The Regulation of the Maritime Industry

Whosoever commands the sea commands the trade; whosoever commands the trade of the world commands the riches of the world and consequently the world itself.

(Judicious and Select Essays and Observations by the Renowned and Learned Knight Sir Walter Raleigh, upon the First Invention of Shipping, H. Moseley, 1650)

16.1 HOW REGULATIONS AFFECT MARITIME ECONOMICS

Shipowners, like most businessmen, find that regulation often conflicts with their efforts to earn a reasonable return on their investment. When Samuel Plimsoll first started his campaign against the notorious ‘coffin ships’ in the 1870s, British shipowners argued that the imposition of load lines would put them at an unfair competitive advantage. Flyle, writing in the 1930s, observed that:

In their efforts to raise both the standard of safety and the standard of working conditions afloat, the Board of Trade frequently found themselves, during the last quarter of the nineteenth century, at loggerheads with the shipowners. They were accused of cramping the development of the industry by laying down hard-and-fast rules which in effect punished the whole of the industry for the sins of a small minority, and hampering British shipping in international competition, by imposing restrictions from which foreign ships were free, even in British ports.

The same, sometimes legitimate, resistance to regulation is found in most industries, but the world’s oceans provide the shipping industry with an unrivalled opportunity to bypass the clutches of regulators and gain an economic advantage. The goal of maritime regulators is to close the net and ensure that shipping companies operate within the same standards of safety and environmental responsibility which apply on land. As a result, in the last 50 years the regulatory regime has played a significant part in the economics of the shipping market.

It would, however, be wrong to think that the regulatory process is only concerned with pursuing villains. A few regulations are made in response to particular incidents.
The Titanic, the Torrey Canyon, the Herald of Free Enterprise, the Exxon Valdez, the Erica and the Prestige all provoked a public outcry which led to new regulations. But these are the exceptions. Over the last century the shipping industry and the maritime states have gradually evolved a regulatory system covering all aspects of the shipping business. Ship design, maintenance standards, crewing costs, employment conditions, operating systems, company overheads, taxation, oil pollution liability, environmental emissions and cartels are all subject to regulation in one way or another. However, the emphasis changes and during the last decade, the environment, emissions by ships, ballast water, and ship recycling have all received more attention. Needless to say, all of this has economic consequences and a knowledge of maritime regulation is an essential part of the maritime economist's toolkit.

16.2 OVERVIEW OF THE REGULATORY SYSTEM

The aim of this chapter is to discuss the international regulatory system and the legal and political issues that have influenced, and in some cases dominated, the maritime scene since the mid-1960s. The chapter seeks to answer three questions: Who regulates shipping and commerce? What do they regulate? How do regulations affect shipping economics?

The first step is to identify the regulators more precisely. In an ideal world there would be a supreme legislative body which makes a single set of international laws, with an international court that tries cases and an enforcement agency. Reality does not live up to this ideal, and some experts doubt whether what passes for international law is really 'law' at all. There is an International Court of Justice, but its rulings on shipping matters are purely advisory. We should not be surprised at this state of affairs since the mid-1960s. The chapter seeks to answer three questions: Who regulates shipping and commerce? What do they regulate? How do regulations affect shipping economics?

The first step is to identify the regulators more precisely. In an ideal world there would be a supreme legislative body which makes a single set of international laws, with an international court that tries cases and an enforcement agency. Reality does not live up to this ideal, and some experts doubt whether what passes for international law is really 'law' at all. There is an International Court of Justice, but its rulings on shipping matters are purely advisory. We should not be surprised at this state of affairs. Each of the 166 countries with an interest in shipping has its own priorities. Agreement on a body of international law, far less approving an international executive responsible for ships flying the Greek flag, wherever they are in the world, whilst as a coastal state it enforces maritime laws on ships in Greek territorial waters. This is known as 'port state control'. Generally the laws maritime states enforce comply with maritime conventions, but not always. For example when the USA passed the Oil Pollution Act (1990), a law designed to phase out single-hull tankers in US waters, there was no maritime convention on this issue.

