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Open registers: past, present and future

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Abstract

The debate about open registers (ORs) is not a new matter, and throughout centuries States have taken advantage of other flags for their own profit in order to overcome any kind of restrictions. To understand this system in depth it is necessary to know about its origins, development and consolidation. Eradicating substandard registers calls for the application of specific directions like the ones presented, which are a result of many years of researching and working for international organizations aiming at the modernization and consolidation of some ORs. This has led to an increase in the levels of safety and credibility of the maritime administrations where they were applied.

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1. Introduction

The use of flags of convenience (FOCs) has been a source of controversy in the context of international maritime transportation for decades, and it carries on being so. There is no doubt that this has become a central topic at the beginning of the 21st century, above all if we take into account that the latest and most important accidents, as the one suffered by the tanker “Erika” or, more recently, by the “Prestige” have had flags belonging to ORs. Nevertheless, it would be unfair to relate FOCs to substandard or lost ships. We should bear in mind that about 54% of the world’s tonnage is under that type of register.

Lately, European media apply the term “rubbish ship” to any tanker not having a double hull. They do not take into account that more than 2100 million tons of crude and its derivatives are handled yearly by ships of this type, usually in an efficient and safe way for human beings and the marine environment. In the same way, they define as “rubbish flags” those registers to which “rubbish ships” belong and, by extension, all ORs.

The application of international conventions developed by the International Maritime Organization (IMO)

establishes compulsory regulations relating, inter alia, to construction, operation, maintenance, training, safety management and pollution prevention, which must be applied by all Flag States. Their ships must undergo strict inspection and certification controls, either through their own officials or through especially recognised organizations for this purpose. Likewise, ships are subject to other controls by, for example, classification societies for the attainment and maintenance of class certification, and especially by Port States, exercised on foreign ships calling into ports of another country.

It would be fair to recognise that very important steps forward have been taken on maritime safety matters beyond the IMO regulations. In the tanker sector, it is worth mentioning the Oil Pollution Act of the United States (OPA’90) or the legislation recently produced by the European Commission, known as “Erika I” and “Erika II” packages. There is no doubt that this has contributed to a cut down in marine pollution over the last 12 years. However, these maritime accidents, although infrequent, usually have very serious consequences, as in the recent case of the “Prestige”.

The safety of ships, regardless of flag, depends on their adequate operation and maintenance, under a qualified crew trained for that purpose, and on being managed by a company which strictly observes all the applicable international regulations on safety, pollution

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prevention and the training, certification and watch-keeping of crews. Although it is true that many ORs are too lenient in these respects, it is no less true that many “closed” registers keep old, obsolete, badly maintained and uncontrolled ships under their flags.

In this paper we intend to analyse ORs in a strict way, beginning with a deep historical review trying to show their origins and basis, the birth of the two greatest registers, Panama and Liberia, and then, their evolution up to the present. Next, we deal with the current situation of international maritime transport and Flag State implications, concluding with a list of proposed actions aimed at enhancing ORs safety and credibility levels. This could be the only way for consolidation in an international context in which only those ‘serious’ registers abiding by international regulations must remain.

2. Historical causes

Although the terms “open register” or “flag of convenience” have been profusely used since 1950, the use of FOCs dates back to several centuries. In the 16th century, British ships improperly used the Spanish flag in order to overcome the existing restrictions about trade in the West Indies. Moreover, they used the French flag on fishing ships from Newfoundland during the 17th century to avoid the imposed restrictions by their own country. Nonetheless, it is during the 18th century when the practice of changing flags for convenience is widely used in the maritime trade in the East Mediterranean, more specifically in the Peloponnese Peninsula. Thus, whatever the shipowners’ nationality was, ships carrying goods for France interest sailed under French flag, being the ones from Genoa the most remarkable. Subsequently, when the French made their taxes and other fees increase, the Genoese registered their ships under Austria’s flag. This one was also used by Neapolitan ships which frequented the South of Greece ports [1].

In this way, it became a traditional practice for shipowners to register their ships under a foreign flag so as to overcome obstacles or restrictions of a political or economic nature which affected their own country. A classic instance of register transfer in this century is the one by Genoa. They adopted the practice of using the British flag instead of their own whenever they called the Gulf of Corinth, in order to, following the interests of that country, counteract the French supremacy on that area [2]. During the first half of the 18th century, Greek ships were under Turkish flag and in 1774, still under Ottoman control, they used the Russian one.

Since 1760 and during more than 20 years, Irish shipowners had been making use of the French flag to register their ships which had home ports in England.

Halfway through the 19th century, English shipowners began to use the Norwegian register [1].

There were many American shipowners who registered their ships in Portugal during the 1812 war, in order to avoid British restrictions. This practice was also frequent among shipowners from the new South American independent republics, which, together with their North American neighbours, registered their ships under other flags from 1830 to 1850 so as to overcome the British control on the high seas, over the States signatory to the eradication of slave trading treaties.

Registering ships under foreign flags was a general practice at the beginning of the 20th century, when owing to the high costs of changing from sail to steam, ship construction in American shipyards became prohibitive, and shipowners moved to Great Britain for constructing and registering. However, it was not until 1905 when a legal definition was agreed at an international forum stating that “the flag and the register of a ship certify her nationality”, whatever the shipowner’s nationality.¹

3. Panama: 1903–1940

During the period between its independence in 1903 and 1915, according to the limited documentary sources, the Panamanian merchant fleet was owned by nationals and made up of 26 fishing vessels and coasters with no more than 50 grt each. An exception was its leader ship, the 451 grt steamship ‘Panama’. Panamanian maritime legislation at that time, as it was in Central America, was consistent with a national fleet of the given characteristics, managed by national interests and targeting the protection of trade with neighbouring countries, on account of the precarious and even non-existent connection in Central America by other means of transport [3].

