Portugal and the Sea: Recent Evidence of Blue Economy

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To my dear brother Jorge, a passionate about the sea!

ABSTRACT: Starting from an introductory framework of the historical links of Portugal with the sea as well as of its influence on the international relations of the country, this article aims to illustrate the significance of the Sea or Maritime economic activity sector in the Portuguese economy and its recent evolution. Data from the Central Balance Sheet (CBS) of Banco de Portugal (BdP) on the general characteristics, dimension, location, age, economic and financial indicators for the enterprises pertaining to the sector are presented and then compared to those of the whole non-financial corporations (NFCs) in Portugal. References to the strategic importance of the sector for the Portuguese economy in the near future and its role in European and worldwide contexts conclude.

KEYWORDS: blue economy, central balance sheet, economic and financial indicators, enterprises, international relations, Sea economic activity sector.

1. INTRODUCTION

This article has the main purpose of presenting the principal characteristics and economic and financial indicators of the enterprises included in the Sea or Maritime economic activity sector, as made available by the Central Balance Sheet (CBS) of Banco de Portugal (BdP), their relevance within the institutional sector of the non-financial corporations (NFCs) of the Portuguese economy and recent evolution.

With the aim of illustrating the importance of the sea for the country, a quick tour on the influence it played in the history of Portugal and its international relations is initially provided.

2. A BIT OF HISTORY AND INTERNATIONAL RELATIONS

Portugal is signaled in the literature as the country of maritime discoveries, with its history linked to the sea. The relevance of the geography in the history of Portugal is, according to Cunha (2011), a fact that had undoubtedly a greater weight than in other European countries. From the outset, the condition of finisterra in mainland Portugal and the uneasy relations with its single terrestrial neighbor already since the birth of the nation in the XII century, made the country to choose for a long time between the sea and isolation.

In the XV century, with Infant Dom Henrique, the Navigator, capturing Ceuta in order to control the commercial routes of North Africa, the narrative of Portuguese conquests initiated with the discovery of new seas and lands that, benefiting from the then existent Mare Clausum principle, increased the European continental limits of the Portuguese crown. The maritime discoveries included Madeira, Azores, the West African coast, the route to Orient and Brazil, and brought spices, preciousness, gold and raw materials to the country, which maintained an overseas empire of adjustable dimension across time until the third quarter of the XX century.

During the Estado Novo regime, exploring the maritime nature of Portugal was preferred to a more direct involvement in European issues namely the participation in the two world wars. The development of a set of economic sectors and related activity, like distant fishing, naval building and maritime transport, was a key pillar (Cunha, 2011).

1 This article uses information of a public nature, and the analyses, opinions and findings expressed represent the personal views of the author that do not necessarily coincide with those of Banco de Portugal or the Eurosystem. Any errors and omissions are the sole responsibility of the author.
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Years later, with the revolution of 1974, a healthy social rise of various segments of society was accompanied by the rejection of the traditional economic sectors seen as unattractive including agriculture, fisheries and also the merchant marine exploration implying long absences from home. The reality of geography was by the end of the XX century replaced by the political movement to adhere to Europe.

Due to its physical location at the western end of Europe, Portugal has since early on seized benefit from the ocean not only as a strong component of its economic expansion, but also within the role it played in the country’s international relations. These were, in line with Pereira (2018), historically developed around three main pillars, the Portuguese-language, the Atlantic and Europe.

The Portuguese space on a global scale was mainly materialized in the special relationship with the Portuguese-speaking African countries and with Brazil and East Timor, now part of the Community of Portuguese Language Countries (CPLP, in the Portuguese acronym).

The Atlantic assures Portugal a geostrategic centrality that it otherwise would not have as a peripheral country in the European context (Pereira, 2018). Positioned between the North and the South Atlantic, in the middle of the Mediterranean and the Atlantic, amid Europe and the Americas and Africa, Portugal has relevance through its participation in the EU, the Atlantic Alliance, the CPLP and the Ibero-American Conference. Belonging to the Euro-Atlantic space and to the North Atlantic Treaty Organization (NATO) also ensured Portugal the strengthening of ties with countries historically important economic and strategic partners, like the United Kingdom and the United States of America.

