẩu giảm mạnh trong thời gian qua trong khi hàng lỏng nhập khẩu thì có xu hướng tăng.*

**Từ khóa:** Ngoại thương đường biển, xuất khẩu đường biển, nhập khẩu đường biển, Việt Nam.

#### 1. Introduction

During more than thirty years of renovation, Vietnam made the remarkable achievements in socio-economic. The role of foreign trade in these developments could not be denied. Especially in the current period, when the global commercialization is an inevitable trend in the world, foreign trade affirms its important role in the economy. It is estimated that roughly 80 percent of global trade by volume and 70 percent by value is transported by sea [2]. Walk into any shop, and much of what you see will have come from overseas. Between 1950 and 2005 sea trade grew from 0.55 billion tons to 7.2 billion tons, an average of 4.8% per annum. This expansion was the result of the most fundamental redesign of the world's political and economic arrangements since industrial revolution [1]. Therefore, research on seaborne trade is an urgent issue nowadays, not only for Vietnam but also the countries with sea borders in the world. In seaborne trade, both volume and turnover are important indicators which represents the scale and structure of this foreign trade method. In this paper, the author choose analysis on the volume of Vietnam's seaborne trade.

The main purpose of this research is to find out the trend and fluctuatiions in the development of seaborne trade in Vietnam in the current state. This volume indicator directly affects to the seaborne trade turnover, through the factor price. In other words, this research is the predominant basis in

offering specific solutions in different seaborne trade markets. Also, this study would be useful in implementation the diplomatic and foreign policies, even the free trade agreements.

## 2. The volume of Vietnam's seaborne trade in the current state

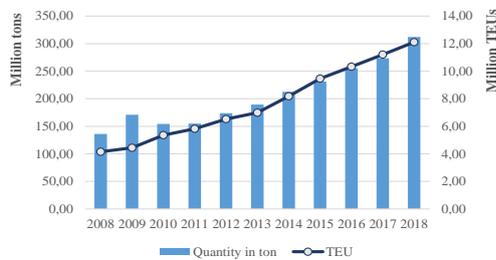


Figure 1. Fluctuations in the volume of seaborne trade [3]

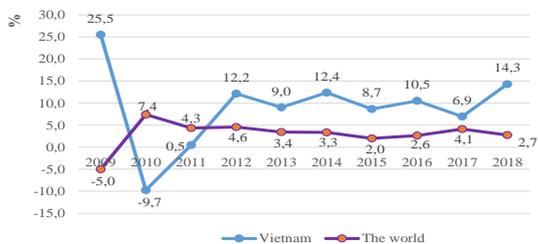


Figure 2. Fluctuations in the growth rate of Vietnam's seaborne trade volume and the world's [2] [3]

As can be seen, the figures show that the seaborne trade volume of Vietnam increased over the past ten years, the same trend as the volume of world seaborne trade. The cargo volume of seaborne trade in Vietnam increased 2.3 times from 136.09 million tons in 2008 to 312.28 million tons in 2018. The global financial and economic crisis did not affect Vietnam's seaborne trade, the volume still surged, even at the highest rate in the studied period, reaching 25.5%, while the volume of world seaborne trade decreased by 5%. Driven by the growing international division of labor and productivity in the industry, container trade, this cargo segment grew rapidly, up nearly three times, from 4.15 million TEUs in 2008 to 12.11 million TEUs in 2018.

Regarding the growth rate, it can be said that the growth rate of Vietnam seaborne trade volume was significantly higher than the world, with an average of 9%/year and 3%/year for the whole period. The reason is that according to statistics in recent years, 60% of the world's exported goods come from developing countries, and 50% of seaborne imports come from developing countries' ports [6]. More importantly, these countries are not only the source of raw

materials, but also a key player in globalization of production and are also an increasing source of demand. In particular, developing countries in Asia continue to account for the largest share in the seaborne trade of developing countries in general. Vietnam is a developing country with a strategic position in the continental geography.