The other major 'players' in the regulatory process are the classification societies. Most major maritime nations have their own classification society and they are, in effect, the technical advisers to the maritime regulators. Over the last decade their role as recognized organizations (ROs) has increased and they assist the regulators in making and implementing maritime laws with a technical, human or environmental focus. In addition, they develop technical standards in their own right and award the classification certificate which is required by insurance underwriters. They are paid for these services, but have no legal powers of enforcement beyond withdrawing their services.

In summary, the regulatory system discussed in this chapter involves six principal participants in the regulatory process:

- The classification societies: the shipping industry's own system for regulating the technical and operational standard of ships. The classification societies make rules...
for ship construction and maintenance and issue a classification certificate to reflect compliance.

- The United Nations, which sets the broad framework of maritime law.
- The flag states. The primary legal authority governing the activities of merchant ships is the state in which the ship is registered, the flag state. By custom this state is responsible for regulating all aspects of the commercial and operational performance of the ship. International laws are developed by the participation of flag states in treaties or conventions.
- The coastal states. A ship is also subject to the laws of the coastal state in whose waters it is trading. The extent of each state’s territorial waters and the scope of regulation vary from one country to another.
- The IMO, the UN agency responsible for safety, the environment and security.
- The ILO, responsible for regulations governing people on board ship.

In the following sections we will consider each of these regulatory regimes.

16.3 THE CLASSIFICATION SOCIETIES

The shipping industry’s own regulatory system arose from the efforts of insurers to establish that the vessels for which they were writing insurance were sound. In the mid-eighteenth century they formed the first classification society and during the intervening period their activities have become so closely involved with the regulatory activities of governments that it is often difficult for laymen to understand the difference between the two. In this section we will focus on the role of classification societies and explain why they were set up, how they have evolved, the functions they undertake today and their impact on maritime regulation.

Origin of the classification societies

Like many other shipping institutions, the classification societies are the product of their past, so knowing something of their history helps to explain the current structure. Lloyd’s Register of Shipping, the first classification society, can trace its origins back to Lloyd’s Coffee House in the early 1760s. The proprietor, Edward Lloyd, presumably in an effort to attract clients, started to circulate lists giving details of vessels which might appear for insurance. The next step came in 1764 when a committee of London insurers and insurance brokers compiled a book containing details of ships that might require insurance. When published the book was known as Lloyd’s Register. This register classified ships according to their quality, listing a grade ‘conferred on the ship by the Committee’s appointed surveyors’. The condition of the hull was classified A, E, I, O or U, according to the excellence of its construction and its adjudged continuing soundness (or otherwise). Equipment was graded G, M or B — good, middling or bad. Any ship classified AG was thus as sound as it could be, whilst one rated UB was obviously a bad risk from the underwriter’s point of view. In time, G, M and B were replaced by 1, 2 or 3.

The ‘green book’, as it was known, was compiled by insurers for the sole use of members of the society and contained details of 15,000 ships. All went well until the 1797-8 register introduced a new grading system which based the ship’s class on its river of build, favouring ships built on the Thames. This was disputed by many shipowners, and in 1799 a rival register was published, the New Register Book of Shipping, known as the ‘red book’. A period of punitive competition followed, bringing both registers close to bankruptcy. In 1834 the differences were settled and a new society was set up to produce a shipping register which was acceptable to all sections of the industry. The new publication was Lloyd’s Register of British & Foreign Shipping and its governing body had 24 members, eight each from the merchants, the shipowners, and the underwriters. This made it representative of the shipping industry as a whole.

The new society had 63 surveyors and a system of regular inspection for ships was instituted. The main function continued to be the production of a register grading ships, but a new classification system was introduced. Under this system, ships that had not passed a prescribed age and had been kept in the highest state of repair were classified A; ships which, though not fit for carrying dry cargo, were considered perfectly safe for carrying cargoes not damaged by the sea were classified E; and ships unsuitable for dry cargo, but fit for short voyages (not out of Europe) were classified I. The condition of the anchor cables and stores when satisfactory was indicated by 1 and when unsatisfactory by 2. This system gave rise to the familiar expression ‘AI condition’. In the first five years 15,000 vessels were surveyed and ‘classed’.