Since joining the then European Communities (EC) in 1986, Portugal has consistently been a country deeply committed to building and deepening the European project, which contributed to its modernization, development and to the consolidation of its democracy. At the same time, a growing presence at the multilateral level in various organizations and an increasingly internationalization of Portugal has been observed in capacities like language, culture and cooperation, alongside with exports and other economic ties.

3. BLUE ECONOMY RECENT EVIDENCE

The sea has always been one of the main assets of the Portuguese economy, and in the first semester of 2021, within the Portuguese Presidency of the Council of the European Union, a particular importance was assigned to the development of the blue or ocean economy.

Portugal, with a coastline of 1187 km, represents in terms of land extension a relatively small country with just over 92,000 km². Considering its maritime dimension, Portugal is however one of the largest countries in the world, with almost 4 million km², where the marine territory is 40 times larger than the terrestrial one.²

The quantification and analysis hereinafter of the Sea or Maritime economic activity sector and its importance in the whole of NFCs in the Portuguese economy is based on the economic and financial indicators used by the CBS of BdP (BdP, 2015).³

The Maritime sector is made up of enterprises or companies pertaining to the non-financial corporations institutional sector of the economy,⁴ whose main activities are directly related to the sea and classified within the following sector’s segments: “Fishing and related activities” (designated as Fishing), “Building, repair and maintenance of ships and boats” (Building) and “Sea and coastal water transport” (Transport).

In 2020, the Sea sector was made up of around 2900 NFCs (Figure 1), exhibited a business volume of more than 4500 million euros (Figure 2) and employed roughly 28 000 persons (Figure 3). Since at least 2011, the evolution of the Maritime sector, as measured by the three variables - number of corporations, turnover and number of employees - has shown encouraging, although some reduction in the turnover and number of employees was noticed in 2020. This is probably due to a contraction of activity and employment associated to the effects of the COVID-19 pandemic in the Portuguese economy.

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² Portugal awaits the response from the United Nations to the proposal submitted in 2009 for the extension of its Continental Shelf (CS). Portugal ratified in 1997 the United Nations Convention on the Law of the Sea (UNCLOS), which is the basis for the establishment of the maritime limits inherent to the Exclusive Economic Zone (EEZ) and the CS of a country. The EEZ is the space that extends up to 200 nautical miles (one nautical mile corresponds to 1852 meters) beyond the baseline. According to certain geological and legal criteria established by the UNCLOS, it is possible for a coastal state to extend the area of its CS beyond 200 miles. The rights are exclusive, in the sense that if the coastal state does not explore the CS or take advantage of its resources, no one can do so without its express consent (Eurocid, 2021).

³ The CBS of BdP manages a database with economic and financial information on NFCs in Portugal. Data relies on annual accounting reported within the scope of Simplified Corporate Information and quarterly accounting through the joint Instituto Nacional de Estatística and BdP Quarterly Survey of Non-Financial Corporations.

⁴ Based on the European System of National and Regional Accounts (ESA 2010), the NFCs institutional sector excludes sole proprietors.
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Figure 1. Number of corporations in the Sea sector
Source: Central Balance Sheet of Banco de Portugal

Figure 2. Turnover in the Sea sector (million euros)
Source: Central Balance Sheet of Banco de Portugal

Figure 3. Number of employees in the Sea sector
Source: Central Balance Sheet of Banco de Portugal
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Comparing to the whole sector of NFCs in the economy of Portugal, the Maritime sector represented in 2020 0.6% of the number of corporations, 1.3% of the business volume and 0.9% of the people working, relative values that have presented somewhat stable since 2010.5

The evolution pattern of the annual rate of change (arc) of the number of enterprises of the Sea sector has been similar to that of NFCs until 2015, the first sector offering even slightly higher rates as compared with the second, but showing lower rates as from 2016 (for instance in 2019, respectively, 1.6% and 4.5%) (Figure 4).

As for the activity indicator, the turnover in the Maritime sector grew at rates well above the ones of the NFCs between 2011 and 2016 and since 2019 (respectively, 6.5% and 3.7%). The reduction of activity in 2020 was less pronounced in the Sea sector (Figure 5).