## 3. The volume of Vietnam's seaborne exports in the current state

### 3.1. General assessment

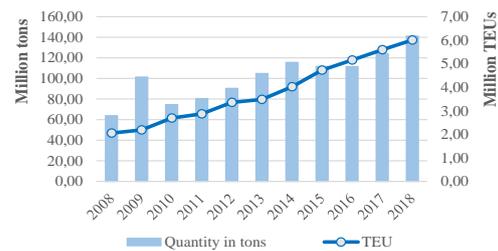


Figure 3. Fluctuations in the volume of seaborne exports in Vietnam across time [3]



Figure 4. Fluctuations in the growth rate of Vietnam's seaborne export volume and the world's [2] [3]

The statistic represents the Vietnamese seaborne exports volume reached 63.73 million tons in 2008, an increase of 2.2 times in the past 10 years, reaching 141.11 million tons in 2018.

With regard to the growth rate, the growth rate of Vietnam's seaborne export volume fluctuated around the world's and the average rate in the latter period was higher than in the first period. But in terms of the average of the whole period, the growth rate of the world seaborne exports volume (reaching 3%/year) was lower than that of Vietnam (reaching 8%/year) caused by the peak in 2009 (59.1%).

For container seaborne export, this volume experienced a strong rebound driven by an increase in demand on most trade routes. In 2010, the volume of trade in containers rose by 22.8% compared to 2009,

one of the highest growth rates in the history of containerization.

### 3.2. Vietnam's seaborne export volume by cargo types

Table 1. Fluctuations in the volume of seaborne exports by cargo types

Cargo types	Units	2008	2012	2015	2018
Container	10 <sup>6</sup> TEU	2.05	3.36	4.73	6.01
	10 <sup>6</sup> Tons	19.10	32.38	46.81	60.89
Liquid bulk	10 <sup>6</sup> Tons	13.50	9.77	8.73	5.29
Dry bulk	10 <sup>6</sup> Tons	31.13	48.20	56.24	74.93
Sum	Tons	63.73	90.34	111.8	141.1
	TEU	2.05	3.36	4.73	6.01

(Source: Vietnam Maritime Administration)

It can be seen that Vietnam's seaborne exports were divided into three main types: container, liquid bulk and dry bulk. In which, dry cargo volume accounted for the largest proportion and tended to increase in the period of 2008-2018, on average 56 million tons/year. Following was the volume of container cargo with the same fluctuating trend, averaging 38.39 million tons/year. In contrast, liquid cargo had the lowest percentage and tended to decrease over the past 10 years, on average 10.32 million tons/year. Here, the author will give a detailed analysis of each type of goods.

Regarding dry bulk, seaborne trade of dry bulk cargo include bulk cargoes (coal, ore, alumina), foodstuffs, general goods. Coal is exported mainly to the Middle Sea (Northeast Asia) and the near sea (China, Southeast Asia).

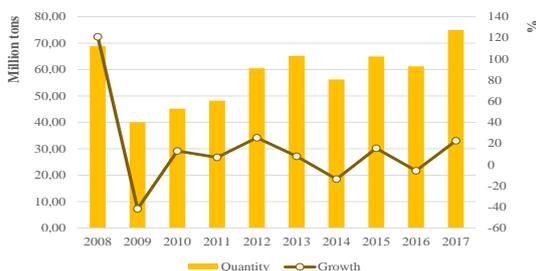


Figure 5. Fluctuations in the volume of dry bulk seaborne exports and the growth rate [3]

The historic contraction of 2009 in world trade and GDP negatively affected all shipping segments, except dry bulk volumes, due to strong Chinese demand for coal and iron ore. China's cabinet approved a massive stimulus package worth (\$586

billion) through 2010 to boost domestic demand. In this period, the Chinese government also closed many domestic mines which were considered the main cause of serious environmental pollution in this country. In the later study period, 2015, seaborne exports of dry bulk decreased by 8.9 million tons, or 13.7%, due to the slowdown of China's domestic infrastructure construction.