Panama started its foreign open ship register in 1916,² allowing the introduction of Panamanian companies owned by foreigners. It is clear that the first Panamanian Constitution, as well as the established agreements with the USA, were taken advantage of by, especially, the US shipowners who found exceptional advantages not available elsewhere.³

As stated by Carlisle [3], a decisive factor for American ships registering was their country’s actions for Panama to become an independent republic, to facilitate the Canal’s construction and operation. Likewise, the Panamanian register would become an

¹The Hague Permanent Court of Arbitration, 1905, in the case of “Muscat Dhows”, under French flag and owned by Muscat Sultanate, British protectorate at that time.

²Code of Commerce, 22 August 1916 and Law 63/1917.

³1904 Constitution, the Canal Zone under American dominion, the use of dollar, and its geographical location.

effective means to cut down on the restrictions imposed by USA maritime legislation, which was modified between 1915 and 1920⁴ in order to reform certain social aspects and for merchant fleet consolidation as a navy auxiliary branch during the First World War.

Given the evident disadvantages for the USA regarding their own maritime legislation, proper authorities, explicitly acknowledged the need to evade it by registering under a less restrictive flag, as stated by admiral W. Benson, President of the Shipping Board between 1920 and 1921.

Panama's OR official setting-up was possible in 1925 through these actions. The importance of crew costs and trade competition between the USA and Japan at that time could not be avoided. In fact, Japan employed German officers during the postwar period, paying them much lower wages as compared to American crews, which were protected by a progressive legislation and kept much higher⁵ statutes, which affected shipping operation costs [4].

Nevertheless, the first vessel transferred to the Panamanian register was not American. The Canadian ship 'Belén Quezada' was an exceptional case which permitted to analyse both the advantages and disadvantages of an OR, especially regarding the link between shipowner's and vessel's nationalities. The 'Belén Quezada', formerly 'Zafiro', 1141 grt, was bought by North and Central American investors from a Canadian shipping company in August 1919. Although the State Department was suspicious of the vessel trading in spirits, which was illegal between Cuba and the USA, thus violating the well-known 1920 Volstead Act, it could never be proved, even though her owners had been arrested. A different conflict was necessary to develop a complex 'study case'.

At a time when Panama and Costa Rica were engaged in a military dispute due to boundary demarcation problems, the Costa Rican authorities confiscated the vessel while loading coal in Puntarenas in February 1921 and her crew was repatriated to the USA, at the latter country's expense. The ship was prepared at once, with 500 soldiers on board, to get ready to invade Panama. American mediation averted confrontation, although the vessel remained in Costa Rica as plunder. This fact gave rise to a complex problem of international interests among the three above-mentioned countries, in which the Costa Rican Supreme Court, the US State Department and the New York District Court all intervened.

The first American ship transfer to the Panamanian register were accelerated due to Shipping Board obligation

to confiscate merchant ships in compliance with the Versailles Treaty (41 Stat. 988, Section 4). Those ships were chartered or bought between 1921 and 1922, according to the agreements signed with private shipping companies.

However, bureaucratic problems encouraged the Shipping Board to offer confiscated ships for auction to national shipping companies, on the understanding that they could be transferred to any foreign register for trading where American ships could not compete.⁶ The new owners transferred ships to Panama,⁷ when transiting the Canal, in abiding by the requirement that physical presence was necessary at the place of register.

An important event which consolidated the register was the transfer in 1922 of two large passenger ships of German construction, "Reliance" and "Resolute", acquired by the American Ship and Commerce Corporation [5], a shipping company owned by Averell Harriman, which, together with other shipowners, established the powerful United American Lines. The aforesaid ships had been transferred by Germany to the Netherlands, in order to avoid the Allies confiscation, but the latter did not accept the deal and the Dutch shipowners were forced to sell.

The Panamanian register subsequent success was, without doubt, due to both above-mentioned ships. The requirement for the Shipping Board allow for both ships' transfer was based on the provision that 'after analysing some countries without aspirations to compete with the USA to develop its merchant fleet and naval power legislations... Panama is the most suitable for our needs and, we consider it the most acceptable for USA's interests, either for its trading development or its availability in periods of war...' [3].

The shipowner's lawyers firm was Sullivan and Cromwell, and it was precisely William Cromwell who had prepared legal documents for the independence of Panama from Colombia, and had kept close ties with Panama, being its legal representative in the USA.

Experience taken from both ships marked the beginning of a new philosophy on the international stage about a shipowner's choice to cut down on his ships' operation costs, which is still current [6].

In short, Panama became an attractive choice to increase the profitability of American shipowners. In 1925, Panama's Legislative Assembly passed Law 8, modifying the existing register system to allow the

⁴1920 Jones Act gives a wider authority to the United States Shipping Board, as managing institution for merchant fleet, and to the American Bureau of Shipping.

⁵1915 LaFollete Seaman's Act established a 48 h working week, festivities on board, crew diets and 75% English speaking crew.

⁶Seven important ships: 'Casco', 'Isonomia', 'Arcadia', 'Pawnee', 'Ida', 'Pegot' and 'Tunicia' were put up for auction and bought by San Francisco Pacific Freighters, for trading between Seattle and Shanghai, showing overt competition with Japan.

⁷W.L. Comyn, one of the shipping company managers, stated October 1, 1922 to the New York Herald that '...the Panamanian register main advantage is that engines and hull inspections are not so strict, we can use German officers and Chinese crew following the Japanese wage scale, only one way to compete...'

register of ships of any given nationality, thus starting the Panamanian register with 14 ships and 83,776 grt [7].

3.1. Panamanian fleet development

Law 8 laid down that vessels from any foreign country could be registered without restrictions regarding the shipowner's residence or nationality, provided that they were represented in Panama by Panamanian lawyers. On the other hand, worldwide register, performed by consuls, met register procedures in article 18,⁸ as included in article 589 of the Fiscal Code. From former Colombian legislation, article 16 demanded 10% of Panamanian crew per vessel, not having been applied so far, and article 17 allowed the executive to create a Nautical Academy. One of the most important advantages was the specific reference to obtain incomes for registration.