The analysis of the size or dimension’s classes6 of the enterprises in the Sea sector indicated Medium companies (with 36% of the total) and Large (31%) as the ones explaining most of the sector’s turnover in 2020. Differently from Large enterprises, Micro decreased their importance along the period under review (Figure 6).

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5 The indirect impacts of proximity to the sea of segments like “Accommodation and catering” and “Recreational and cultural activities”, both included in the economic activity sector of Tourism, tend to exceed with some significance the direct contribution of the Sea sector to the NFCs.

6 According to the criteria from the European Commission Recommendation of 6 May 2003, enterprises were grouped into Micro, Small, Medium and Large.
Micro were, on its turn, responsible by 81% of the number of enterprises of the sector in 2020, and Medium (31%) and Small (29%) signified the majority of the number of employees.

The enterprises in the maturity class of above 20 years old accounted for the greatest part of the turnover generated (60% in 2020) (Figure 7) and number of persons employed by the Maritime sector in the period assessed.

The class of up to 5 years old has nevertheless recorded systematically the highest percentages in the number of corporations of the sector, with 33% in 2020 (Figure 8).
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The geographical distribution of the Sea sector within the several regions of Portugal displayed for 2020 the districts of Porto and Aveiro, together with the other northern districts, as accounting for 22% of the number of enterprises, 21% of the turnover and 25% of the number of employees. In turn, the country’s center districts were responsible by 20%, 29% and 30%, respectively. The districts of the metropolitan area of Lisboa, including Setúbal, represented 28% of the number of enterprises, 26% of the turnover and 25% of the number of employees. In the Alentejo region, including Sines, these figures amounted to 3%, 5% and 4%, respectively. The Algarve district meant 16% of the number of enterprises, 4% of the turnover and 8% of the number of employees.

The Fishing economic activity was the chief representative segment in the Maritime sector in 2020, concentrating 75% of its number of enterprises, 65% of its turnover (Figure 9) and 73% of its number of employees. The weight of the Transport segment on these three variables was, respectively, 13%, 25% and 15%. The segment of Building produced, in that same order for the three variables, 12%, 9% and 13% of the sector.

These figures were quite steady along the period considered, in spite of an increase in the turnover of the Transport segment since 2019 and a reduction observed in 2010 of the number of employees in the Building, compensated by the growth in Fishing.

The evolution of the Sea sector turnover arises naturally from the relatively stable growth in the Fishing segment, with an arc of around 5% in several years namely after 2014, exception due in 2020. Also the somehow reemergence of the Transport segment in 2013 and 2014, then reinforced as from 2017 and even showing 19% in 2020 its highest rate in the period, contributed with some significance. Lastly, the Building segment, although with a smaller weight in the sector, showed higher rates but more volatile, ranging from -18% in 2011 to 35% in 2015 (Figure 10).
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The relative importance of external trade in the Maritime sector, as measured by the weight of its exports on the respective turnover, exceeded that observed for the NFCs, has been increasing steadily at least since 2013 and shot in 2020 when the shares were, respectively, of 36% and 21% (Figure 11).

![Figure 11. Exports in the turnover of the Sea and NFCs sectors (in percentage)](source)

Source: Central Balance Sheet of Banco de Portugal

This behavior is due in particular to the Building segment (Figure 12) and the Large size class companies, with most growth rates above, respectively, 50% and 40% during almost the whole period considered, and even higher in 2020 for both categories.

![Figure 12 – Exports in the turnover of the Sea sector by segment of economic activity (in percentage)](source)

Source: Central Balance Sheet of Banco de Portugal

The financial sustainability of the Sea sector is hereinafter assessed through several financial indicators. Until 2015, the sector presented a more stable evolution of its operational results than the one of the NFCs, as measured by the earnings before interests, taxes, depreciations and amortizations (EBITDA). After, the volatility increased with an arc in 2017 for the Maritime sector atypically very high (67%) and in 2020, although negative (-11%), it remained above that of the NFCs (-19%) (Figure 13).

![Figure 13. EBITDA of the Sea and NFCs sectors (arc, in percentage)](source)

Source: Central Balance Sheet of Banco de Portugal
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During the period under analysis, the main contributor segment of economic activity for the Maritime sector’s EBITDA was the Fishing. In terms of the enterprises’ dimension classes, the Micro showed up as the principal responsible, exception in 2017 when the Medium peaked.