As the class movement developed in the nineteenth century, the role of classification societies changed. At first the main job was to grade ships. As time passed they started to set the standards to which ships should be built and maintained. Blake comments:

As its authority grew, the Committee took upon itself something like disciplinary powers. Any new vessel for which an AI classification was sought must undergo a survey under construction, which meant in effect that its progress was closely inspected at least three times while the hull was still on the stocks.

AI became a requirement rather than a grade in a scale.

Technical committees were set up to write rule books setting the precise standards to which merchant ships should be built and maintained. These rules set the standards and the society policed them through their network of ship surveyors.

Other classification societies were set up in the nineteenth century. The American Bureau of Shipping (ABS) has its origins in the American Ship Masters Association which was organized in 1860 and incorporated in 1862 through an Act of Legislature of the State of New York. Like Lloyd’s Register of Shipping it is a non-profit making organization with general management vested in the membership comprising individuals prominent in the marine and offshore industries and related fields. Most class societies today are managed by a Board drawn from all parts of the maritime industry — shipbuilders, shipowners, insurers, etc. Although underwriters still participate in general management through membership of these boards, the classification societies can no longer be seen as acting exclusively for the insurers.
The classification societies today

There are currently more than 50 classification societies operating world-wide, some large and prominent, others small and obscure. The list of the ten largest societies and the number of cargo ships they class, shown in Table 16.1, gives a rough idea of the relative prominence of the various institutions. These are all well-known names in shipping circles and together they cover over 90% of the cargo and passenger fleet (note that these numbers do not include the many small non-cargo-carrying vessels which the societies also class).

Today the main job of the classification societies is to enhance the safety of life and property at sea by securing high technical standards of design, manufacture, construction and maintenance of mercantile and non-mercantile shipping. The classification certificate remains the mainstay of their authority. A shipowner must class his vessel to obtain insurance, and in some instances a government may require a ship to be classed. However, the significance of the classification certificate extends beyond insurance; it is the industry standard for establishing that a vessel is properly constructed and in good condition.

In addition to their role as regulators, the major classification societies also represent the largest single concentration of technical expertise available to the shipping industry. For example, Lloyd's Register, the largest classification society, has over 5,400 people, of whom half are qualified engineers, operating from 240 offices in 80 countries world-wide. They class ships against their own rules (around 6,000 ships annually).

Table 16.1 The major classification societies, November 2006

<table>
<thead>
<tr>
<th>IACS members</th>
<th>Fleet classed</th>
<th>Average ship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Million gt</td>
</tr>
<tr>
<td>IACS members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nippon Kaiji Kyohei</td>
<td>6,494</td>
<td>142.9</td>
</tr>
<tr>
<td>Lloyd's Register (LR)</td>
<td>6,190</td>
<td>125.8</td>
</tr>
<tr>
<td>American Bureau of Shipping (ABS)</td>
<td>6,252</td>
<td>103.2</td>
</tr>
<tr>
<td>Det Norske Veritas</td>
<td>4,010</td>
<td>102.0</td>
</tr>
<tr>
<td>Germanischer Lloyd</td>
<td>4,712</td>
<td>64.9</td>
</tr>
<tr>
<td>Bureau Veritas</td>
<td>4,877</td>
<td>46.6</td>
</tr>
<tr>
<td>Korean Register</td>
<td>1,648</td>
<td>21.9</td>
</tr>
<tr>
<td>China Classification Society (CCS)</td>
<td>1,897</td>
<td>21.8</td>
</tr>
<tr>
<td>Russian Register</td>
<td>3,174</td>
<td>12.5</td>
</tr>
<tr>
<td>Registro Italiano</td>
<td>1,345</td>
<td>12.0</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian Register</td>
<td>392</td>
<td>1.5</td>
</tr>
<tr>
<td>11 Others (under 1,000 ships)</td>
<td>1,819</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td>42,810</td>
<td>650.2</td>
</tr>
</tbody>
</table>

Note: The statistics cover only vessels included in Clarkson Registers.

The regulatory activities of the classification societies

The role of the class societies today has two fundamental aspects, developing rules and implementing them.

Developing rules includes both new initiatives and the continuous updating of existing rules to reflect changes in marine technology and conventions. Procedures vary, but most societies develop their rules through a committee structure, involving experts from various scientific disciplines and technical activities including naval architects, marine engineers, underwriters, owners, builders, operators, materials manufacturers, machinery fabricators and individuals in other related fields. This process takes into account the activities of IMO and IACS unified requirements.