Meanwhile, resulting from the Prohibition laws, the USA signed 18 agreements with other countries, including Panama. By virtue of this agreement,⁹ the USA reserved the right to board Panamanian vessels in the high seas whenever it was suspected that the Prohibition laws were being violated. This was limited to the distance sailed in 1 h, from the American territorial waters external boundary.¹⁰ Given that several Panamanian vessels had committed illegal acts, the USA pressed Panama into cancelling registers¹¹ for smuggling, practising illicit trade and piracy vessels,¹² which supported the American theory that non-registered vessels would be considered as pirate and they could be captured in the high seas as such [4]. The effectiveness of this law had an immediate repercussion on the figures provided by the US Treasury Department: of a total of 143 ships captured smuggling, 112 were British and just two Panamanian.

In 1928, the system operated regularly, with consular offices in 17 cities worldwide. Consuls were paid according to their tax collection and where no consul was available, USA consular offices acted as such. Thus, the register had increased to a large extent at the end of the 1920s.

Some authors ascribe Panamanian register growth, see Table 1, to American vessels being transferred to evade neutrality laws during the 1930s [3]. Thus, more than 100 European ships were registered, 30 of them American owned, previously registered in Spain, Greece, UK and Norway [8]. Between 1928 and 1931, 13 vessels

Table 1
Ships and tonnage: Panamanian and World fleet, years 1924–1939

Year	Panama		World		% grt
	No.	Thousand grt	No.	Million grt	
1924	14	83.8	29,024	61.5	0.13
1927	21	47.3	28,967	63.3	0.16
1930	28	74.7	29,996	68.0	0.25
1933	83	287.0	29,515	66.6	0.97
1936	81	429.3	29,197	64.0	1.47
1939	159	717.5	29,763	68.5	2.41

Source: Lloyd's Register of Shipping 1924–1939.

totaling more than 48,000 grt, were transferred by the United Fruit Company, from their Glasgow headquarters to Panama. The company then settled in Chiriqui, a bordering province with Costa Rica, to develop new banana plantations [9].

In 1935, the Panamanian register was consolidated upon receiving new tonnage from the Standard Oil of New Jersey (ESSO), which through its subsidiary Bapico transferred 25 tankers of about 230,000 grt, registered under the Danzig Free City flag, which having a nearly independent status, kept a customs agreement with Poland, which, in turn, guaranteed it access to the sea.¹³

Between 1935 and 1941 the Panamanian government endeavoured to consolidate its maritime administration, adopting, in particular, the American tonnage measurement system in 1936. In the same year, shipping companies were exempted from corporate tax in accordance with 1934 law.

The European political crisis during the 1930s made shipowners think of changing register, given the increases in export costs which hardly allowed any profit. The Spanish Civil War, between 1936 and 1939, and the Jews persecution in Central and Eastern Europe generated a clandestine net of trade which, in many cases, used the Panamanian register. Regarding the Spanish case, some Basque shipping companies were the first to transfer vessels to Panama. Between 1926 and 1933, nine ships with 31,102 grt were flagged out [10]. As well as high operational costs there were social reforms and Basque shipowners discrimination against Spanish officers; all this favoured flagging-out. Later on, Sota y Aznar shipping company transferred three more vessels during the Civil War, thus avoiding being confiscated, as all those registered in Bilbao, as established by war decree [11].

At that time, several Greek shipowners transferred their vessels to Panama. New Greek legislation, aimed at guaranteeing employment and Greek seafarers wages, forced shipowners to transfer their headquarters to

⁸Subsequently abolished by Law 2/1980, art. 25.

⁹Agreement between the USA and Panama, for 19 January 1925, Spirits Smuggling Prevention.

¹⁰This boundary was of 3 nautical miles, resulting that depending on the patrol boat speed it could become between 12 and 15 miles.

¹¹Legislative Assembly passed Law 54/1926 whose article 1 authorised this register cancellation.

¹²Subsequently abolished by Law 2/1980, art. 9

¹³Danzig merchant fleet was considered an anomalous register and so was the city's international status as established by the Treaty of Versailles, Article 105.

London. The new law provided that 41% of Greek basic salary went to social security, with a 33.5% at the shipowner's expense [12]. A Greek ship transferred to Panama would reduce her crew from 62 to 22 members, with no nationality restrictions.

Aristotle Onassis was the first Greek shipowner to discover the advantages of the Panamanian register. Between 1932 and 1941, 24 Greek ships were transferred to the Panama register from Great Britain, the Netherlands and Greece [3].

Norwegian shipowners followed the Basque and Greek example as regards avoiding double tax payment, with which multinationals based in Norway were burdened. Vikingen Ltd. Shipping Company, dedicated to whale catching, was the first to have access to the Panamanian register, being followed by other 14 ships with 94,000 grt, together with 15 whalers with more than 5,000 grt [5].

3.2. *The Second World War and the postwar period*

Between September 1939 and February 1941, ESSO transferred 15 more vessels to Panama, keeping its ability to supply countries at war. Nevertheless, it had to face serious problems with German crews from 25 transferred vessels from the Danzig register, who in August 1939, were replaced by American and British seafarers. Later on, once war zones were set up, American crews were replaced by Danish, Norwegian and Canadian ones [13].

Between 1939 and 1941, 267 vessels with 1.43 million grt were transferred by the USA to different States, of which 63 ships with 359,000 grt (24.8%) went to Panama, while Great Britain got 126 ships with 705,000 grt (48.9%). At that time, the US State Department and the Maritime Commission demanded from Panama not to allow Japan and Germany to use the register. Meanwhile, the USA began to co-operate with Great Britain to reduce the use of the Panamanian register by Greek shipowners for carrying Jews to Palestine, and in 1940 Greece declared illegal, the use of Panamanian flagged ships by its citizens.

During the neutrality period, the Maritime Commission tried to get the Panamanian register to act as an American merchant fleet branch and, at the suggestion of Great Britain, took control of all Panamanian vessels trading with the Axis. The sinking of 20 Panamanian vessels torpedoed by German submarines in 1941 led Panamanian President Arias Madrid to regulate the removing of any military armed ships from the register [14]. From 6 to 20 October, with American approval, the President was removed and the decree withdrawn.