The share of companies in the Maritime sector with annual negative EBITDA decreased since 2015, though it augmented again in 2020 in all segments of activity and more visibly in the Transport segment where more than 50% of the enterprises (Figure 14), usually of Micro dimension, showed net operational losses.

Figure 14. Enterprises with negative EBITDA by segment of economic activity in the Sea sector (in percentage)
Source: Central Balance Sheet of Banco de Portugal

The evolution pattern of the return on equity (ROE), as the net income (profit) on equity, of the Sea sector has accompanied the one shown by the NFCs, although at lower levels and with higher volatility namely since 2015. From 9% in 2017, when the Sea sector’s ROE reached an uncommon high value in the period, it has reduced and displayed 2% in 2020, below the level of 3.6% for the NFCs (Figure15).

Figure 15. Return on equity (ROE) (Net income/Equity) in the Sea and NFCs sectors (in percentage)
Source: Central Balance Sheet of Banco de Portugal

The ROE of the Maritime sector was particularly high in 2015 and 2017 due, respectively, to the segments of Building (22%) and Fishing (21%) (Figure16).
Financial pressure, as the ratio of financing expenses to EBITDA, indicates the percentage of EBITDA generated during the period able to cover financing expenses. This ratio has been higher in the NFCs, but decreasing in both the Sea sector since 2011 and the NFCs since 2013, registered again an upsurge to 11% and 16%, respectively, in 2020 (Figure 17).

Fishing was traditionally the segment with the highest financial pressure in the Maritime sector; however, it had been reduced from 41% in 2011 to 16% in 2020. The other two segments of the sector, Building and Transport, registering each around 8% to 9% in that year (Figure 18).

**Figure 16.** ROE in the Sea sector by segment of economic activity (in percentage)  
*Source: Central Balance Sheet of Banco de Portugal*

**Figure 17.** Financial pressure (financing expenses/EBITDA) in the Sea and NFCs sectors (in percentage)  
*Source: Central Balance Sheet of Banco de Portugal*

**Figure 18.** Financial pressure in the Sea sector by segment of economic activity (in percentage)  
*Source: Central Balance Sheet of Banco de Portugal*
Micro corporations were the dimension class with higher financial pressure, seeming particularly significant in 2018 after accomplishing a peak in 2012. The Sea sector recorded higher operating margins than the NFCs, as the share of EBITDA on total income, until 2015 and in 2017. In 2016 and since 2018, this pattern reversed and each sector achieved 8.7% and 9.3%, respectively, in 2020 (Figure 19).

![Figure 19. Operating margin (EBITDA/Total income) in the Sea and NFCs sectors (in percentage)](source: Central Balance Sheet of Banco de Portugal)

Transport came up as the segment with higher operational margins, of more than 20%, exception in 2020, and well above the ones of the other segments in the Maritime sector during the period (Figure 20).

![Figure 20. Operating margin in the Sea sector by segment of economic activity (in percentage)](source: Central Balance Sheet of Banco de Portugal)

The Large corporations were the dimension class with the higher operating margins, 13% in 2020 and even higher in the years immediately before. The net margin, as the weight of net profit on total income, of the Sea sector has been lower than those of the NFCs since 2016, exception in 2017, pointing probably to higher financial costs registered in the first sector in comparison with the second. In 2020, the indicator reached about 1.6% in the Sea sector, a bit below the 2.2% observed in the NFCs (Figure 21).
Transport was the segment and Large corporations the size class with the highest net margins in the period under assessment, reaching, respectively, 3.4% and 4.3% in 2020.

The financial autonomy of the Maritime sector measured by the respective capital ratio, as the share of assets financed by equity, has at least since 2011 acknowledged a favorable evolution and been well above that of the NFCs that revealed however some recover since 2015. This ratio exhibited between 40% and 50% for the Maritime sector and around or above 30% for the NFCs, hitting 49% and 38%, respectively, in 2020 (Figure 22).

Transport has been the segment of the Sea sector with the highest capital ratio (well above 50%). Lower percentages (of around 30%) of coverage of assets by own funds are found in the Building segment, which showed negative values in 2011 (Figure 23).
Large and Medium corporations were the size classes methodically observing the highest values of the capital ratio in the Maritime sector in the period under analysis achieving, respectively, 57% and 53% in 2020.