The second stage involves applying the rules to practical shipbuilding and shipping activities. This is a four-step procedure:

1. Technical plan review. The plans of new ships are submitted to the classification society for inspection to ensure that the structural details in the design conform to the society's rules. If the plans are found satisfactory they are passed and construction can proceed. Sometimes modifications are required, or explanations required on certain points. Alternatively, the society may be asked by the shipyard to help out in developing the design.

2. Surveys during construction to verify that the approved plans are implemented, good workmanship practices are employed and rules are followed. This includes the testing of materials and major components such as engines, forgings and boilers.
3. **Classification certificate.** On satisfactory completion of the vessel the class is assigned and a certificate of classification is issued.

4. **Periodic surveys** for the maintenance of class. Merchant ships are required to undergo a scheme of surveys while in service to verify their acceptability for classification. The ship's classification society carries out these inspections and keeps records which, for example, a prospective buyer of the ship may ask to inspect.

The classification procedures for existing ships are, in general terms, agreed by IACS for its members and associates. The regulations typically require a hull and machinery annual survey, a hull and machinery special survey every 5 years, a dry-docking survey every 2 1/4 years, a tail shaft inspection every five years, and a boiler survey every 2 1/2 years. The hull and machinery survey is very demanding, involving detailed inspection and measurement of the hull.

As the ship grows older, the scope of this inspection widens to cover those areas of the ship which are known to be most vulnerable to ageing. For example, as oil tankers grow older the area of the deck plates subject to tests for corrosion increases. To avoid the lengthy time out of service, the classification societies allow owners to opt for a continuous survey consisting of a programme of rolling inspections covering one-fifth of the ship each year.

As more governments have become involved in flag state regulation over the last 30 years, the activities of classification societies as government representatives have increased. The most common authorizations are in connection with tonnage measurement and load lines, SOLAS, MARPOL and IMO set standards on the transportation of dangerous goods. In carrying out statutory work, the classification society applies the standards relevant to the country of registry.

Finally, it is worth mentioning the vetting inspections carried out by charterers of ships, particularly corporations in the oil and steel industries.

**The International Association of Classification Societies**

Over the last thirty years classification societies have been under pressure from shipowners and regulators to standardize their rules. Non-standard rules mean design work classed by one society may not be acceptable to another, causing unnecessary cost and inconvenience. For regulators legislating on the technical standards of ship construction, particularly through the IMO, the lack of a common standard complicates their job. To address this problem, in 1968 the International Association of Classification Societies was set up. Its ten members are listed in Table 16.1 and account for about 90% of world classification activity. The IACS has two main aims: to introduce uniformity into the rules developed by class societies and to act as the interface between class societies. A related function is to collaborate with outside organizations and in particular IMO. In 1969 IMO granted IACS 'consultative status'. The fact that it is the only non-governmental organization with observer status at the IMO neatly illustrates the position of the classification societies as intermediaries between the commercial shipping industry and governments.

Over the last 30 years IACS has developed more than 160 sets of unified requirements. These relate to many factors, of which a few are minimum longitudinal strength, loading guidance information, and the use of steel grades for various hull members. However, a significant step forward came in December 2005 when the IACS Council adopted Common Structural Rules for tankers and bulk carriers. For the first time this integrated the rule-making activities of the societies into a single design standard. The Common Structural Rules were implemented on 1 April 2006.

### 16.4 THE LAW OF THE SEA

#### Why the law of the sea matters

Since maritime law is made and enforced by nation states, the next task is to examine the legal framework which determines the rights and responsibilities of nations for their ocean-going merchant ships. There are two obvious questions. First, which nation's law applies to a ship? Second, what legal rights do other nations have over that ship as it moves about the world? The answers were not developed overnight; they were evolved over the centuries as a set of customary rules known as the law of the sea.