In 1942, President Roosevelt established the War Shipping Administration, appointing admiral Land, then President of the Maritime Commission, as its Director. The Panamanian maritime administration worked closely with the newly created Agency. The

1936 American Merchant Marine Act was changed in March 1942 in order to allow war risks cover; obviously, American owned vessels registered in Central and South America were covered. The USA had sought permission from several Central American countries to make use of their registers in order to bring help to their European Allies, to which Costa Rica and Honduras agreed. With this aim, Honduras enacted its National Merchant Marine Organic Law on 3rd March 1943, by virtue of which the Merchant Marine Directorate was created, under the War Ministry, regulating the Ship Register [15].

The War Shipping Administration exerted direct control over Panamanian vessels, leaving the State Department to deal only with consular affairs and relations with other countries [3]. During the war 158 Panamanian vessels were sunk, with a total loss of 736,000 grt and 1500 lost or missing crewmembers.

Once the war was over in 1945, Honduras and Costa Rica kept their open register system, adducing that it represented an important source of foreign income. Nevertheless, during the 1950s, Costa Rica went back to its former closed register. It is remarkable that the 1943 Honduras Merchant Fleet Organic Law was written in English at Boston Tela Railroad Company headquarters and subsequently translated into Spanish [15].

Several factors made the Panamanian fleet to grow during the post-war period. The European fleets had been virtually destroyed and it was necessary to reconstruct them. Thus, countries such as Norway and the UK developed programmes for tax exemption. According to the 1946 Ship Sales Act (60 Stat. 41), the USA sold 1113 Liberty ships to European shipowners.

In 1945, the Panamanian fleet was made up of 268 units and in 1946 it had reached 406. Unfortunately, there are no published statistics for the years between 1940 and 1947, due to the war. Between 1946 and 1948, American tanker owners took advantage of the Panamanian flag to consolidate their position in the international trade, taking advantage of the imposed restriction by the Maritime Commission in order for T-2 tankers to be sold only to American shipowners [16].

In 1947 trade union protests became more severe due to the growth of the Panamanian fleet, which had doubled its tonnage since the beginning of the war. They argued that Panama was not a maritime country and so, its fleet size could not be justified, since its existence was due to tax advantages, use of cheap crews and poor safety controls. They prepared strikes and boycotts at several ports. Nevertheless, as Naess pointed out, 'it must be admitted that although there were some substandard ships, most of the operators were efficient.' In Europe, the attack was led by the International Transport Workers Federation.¹⁴

¹⁴ITF had 300 trade unions and 4 million members in 46 countries throughout the world.

4. Liberia vs. Panama: 1948–2002

The year 1948 was specially difficult for Panama. Arias Madrid had won presidential elections but he was arrested by the National Guard. The image of instability projected overseas was worsened by consul outrages abroad. The International Labour Organisation (ILO), pressed by European countries, opened an investigation on the Panamanian register. All this led, according to Torrijos and Carlisle, to American shipowners looking for other means to protect their interests over seaborne trade, thus creating Panama's biggest competitor, Liberia, a country which, like Panama, kept special links with the USA.

Liberia was created in 1822 resulting from the American Colonisation Society action, with 12,000 Afro-americans from the USA and became an independent country in 1847. In 1944 a program was developed to facilitate integration and to achieve a balance between race differences, which proved to be ineffective, a reason which could have probably generated subsequent military coups.

In December 1948 the Liberian Maritime Act entered into force and the tanker "World Peace" was the first vessel transferred. The so-called "Liberian Maritime Program"[17] was created aiming at fostering a system of co-operation between the USA and Liberia, offering the possibility of making use of an alternative to the Panamanian register.

The investigation of ORs was increased during the 1950s, and the expression "FOC" was born. As Metaxas has noted [1], on 1 April 1958, Greek shipowner Stavros Niarchos published in The London Times his views defending the FOC concept, which, we consider, focuses on the heart of the matter: "a ship owned by a national from a particular country, loads in a second one, unloads in a third country and finally trades with a fourth one. I must confess I do not believe in any valid reason to justify that this ship must have a flag rather than another. Maritime trade has always been, and must carry on being, an international business..." Other American shipowners held the same opinion, as clearly stated by Carlisle and Naess.

The 1960s were particularly difficult to both Panamanian and Liberian registers due to strong European opposition, especially from the UK, the Netherlands and Norway expressed at different international fora, such as the International Law Commission, Sea Law Conference, IMCO or the International Court of Justice. This subsequently forced the State Department to defend its system. In 1963 the Cyprus OR was established.

The Suez Canal closing in 1967 for 8 years brought drastic changes on tanker construction, thus increasing their dimensions and lowering costs by offering an alternative way around the Cape of Good Hope. This

was one of the reasons why Greek shipowners Onassis and Niarchos competed, turning from classic 50,000 to 100,000, 150,000 and 300,000 dwt ships, known by their abbreviations VLCC and ULCC [18–19], to a tremendous tanker tonnage growth [20].

In 1960, the world's tanker fleet reached 40.2 million dwt, a 31% of the total, and in 1969, expanded to 81.7 million, a 36.6%. In that year tankers flying FOCs were distributed as follows: Liberia 30.5, Panama 5.3 and Cyprus 0.4 million dwt [21]. A distinguishing feature of the Liberian register is its specialisation on tankers of large size. Evolution underwent by Panama and Liberia grt from 1948 to 1969 is shown in Table 2.

Throughout the period under review, the Panamanian register almost doubled its tonnage, but its share decreased from 34% to 25%, whilst Liberia reached 13.8% of the world register in 1969. In 1955 Liberia overtook Panama in tonnage and 1 year later regarding number of vessels.

The 1970s saw European shipowners', such as German, Norwegian and British, entering the ORs, as well as owners from Hong Kong, Taiwan and Japan. At the same time, the United Nations Conference for Trade and Development (UNCTAD) started taking action against ORs. In fact, its Maritime Transport Commission during its Sixth Period of Sessions demanded from the General Secretary of the Organization to take into account the problems and needs of developing countries, and the analysis of "the economic consequences for international maritime transport of the existence or non-existence of a genuine link between vessel and register, as defined on current international conventions in force" [22]. The reference to "genuine link" was understood as an "authentic relation" included in article 5 from the 1958 High Seas Convention.