The financing of the enterprises in the Sea sector has been accomplished with recourse to different instruments. Within the respective total liabilities, the share of bank loans was at least since 2011 higher in the sector than in the NFCs and represented in 2020, respectively, 38% and 22%. Throughout the period considered, its evolution pattern was dissimilar: in the Maritime sector, the weight practically increased until 2014, after which it started to diminish, and in the NFCs, it declined until 2018; as from 2019, the percentage of bank debt in both sectors showed again an increase (Figure 24).

The Building segment, with a ratio of bank loans in liabilities of around 15% in recent years, was the less indebted against banks; the other segments, Fishing and Transport, attained almost 40% in the same period (Figure 25).

Large and Medium companies were the more exposed to banks in the last years of the period under review, with more than 40% of their liabilities falling under this funding instrument category.

Reversely, the issuance of debt securities was a form of financing lesser used by the Maritime sector corporations (registering only around 1% of its total liabilities in 2020) than by the NFCs (idem 6%) (Figure 26).
The segment of Fishing and Large corporations size class were the ones recurring more to this type of financing, although in the latter debt securities diminished since 2016.

Intra-group loans had also a smaller importance in the funding of the Sea sector corporations (reaching 7% of the respective liabilities in 2020) than in NFCs (up to 22% in the same year). While the weight of this instrument in the liabilities has been growing steadily in the NFCs and stabilized somehow as from 2016, a small increase in its use has nevertheless been noticed in the Maritime sector in the same period (Figure 27).

The segments of Building and Transport were those more benefiting from intra-group loans (both cases verifying 7% to 8% of the respective liabilities in 2020), and the Small and Micro enterprises were the size classes choosing more this type of funding (12% each in that year).

The trade payables started to increase as a financing instrument for the Sea sector after 2015, hitting 20% of total liabilities in 2018 and decreased slightly thereafter to 19% in 2020. The NFCs showed smaller weights and a more pronounced downward path along the period, getting 15% in 2020 (Figure 28).
The Maritime sector’s segments exhibited a relatively constant behavior along the period under assessment, though Building and Fishing were the ones relying more on financing through suppliers’ credits and ending up in 2020 with weights in their liabilities of, respectively, 33% and 27%. Small and Micro enterprises used to be the dimension classes with a stronger financial dependence on trade payables, showing 30% occasionally along the period considered, but lately there has been a convergence to an interval ranging from 17% to 22% among the several classes of dimension particularly in 2019 and 2020.

4. CONCLUDING REMARKS

Since ancient times, the sea has ensured an important role in the existence of Portugal as a country and influenced somehow the course of its international relations developed along different axes. According to data made available by the CBS of BdP, the Sea economic activity sector along the period between 2011 and 2020 has not represented a large share of the number of corporations, business volume and people working for the whole NFCs in Portugal. Its recent favorable evolution has though been observed in several economic indicators. This is the case, for instance, in the growth steadily increasing of its turnover or in the weight of its exports on the business volume, comparatively higher than those of the NFCs. Some reduction in the turnover, and in the number of employees, was nevertheless noticed in 2020 probably due to a contraction of activity and employment associated to the effects of Covid-19 pandemic, observed not only in the sector but also in the Portuguese economy in general. Within the Maritime sector, the Fishing segment concentrated most of its number of enterprises, volume of turnover and number of employees. Financial indicators of the sector suggest, in turn, operational results more volatile, return on equity at lower levels, but financial autonomy well above those of the NFCs. Profitability displayed reasonably close operating margins; however, the net margin of the Sea sector has been generally lower than that of the NFCs, indicating probably higher financial costs for the former. The financing of the enterprises in the sector has been carried out with a relatively higher resource, by contrast with the NFCs, to bank loans and trade payables, whereas the issuance of debt securities and intra-group loans were instruments relatively far lesser used.

While the oceans have been gaining an increasingly important space at the international level, continuing to rely on the sea can contribute to the growth potential of the Portuguese economy. This will allow the country to strengthen its differentiated role in Europe and the world as one with greater vocation for the blue economy.

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