#### The law of the sea: flag state versus coastal state

The debate over the legal responsibility for ships stretches back to the days when naval power was the deciding factor. A country's navy protected the ships flying its flag and this established the principle, which survives today, of flag state responsibility. However, coastal states also had a claim over ships visiting their ports or sailing in their coastal waters, if only because they could sink them with their cannons if they did not behave. Indeed, early writers suggested that the distance controlled by shore-based cannons should be the criterion for determining the extent of the coastal seas. In a world of rapidly growing commerce, agreeing the rights of the flag and coastal states has become a major issue. Can a country ban alcohol on board foreign ships in its territorial waters? If it considers a foreign ship unsafe, has it the right to detain it? The answers to these questions, in so far as there are answers, are to be found in the UN Convention on the Law of the Sea (UNCLOS 1982), the culmination of three Conferences on the Law of the Sea, referred to as UNCLOS I (1958), UNCLOS II (1960) and UNCLOS III (1973).

The process of developing these conventions started in 1958 when the United Nations called the UNCLOS I. Eighty-six states attended. The aim was to define the fundamental issues of the ownership of the sea, the right of passage through it and the ownership of the seabed. The latter issue was becoming increasingly important as offshore oilfields started to be developed. Four conventions were eventually finalized, dealing with the Territorial Sea and Contiguous Zone, the High Seas, the Continental Shelf, and Conservation of Fisheries.

A second conference, UNCLOS II, was called in 1960 to follow up on some items not agreed in UNCLOS I. In the 1960s the growing awareness of the mineral wealth on
the sea bed placed new significance on the law of the sea, and in 1970 the United Nations convened a third conference to produce a comprehensive Convention on the Law of the Sea. Work started in 1973 (UNCLOS III), attended by 150 states. With so many participants, discussion was extended. It was not until 1982 that the UNCLOS 1982 was finally adopted, to enter into force 12 months after it had been ratified by 60 states. It finally came into force on 16 November 1994, at last providing a comprehensive framework for the regulation of all ocean space ... the limits of national jurisdiction over ocean space, access to the seas, navigation, protection and preservation of the marine environment.5

As far as the flag of registration is concerned, UNCLOS 1982 endorses the right of any state to register ships, provided there is a ‘genuine link’ between the ship and the state. Since the flag state can define the nature of this link, in practice it can register any ship it chooses. Once registered, the ship becomes part of the state for legal purposes. The flag state has primary legal responsibility for the ship in terms of regulating safety, labour laws and on commercial matters. However the coastal state also has limited legal rights over any ship sailing in its waters.

The rights of the coastal states are defined by dividing the sea into the ‘zones’ shown in Figure 16.2, each of which is treated differently from a legal point of view: the

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**Figure 16.2**

Maritime zones
Source: Martin Stopford 2007

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**BOX 16.1 MARITIME ZONES RECOGNIZED BY THE UN CONVENTION ON THE LAW OF THE SEA 1982**

**The territorial sea**

This is the strip of water closest to the shore. UNCLOS recognizes a maximum width of 12 nautical miles, but in practice countries use many different limits, as can be seen in Table 16.2. Three miles is the smallest limit, 12 miles the most common, while 200 miles is the furthest. Ships have the right of innocent passage through territorial waters. Coastal states only have the right to enforce their own laws relating to specific topics listed in Article 21 such as safe navigation and pollution. They are entitled to enforce international laws.

**The contiguous zone**

This is a strip of water to the seaward of the territorial sea. It has its origins in the eighteenth-century ‘Hoving Acts’ enacted by Great Britain against foreign smuggling ships hovering within distances of up to 6 leagues (i.e. 24 miles) from the shore. Coastal states have limited powers to enforce customs, fiscal, sanitary and immigration laws.

**The exclusive economic zone**

The exclusive economic zone (EEZ) is a belt of sea extending up to 200 miles from the baseline (i.e. the legally defined shoreline). It is mainly concerned with the ownership of economic resources such as fisheries and minerals. Within this zone third parties enjoy freedom of navigation and the laying of cables and pipelines. From a shipping viewpoint the EEZ is more like the high seas. However, the exception concerns pollution. Article 56 centers on the coastal state’s jurisdiction as provided for in the relevant provisions of this convention with regard to the protection and preservation of the marine environment. The ‘relevant provisions’ relate to the dumping of waste and other forms of pollution from vessels. This gives the coastal state the right to enforce pollution regulations in the EEZ, a matter of major economic importance to shipowners.