A Special Intergovernmental Working Group met from 6 to 10 February 1978 to adopt a Resolution, concluding that ORs expansion would have unfavourably affected developing countries, and to determine if

Table 2

Ships and tonnage: Panamanian, Liberian and World fleet, years 1948–1969

Year	Panama		Liberia		World	
	No.	Million grt (%)	No.	Million grt (%)	No.	Million grt
1948	515	2.7 (3.4)	2	0 (0.0)	29,340	80.3
1951	607	3.6 (4.1)	69	0.6 (0.7)	31,226	87.3
1954	595	4.1 (4.2)	241	2.4 (2.4)	32,358	97.4
1957	580	4.1 (3.7)	743	7.5 (6.8)	33,804	110.3
1960	607	4.2 (3.3)	977	11.3 (8.7)	36,311	129.8
1963	619	3.9 (2.7)	983	11.4 (7.8)	39,571	145.9
1966	702	4.5 (2.7)	1436	20.6 (12.0)	43,014	171.1
1969	823	5.4 (2.5)	1731	29.2 (13.8)	50,276	211.7

Source: Lloyd's Register of Shipping 1948–1969.

there existed an “authentic relation” between vessel and register. Factors such as fleet contribution to the country’s economy; national balance of payments for maritime transport; the use of national crews; and the effective property of ships should be taken into account. As no agreements were signed and different opinions emerged, the subject was presented again to the Commission, which met in Geneva in September 1980.

During the 1980s, the maritime international industry carried on being dominated by developed countries, which in 1983 kept control of 80% of sea supplies; developing countries kept 60% of exports generating 40% of world transport, but their world tonnage share was only of 13%. Those figures were the reason why during the International Development Strategy for the Third Development Decade of the United Nations they agreed that by 1990, developing countries should reach a share of 20%. In 1989, developing countries participation reached 21% with 135 million grt, exceeding the goals of 1983 VI UNCTAD Conference of Belgrade [23]. This decade would also bring the birth of the first “second registers”. See World, Panama and Liberia development during 1970–1988 in Table 3.

As observed, Panama’s grt grew from 5.6 to 44.6 million grt, i.e., from 2.5% to 11.1% of the world total, being consolidated as the second world register, with a growth rate of 2.16 million grt per year. Liberia grew from 33.3 to 49.7 million grt, with a world tonnage share growth from 14.6% to 12.5%. The Liberian register kept an steady growth until 1979, ending at 3.5 million grt per year.¹⁵ The number of registered ships in Panama trebled that of Liberia’s in 1988.

One decisive factor for ORs consolidation was the adoption of the UN Convention on Conditions for Registration of Ships, by the Conference of the same name on 8 February 1986 in Geneva. The Conference itself was the result of a long debate promoted in UNCTAD in order to eradicate FOCs. Nevertheless, the Convention did not yield the desired effects, since it never entered into force. Its main purpose was to guarantee that all registers abide by its articles [24], highlighting the need of countries to keep efficient and competent maritime administrations and ship operators identification, through a “genuine link” (the term initially planned, “economic genuine link”, was refused) [25–26].

4.1. The 1989 Crisis

When the Panamanian register seemed not only consolidated but also ready to challenge for first position, and all predictions by specialists (Lloyd’s List,

¹⁵Liberian register fall was due to a large extent to 1980 military coup and to the impact which the atrocities being performed had on the international community with wide media covered.

Table 3

Ships and tonnage: Panamanian, Liberian and World fleet, years 1970–1988

Year	Panama		Liberia		World	
	No.	Million grt (%)	No.	Million grt (%)	No.	Million grt
1970	886	5.6 (2.5)	1869	33.3 (14.6)	52,444	227.5
1973	1692	9.6 (3.3)	2289	49.9 (17.2)	59,606	289.9
1976	2680	15.6 (4.2)	2600	73.5 (19.8)	65,887	372.0
1979	3803	22.3 (5.4)	2466	81.5 (19.7)	71,129	413.0
1982	5032	32.6 (7.7)	2189	70.7 (16.6)	75,151	424.7
1985	5512	40.7 (9.8)	1808	58.2 (14.0)	76,395	416.3
1988	5022	44.6 (11.1)	1507	49.7 (12.3)	75,680	403.4

Source: Lloyd’s Register of Shipping 1970–1988.

Fairplay and Journal of Commerce) announced a Liberian reshuffle, Panama suffered a serious political crisis which would culminate in USA invading the country on 20 December 1989.

In fact, diplomatic relations between both governments reached a critical situation on 8 April 1988 when the President of the USA issued Executive Order 12635, imposing on Panama sanctions and measures of an economic and political nature. However, the decision which would cause the register’s collapse came in October 1989, when the White House Press Office officially announced that, effective February 1990, all Panamanian ships would be prohibited from calling at ports and USA territorial waters. This measure could not be executed due to the invasion, but the effects of the announcement yielded a vertiginous fall of tonnage [27–28] which would not stop until April 1990, when a loss of 9 million grt had been registered, as shown in Fig. 1, which would subsequently be recouped in 1991.

On the other hand, in 1989 Liberia bottomed out, falling down to 47.8 million grt, against Panama’s 47.4. Even so, in 1990, the difference was again in favour of Liberia with 54.7 million grt, against Panama’s 39.3. The tonnage lost by Panama was mainly transferred to Liberia, due to a widely publicised package of regulations offered by this register as well as others. The offer by other ORs to exempt Panamanian registered ships from register taxes¹⁶ was a measure planned to eliminate the Panamanian register, signalling the aggressiveness of certain ORs.¹⁷

The Panamanian register spectacular recovery during 1990 and 1991 coincided with serious Liberian political problems. The loss of 9 million grt experienced 2 years back allowed the improving of the Panamanian fleet’s

¹⁶Lloyd’s List 7 December 1989: “Bahamas cuts fees for large ships”. Also, 12 December 1989; “Marshall blands to attract ships from Panama flag”.