Regarding container exports, Vietnam's seaborne container trades with far sea (Europe, America), middle sea (Middle East, Africa, Northeast Asia, Oceania) and near sea (Southeast Asia, China, Taiwan and Hong Kong). The collected data indicated that, in Vietnam, the volume of seaborne container exports tended to increase in the past 10 years. This was also the only commodity with a non-negative growth rate during the studied period but the speed slowed down. This was due to China's policy to promote the value chain in the global production of low value goods to move to other low-cost production locations, including Vietnam. Furthermore, containerization is the most optimal method of shipping cargo to save transportation costs, ensure the safety of goods, contribute to facilities modernization and improve labor productivity. However, the growth rate of container shipping slowed down in the period 2013-2018, there are three reasons: first is the decline in volume on the route of East Asia - Europe trade route; second is the limited growth of North-South trade, because of the impact of falling prices by terms of trade and the purchasing power; third is intra-Asian trade pressure arising from China's decline.

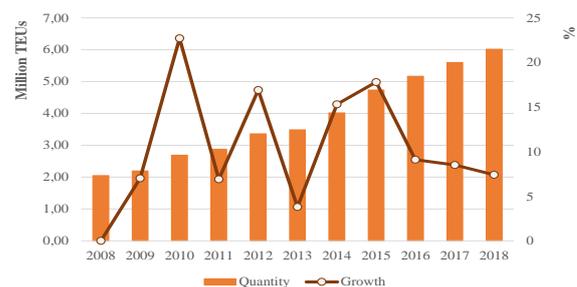


Figure 6. Fluctuations in the volume of container seaborne exports and the growth rate (by TEU) [3]

Regarding liquid bulk, Vietnamese liquid seaborne exports are mainly crude oil. Crude oil was exported by sea mainly to the middle sea (Russia, Japan, Korea, Australia) and nearby sea (China, Asean), of which China is the main market, accounting for 40-60% total crude oil exports,

followed by Southeast Asia with 30-40%. Crude oil always played a strategic role in Vietnam's exports (especially before 2009). Foreign currency brought from crude oil exports is very important to trade deficits recorded in Vietnam, helping to meet a significant part of the foreign currency demand for imports and international payment transactions such as paying the foreign debts.

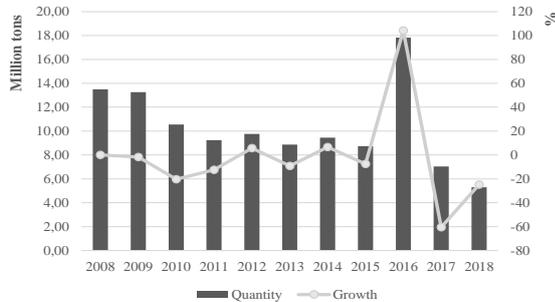


Figure 7. Fluctuations in volume of seaborne liquid trade and growth [3]

The volume of liquid cargo exported by sea tended to decrease over the past 10 years. The reason is that the oil reserves, the main commodity in the liquid cargo exports, are decreasing. The mines of Bach Ho, Su Tu, Lan Tay,... after 30-40 years, have passed their peak of exploitation, while the new mines have just been put into operation slowly due to their small size and lack of capital.

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**4. The volume of Vietnam’s seaborne imports in the current state**

**4.1. General assessment**

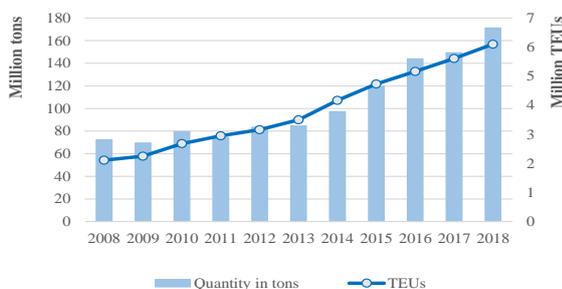


Figure 8. Fluctuations in volume of seaborne imports [3]



Figure 9. Fluctuations in the volume of Vietnam’s seaborne imports and the world’s [2] [3]

The volume of imports by sea in Vietnam grew by 2.4 times in the studied period, from 72.36 million tons in 2008 to 171.17 million tons in 2018. It can be seen that, in recent years, the amount of imported seaborne goods expanded rapidly, equal to the amount of goods exported by sea. This development reflected - in particular - improvements in the global production system, where products processed was increasingly moving to developing countries like Vietnam. In addition, strong industrial growth in emerging market economies (such as Vietnam) also stimulated demand from raw materials to component parts used in production of inputs. Regarding the growth rate of Vietnam's seaborne imports, fluctuated quite strongly compared to the world stable rate, the average speed of the whole period (9,4%/year), three times higher than the world’s (2,9%/year). The growth in seaborne imports also reflected the emergence of developing countries such as Vietnam - a major source of demand for seaborne imports and exports due to increased demand for consumer goods which required more sophisticated and diversified seaborne imports.