¹⁷Journal of Commerce, 23 October 1989, “Liberia Registry Plans”. Also Lloyd’s List, 9 December 1989, “Why flagging out could devalue the sea industry” and “Liberia cuts cost of ship registration”.

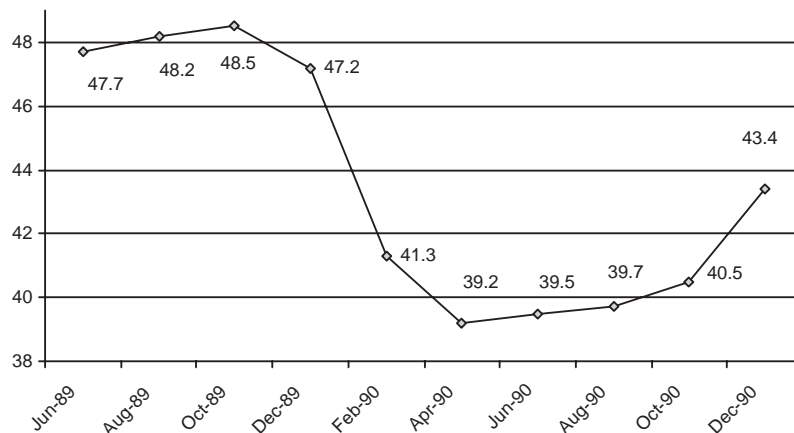


Fig. 1. Panamanian tonnage evolution during crisis period. *Source:* Adapted from Panamanian maritime administration statistics.

age, as new tonnage was gained, thus shortening the average ship age. Although in a difficult situation, the new Panamanian government, which assumed responsibility for State reconstruction, promoted the consolidation of its maritime administration with the support of IMO [29]. Panama and Liberia registers development since 1993, when the former overtook the latter and established itself as the first world register, is shown in Table 4.

4.2. Open registers in the 21st century

As Rochdale Report¹⁸ pointed out, it is not an easy task to give a straightforward definition of an OR, “although economic, employment, easy access to register and fiscal policy factors will be essential elements”. There is no doubt that the lack of a genuine link between shipowner and flag, as well as their different nationality will be unequivocal signs of an OR.

Indeed, as we have been analysing throughout this paper so far, advantages yielded by lower crew costs, freedom to use foreign labour, together with low taxes, have been essential pillars for consolidation of this system. Currently, the situation is changing and safety matters are and will carry on being the cornerstone of registers in the near future.

The determining criterion when choosing an OR is not flagging cost. Generally, ORs charge similar fees according to the tonnage to be registered. Today’s practice entails the use of other factors, including the development of new selection methods as suggested by Haralambides and Yang [30]. Recently, Alderton and Winchester [31] have designed a flag rating system which allows to compare the performance of Flag States according to a range of measures. This interesting

Table 4

Ships and tonnage: Panamanian, Liberian and World fleet, years 1989–2002

Year	Panama		Liberia		World	
	No.	Million GT (%)	No.	Million GT (%)	No.	Million GT
1989	5125	47.4 (11.3)	1455	47.8 (11.6)	76,100	410.5
1990	4784	39.3 (9.3)	1688	54.7 (12.9)	78,336	423.6
1992	5217	49.6 (11.2)	1621	55.2 (12.4)	79,845	444.3
1994	5564	57.6 (12.6)	1611	53.8 (11.8)	80,676	457.9
1997	6118	91.1 (17.5)	1697	60.1 (11.5)	85,494	522.2
1999	6143	105.2 (19.4)	1629	54.1 (10.0)	86,817	543.6
2000	6212	111.1 (20.2)	1582	51.4 (9.3)	87,219	550.2
2001	6245	122.4 (21.3)	1566	51.8 (9.0)	87,939	574.5
2002	6358	126.6 (21.7)	1569	52.3 (8.9)	88,305	584.9

Source: Lloyd’s Register of Shipping 1989–2002.

method establishes the effectiveness of regulatory regimes in five different grades, from “Best practice” (A) to “Poor” (E), and it has been applied to 37 Flag States, which have been classified into four categories, from “High” to “Poor”.

Crew costs constitute one of the components with more repercussion for shipping business, representing an important percentage of total operation costs [32–34]. European [35] and American [36] experts agree with this statement. Annual crew costs, such as those from a typical North European closed register, can be double or even four times those of an OR, depending on crew selection.

The future of emerging ORs will be tied to factors such as: keeping a genuine link, abiding by safety, security and pollution prevention regulations, crew training and qualification compliance with international commitments, fleet age and technical features, recognised classification societies, and so on. There are other factors such as traditionally low costs and reduced fees, 24-h quality service, simple procedures, suitable maritime mortgages, freedom to choose crew nationality,

¹⁸ Report of UK Committee of Inquiry into Shipping (Chairman, Lord Rochdale), May 1970, establishing criteria for determining whether or not a ship register should be declared an OR.

and a professional and competent maritime administration with an effective maritime policy.

Notwithstanding the definitions agreed by international organizations, such as UNCTAD or ITF, we consider ORs could be classified into three large groups: classic, opportunist, and second registers.

Panama, Liberia, Honduras and Cyprus registers are included in the first group. Some experts define these as “old” registers [37] as they already existed before the 1986 UNCTAD Convention that keep a significant tonnage. “Opportunist” registers are those being created or consolidated after the UNCTAD Convention, and include: Antigua and Barbuda, Barbados, Belize, Bolivia, Burma, Cambodia, Comoros, Equatorial Guinea, Jamaica, Lebanon, Malta, Marshall, Mauritius, Sao Thomas, Singapore, Sri Lanka, Turks and Caicos and Vanuatu, among others. Some authors [38] include in this group the so-called “Red Ensign Flag”, linked to the UK, among which Bahamas, Bermudas, The Cayman Islands and Gibraltar can be found. We can categorise as “second registers”, those created by industrialised countries attempting to recoup national tonnage previously lost to ORs. A distinction should be made between an “offshore” register, created by a State in an overseas territory under its sovereignty, with a legal regime different from the general State legislation, as regards fiscal and labour matters; e.g. The Isle of Man (UK), The Netherlands Antilles or Kerguelen Islands (France); and a “special” register, created by a State within its own national territory by virtue of special legislation for the purpose; e.g. NIS (Norway), DIS (Denmark), GIS (Germany), Canary Islands (Spain) or Madeira (Portugal).