**4.2. Vietnam’s seaborne import volume by cargo types**

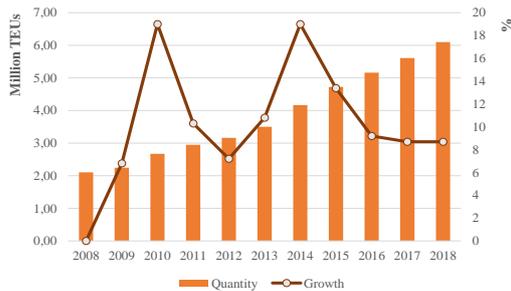
Table 2. Fluctuations in the volume of seaborne imports by cargo types

Cargo types	Units	2008	2012	2015	2018
Container	10 <sup>6</sup> TEU	2.11	3.16	4.73	6.10
	10 <sup>6</sup> Tons	24.69	36.97	53.44	73.44
Liquid bulk	10 <sup>6</sup> Tons	16.31	17.82	22.39	21.91
Dry bulk	10 <sup>6</sup> Tons	31.37	28.57	43.60	75.83
Sum	Tons	72.36	83.36	119.43	171.17
	TEU	2.11	3.16	4.73	6.10

(Source: Vietnam Maritime Administration)

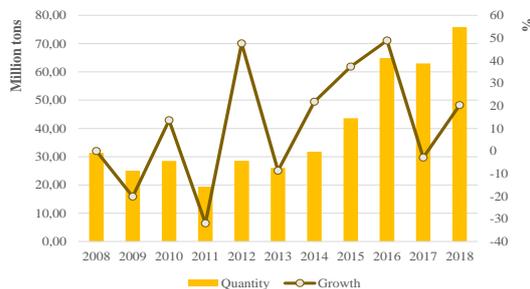
In the period of 2008-2018, seaborne imports were also divided into three main types: container, liquid bulk and dry bulk. The volume of container trade ranked first in seaborne imports and has tended to grow in recent years, from 24.69 million

tons in 2008 to 73.44 million tons in 2018. Followed by dry bulk volume, reaching 31.37 million tons at the beginning of the period, an increase of 2.4 times to 75.83 million tons at the end of the period. Lastly, liquid bulk cargo, with the lowest volume of seaborne imports, went up in the past 10 years, from 16.31 million tons in 2008, raised gradually year by year to 21.91 million tons at the end of the period.



**Figure 10. Fluctuations in the volume of container seaborne imports and the growth rate [3]**

Concerning container trade, the volume, growth rate and proportion of container cargo all ranked the first in three types of seaborne imports. That was because containerization has been the most optimal method of shipping cargo to save transportation costs, ensure the safety of goods, contribute to facilities modernization and improve labor productivity. In particular, Vietnam, one of the emerging markets, remained the key exporters and importers in the research period. They continued to be a great source of demand for consumption and a key role in global manufacturing process.

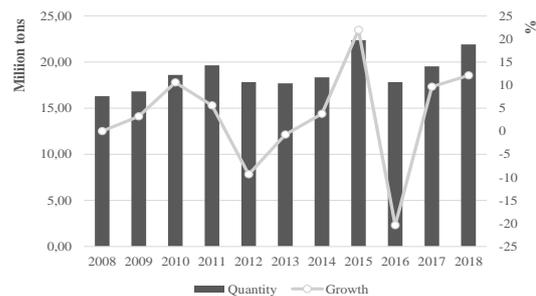


**Picture 11. Fluctuations in the volume of dry bulk seaborne imports and the growth rate [3]**

Concerning dry bulk, Vietnam's seaborne dry bulk imports are bulk cargoes, namely coal for thermal power generation and ore coal for metallurgical complex. In addition, fertilizers and general goods are

also main dry bulk products imported by sea. Dry bulk seaborne imports are mainly from the middle sea (Australia, Russia), and nearby sea (Indonesia). Imported sea ores are mainly used for large-scale iron and steel refining facilities, from the middle sea (Russia) and the far sea (South America).

This impressive development of seaborne dry bulk imports in all of volume, growth rate and proportion was due to the ongoing strongly industrial growth in Vietnam, one of the emerging economies.



**Figure 12. Fluctuations in the volume of liquid bulk seaborne imports and the growth rate [3]**

Concerning liquid bulk, the Vietnam's seaborne liquid bulk imports are crude oil, oil products, and liquefied gas. Crude oil is mainly imported by sea from the middle sea (Middle East, Africa) and far sea (South America). Imported oil products were mainly from the middle sea (Russia, Japan, South Korea) and nearby sea (Southeast Asia).

Although the volume and the growth rate went up in recent years, liquid seaborne imports still ranked the lowest among the three main types of seaborne imports. Today, it can be said that developing countries like Vietnam are no longer a source of raw materials and fossil fuels, but also play a major role in the global production process, be a source of increasing energy demand (includes raw materials such as oil) and also depends on seaborne imports to meet these demand. In addition, since 2012, the Dung Quat factory invested by PVN has changed to technology using imported crude oil (sour oil) instead of Bach Ho sweet oil because of the lower price. The amount of crude oil imported by sea is expected to continue to go up in the next several years to serve Nghi Son Refinery and Petrochemicals, a national key project that started operations in 2018 with large capacity, diversified and abundant petrochemical products. Also during the studied period, natural gas (LNG) imports rose rapidly - one of the reasons for the increase in seaborne liquid

bulk imports in recent years, reflecting the enlargement of industrialization demand. In the past 10 years, LNG - liquefied natural gas (accounting for 24% of world energy consumption, after oil and coal) has been considered a cleaner source of fossil fuels with low-carbon content. Natural gas is emerging as an attractive fuel source, more eco-friendly than other fuels. LNG is considered as a viable alternative to nuclear energy.

## 5. Conclusion

In conclusion, the volume of Vietnam's seaborne trade increased and the growth rate of Vietnam's seaborne trade volume was significantly higher than the world's. Vietnam's seaborne exports were divided into three main types: container, liquid and dry. Container trade grew strongly in size and accounted for a high proportion. For seaborne exports, all types volume rose, except liquid bulk. For seaborne imports, with an increasing volume and proportion, container cargo ranked the first in all types of goods. This is also the global advanced packaging trend because of its outstanding advantages.

Although the volume of seaborne exports has increased in recent years, the overall growth rate as well as of each type tended to decrease, especially dry bulk cargo (bulk cargo (coal, ore, alumin), food products, general goods) and liquid bulk (mainly crude oil). Because, firstly, the main export market of seaborne dry bulk was China, which nation has changed its policy in recent years: reducing investment in construction and infrastructure that greatly affected Vietnam's seaborne dry exports. Secondly, the seaborne liquid cargo was predominantly crude oil, because the oil exploitation reserves were decreasing after 30-40 years. Therefore, the volume of seaborne liquid export has decreased both in size and proportion in recent years. Last, the amount of seaborne imports has increased both in size and growth rate in recent years. The main reason is that Vietnam has been an emerging country that was gradually becoming an exporter and importer. Therefore, Vietnam is now a source of great demand for consumption and a key role in the globalization of production. The consequences of this globalization are an increase in demand for industrial cargoes and energies (dry bulk, liquid bulk, container) as well as consumer goods and processed products (container cargo), production facilities and urbanization (dry goods, liquid cargo).

This paper reports the advantages and the limitations with its main causes in the volume of Vietnam's seaborne trade in the period of ten years. From the above results, this research is an important premise in finding solutions for Vietnam's seaborne trade development in the future.

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