The success of an OR in the 21st century will depend on the application of serious criteria. The first one is related to abiding by international regulations addressing maritime safety, maritime security, pollution prevention and crew training, qualification and watch-keeping. Thus, a distinguishing feature which should enable a shipowner to choose one register rather than another would encompass an established maritime programme, especially referring to recognised organizations acting on behalf of the administration, as regards survey, certification and audit of their ships and companies in accordance with the applicable international conventions. One of the most serious problems affecting this system is the practice adopted by many ORs in this regard, thereby delegating authority to organisations lacking in experience or technical ability to carry out such important functions, not setting a limiting maximum ship age for registration, and failing to rectify the deficiencies detected during Port State Control inspections.

A maritime administration must have a solid infrastructure and qualified technical personnel to handle these important matters. Panamanian efforts, first

creating a National Council for Maritime Sector Development in 1992 and subsequently a Maritime Authority [39] in 1998 at the highest administrative level, unifying all the country’s maritime policies, have yielded clear results. Likewise, Liberia, by managing its maritime safety affairs through a solid infrastructure in Virginia, USA and in offices throughout the world [40], has enabled its young fleet to earn an excellent record, regarding lack of serious accidents and detentions at foreign ports. Furthermore, Cyprus, as stated by Alderton and Winchester [31], has improved its ship register, increasing its tonnage but reducing its PSC detention rates from 1995 to 2002, according to US Coast Guard, Tokyo and Paris Mou statistics.

5. Conclusions

As it has been stated above, registering a ship in a State different to the owner’s own is a practise which goes back several centuries and, for a long time, maritime transport has been making use of that system in order to overcome certain restrictions. The 20th century marked the beginning of a new era in which the United States played a predominant role as regards the creation, development and consolidation of a system from which it would obtain enormous advantages, both in periods of peace and of war, helped at first by the birth of the Panamanian register and then on the Liberian one. From this time, the many attempts in different international fora calling for eradication of the system not only have proved unsuccessful, but have also allowed its consolidation. Since 1986 a significant number of countries have joined in, giving rise to the present-day situation in which interests from the whole shipping world find their place in a classic, opportunist or second OR.

At the beginning of 2003, the need for suggesting measures to eradicate FOCs, especially in Europe, was discussed. In this context it is important to distinguish between the systems which offer the necessary guarantees and those which do not. It is a mistake to label closed registers intrinsically safe and abiding by international regulations, and ORs as unsafe and dangerous. Judging by the 2002 fleet statistics [41] and analysing reports on detentions in Europe [42], the USA [43] and Asia [44], we can confirm that there are ORs with excellent safety records and closed registers with very poor ones [45–46]. Many ORs have failed to produce adequate regulatory regimes that ensure the safe operation of ships, as they do not have the adequate technical expertise necessary to ensure proper control of the safety of the ships flying their flags, and lack the required legal framework to implement the international conventions [31].

Unfortunately, many owners make the decision to flag out to ORs primarily on the basis of expected savings to be made in respect of reduced operating, ship maintenance, and crewing costs. It is remarkable that five countries of nationality own more than 50% of the world tonnage for years: Greece, Japan, Norway, the USA and China with a very high percentage thereof belonging to ORs: 70% of Greece, 86% of Japan, 76% of USA [47]. Apart from the aforementioned data, it is also true that nearly 54% of total tonnage in 2002 was flagged with ORs. Thus, it is not difficult to ascertain the system's strength.

Therefore, it is a duty of the international maritime community to apply policies to eradicate those flags which put at risk both lives and goods at sea as well as the marine environment. These policies will have to be enacted in an international context. Effective regulation depends upon the existence of a network of shared responsibility. All constituents of the maritime community need to take an active role in the maintenance of the highest possible safety and operation standards, with Flag and Port States leading by example.

Banks could play an effective role in influencing shipowners when it comes to selecting an OR. Lenders should take a variety of factors into account before approving loans, from administrative procedures to PSC detention rates. Lenders' powerful position should enable them to put pressure on owners in order to choose certain registers instead of others, if the owners want to secure their future funding. Similarly, insurers have the potential to exert influence over the choice of register by penalizing those flags with high casualty records. Establishing a "list of quality registers" would represent an interesting way to encourage registers with a poor record to improve their standards. Moreover, class societies should be more selective about which ORs they work for. That way, some less competent registers might be forced out of the market.

It is clear that by increasing ownership transparency, safety and security would improve. It is necessary that the "genuine link" concept, mentioned in article 91 of the Convention on the Law of Sea, be effective. As the 1986 UN Convention on Conditions for Registration of Ships has not come into force [48], efforts should be made to review the Convention in order to make the conditions of entry into force more widely acceptable or, if this proves impracticable, consideration should be given to the development of an entirely new international treaty addressing the conditions of registration of ships. It would then be possible to ensure that all Flag States have a competent and adequate maritime administration and that a "genuine link" exists between register and ship. It would also make it very difficult for substandard Flag States to continue in business.

Flag States should have a consolidated maritime administration keeping safety programs which ensure

that the applicable international conventions are implemented, having qualified personnel to ensure that ships do not exceed the maximum age and are properly maintained; ensuring that recognised organizations authorized to act on their behalf comply with the applicable provisions of the pertinent international conventions and are continuously assessed; ascertaining that seafarers qualifications as well as endorsed foreign certificates comply with the minimum requirements of the 78/95 STCW Convention; and ensuring that companies and ships under its flag apply the established procedures in the Safety Management Code.

The role of Port States should be hardened as it has proved to be the most efficient way of verifying compliance by registers, either open or closed. Thus, foreign ship inspections should ensure that the relevant international conventions are applied, the crew has the ability to perform the assigned duties on board, both in port and at sea, and that the work performed by recognised organizations for ship certification and audit is adequate. The effectiveness of this procedure calls for a significant effort, demanding more and better skilled port State control officers, performing detailed inspections and applying the established procedures rigorously, detaining ships when appropriate and, if necessary, forbidding entry to recidivist flags. Accordingly, an international agreement with clear procedures is necessary—including a scoring system—to enable port States to reject ships flying the flag of those unregulated registers, which fail to ensure the safe operation of their ships, are unable to guarantee appropriate manning levels, and cannot offer transparency of vessel ownership and control.

References

- [1] Metaxas B. *Flag of convenience: a study of internationalisation*. Aldershot: Gower Press; 1985.
- [2] Kremmydas V. *The Emporium of Peloponnesus during the 18th Century*. Athens: French Arc; 1972.
- [3] Carlisle R. *Sovereignty for sail*. Annapolis: Naval I Press; 1981.
- [4] Torrijos H. *Las competencias de marina mercante panameña*. Proceedings from IMO/UNDP Maritime Administration Seminar, Panama, vol. 1, 1989. p. 106–7.
- [5] Naess ED. *The Great Panlibhon controversy*. London: Gower Press; 1972.
- [6] Downard J. *Running cost*. Surrey: Fairplay Press; 1989.
- [7] Lloyd's Register. *World Fleet Statistical Tables 1926*. London.
- [8] Lloyd's Register. *World Fleet Statistical Tables 1926–1942*. London.
- [9] Kepner C, Soothill Y. *The Banana Empire*. New York: Vanguard; 1935.
- [10] Beltza R. *Nacionalismo Vasco: 1876–1936*. San Sebastian: Txerto; 1976.
- [11] González R. *Cincuenta años de vapores santanderinos*. Santander: Ind y Navegación; 1951.
- [12] Laimos A. *The Greeks and the Sea*. London: Cassell; 1976.
- [13] Larson H. *History of standard oil company 1927–1950*. New York: Harper; 1971.

- [14] Lafeber W. *The Panama Canal*. New York: Oxford University Press; 1976.
- [15] Rivera R. *La Marina Mercante de Honduras*. Tegucigalpa: Lithos Press; 2001.
- [16] Boczek B. *Flag of convenience*. Cambridge: Harvard Press; 1962.
- [17] Wiswall F. *The Liberian maritime programme*. New York: Lloyd's News Corp; 1988.
- [18] Kemp and Young. *Ship construction*. London: Standford; 1976.
- [19] Munro R. *Ship and naval architecture*. London: Ime; 1977.
- [20] Chrzanowski I. *Shipping economics*. London: Fairplay Press; 1985.
- [21] Branch A. *Economics of shipping practice and management*. London: Chapman; 1988.
- [22] Anguizola R. *Recursos naturales de los pueblos*. Panama: CPCN; 1981.
- [23] UNCTAD. *Review of maritime transport, 1989*. New York: UN; 1989.
- [24] INTERTANKO. *Comments in 1987 on the 1986 UN Convention on condition for registration of ships*, Intertanko, New York, 1987.
- [25] Loree P. *Open registers*. *Proceedings from the III World Maritime Conference, Panama*, vol. 1996. p. 1–11.
- [26] Sturme S. *Open registers controversy*. *Proceedings from Which Register, Which Flag...now? Conference*, vol. 2. New York: Lloyds of London Press; 1989. p. 125–7.
- [27] Montero FJ. *Panama as a Maritime Center*. *Proceedings from the I World Maritime Conference, Panama*, vol. 1, 1991. p. 37–40.
- [28] Montero FJ. *Centro internacional de servicios marítimos en Panamá*. *IEEM Newsletter* 1991;9:43–7.
- [29] Montero FJ. *Project UNDP/IMO PAN 86/088, UNDP Project Documents*, vol. F, 1993.
- [30] Haralambides HE, Yang J. *A fuzzy set theory approach to flagging out: towards a new Chinese shipping policy*. *Marine Policy* 2003;27:13–22.
- [31] Alderton T, Winchester N. *Flag State audit, 2003*. Cardiff: SIRC; 2003.
- [32] Lusted J. *Registers and Costs*. *Proceedings from Which Register, Which Flag...now? Conference*, vol. 1. New York: Lloyds of London Press; 1989. p. 5–9.
- [33] Downward J. *Managing ships*. London: Fairplay Press; 1987.
- [34] Downward J. *Running costs*. London: Fairplay Press; 1989.
- [35] Eliades M. *The concept of European Register*. *Proceedings from Which Register, Which Flag...now? Conference*, vol. 1. New York: Lloyds of London Press; 1989. p. 65–9.
- [36] Corrado EJ. *The idea of an American International Register*. *American Institute of Merchant Shipping Bulletin* 1990;1:30–5.
- [37] Hackett B. *Newly emerging Register*. *Proceedings from Which Register, Which Flag...now? Conference*, vol. 1. New York: Lloyds of London Press; 1989. p. 13–6.
- [38] Montero FJ. *Los Registros Abiertos*, *IME Course for M.Sc. Degree*, vol 3, University of Comillas, Madrid, 2002.
- [39] APM. *Law Decree whereby the Panama Maritime Authority is created*. Law No 7, of February 10, 1998, Panama.
- [40] LISCR. *Liberian International Ship & Corporate Registry Vienna*. Virginia, 2002.
- [41] *Lloyd's Register*. *World fleet Statistical Tables 2002*. London.
- [42] Paris MOU. <http://www.parismou.org>.
- [43] USCG. <http://www.uscg.mil>.
- [44] Asia Pacific MOU. <http://www.tokyo-mou.org>.
- [45] Alderton T, Winchester N. *Flag States and safety*. *Maritime Policy and Management* 2002;29(2):151–6.
- [46] Montero FJ, Andray A. *PSC vs FOC, what about safety? New maritime impulses in the presence of a new century*. *Foro sur* 2000;1:578–88.
- [47] UNCTAD. *Review of maritime transport, 2002*. New York: UN; 2002.
- [48] OECD. *Ownership and control of ships*. *Maritime Transport Committee*, 2003.