**The high seas**

The high seas are ‘all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or the internal waters of a state.’ In this area vessels flying a particular flag may proceed without interference from other vessels. This convention establishes the basis on which nationality can be granted to a merchant ship and the legal status of that ship. Article 91 of the 1982 Convention on the High Seas states that:

Each state shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the state whose flag they are entitled to fly. There must exist a genuine link between the state and the ship.

This paragraph was unchanged from the 1958 Convention and was the end-product of a heated debate about whether countries such as Liberia and Panama had the right to establish open registries. Since the Convention does not define what constitutes a ‘genuine link’ between state and ship, it was left to each state to define this link for itself.
2. Compliance with maritime safety conventions.

3. Crewing and terms of employment. The company is subject to flag state regulations concerning the selection of crew, their terms of employment and working conditions. Some flag states, for example, insist on the employment of nationals.

4. Naval protection and political acceptability. Another reason for adopting a flag is to benefit from the protection and acceptability of the flag state. Although less important today, there were examples during the war between Iran and Iraq in the 1980s when shipowners changed to the US flag to gain the protection of US naval forces in the Gulf.

Any of these factors may be sufficient to motivate shipowners to seek a commercial advantage by changing their flag of registry. Table 16.3 shows that this has a long history, and one that gathered momentum during the twentieth century as taxation and regulation came to play an increasing part in the shipowner's commercial operations. This naturally raises the question whether a shipowner is free to change his flag. To answer this question we must look at how ships are registered. In some countries the shipowner is subject to the same legal regime as any other business, while in others special legislation is introduced covering merchant shipping companies.

Registration procedures

A ship needs a nationality to identify it for legal and commercial purposes, and it is obtained by registering the ship with the administration of a national flag. The way registration works varies from one country to another, but the British regime provides an illustration.

Under the Merchant Shipping Act 1894, British ships must be registered within Her Majesty's dominions (in practice, because of the constraints presented by the legislation of UK Dependent Territories, that registration may have to be in the UK). A peculiarity of British registration is that the ship is registered as 64 shares, at least 33 of which must be owned by a British subject or a company established under the law of some part of Her Majesty's dominions and having its principal place of business in those dominions.3 Under the UK Companies Acts, any person of any nationality may register and own a company in the United Kingdom, so a national of any country may own a British ship.

Interestingly, there are no legal penalties for failing to register a ship, possibly because it was felt that the practical penalties are such that no legal enforcement is required to provide an additional inducement. A ship registered in the UK can fly the British flag, i.e. the Red Ensign, but is not obliged to do so. Nor is there any legal constraint on a British subject or British companies registering ships outside Britain if they wish to do so. All that is necessary is for the requirements of the recipient register to be met.

There is much variation in the requirements for registration. Some flag states require the ship to be owned by a national. This is the case in Liberia, but nationality is easily established by setting up a Liberian company, which qualifies as a national for the purposes of registration. Panama has no nationality requirements, while the Greek flag falls...
Table 16.3 History of ship registration and port state control

<table>
<thead>
<tr>
<th>Period</th>
<th>Flag of registry</th>
<th>Motivation</th>
</tr>
</thead>
</table>
| 18th century | Spanish          | English merchants circumvented restrictions limiting non-Spanish vessels from
|              |                  | West Indies trade.                                                          |
| 17th century | French           | English fishermen in Newfoundland used French registry as a means to continue
|              |                  | operation in conjunction with British registry fishing boats.              |
| 19th century | Norwegian        | British trawler owners changed registry to fish off Moray Firth.            |
|              | Portuguese       | US shipowners in Massachusetts changed registry to avoid capture by the British. |
| 1922         | Panamanian       | Two ships of United American Lines changed from US registry to avoid laws on
|              |                  | serving alcoholic beverages aboard US ships.                               |
| 1922-1930    | Panamanian       | US shipowners switched registry to reduce operating costs by employing cheaper
|              |                  | shipboard labour.                                                          |
| 1930s        | Panamanian       | Shipowners with German-registered ships switched to Panamanian registry to avoid
|              |                  | possible seizure.                                                          |
| 1939-1941    | Panamanian       | With encouragement from the US government, shipowners switched to Panamanian registry
|              |                  | to assist the Allies without violating the neutrality laws. European shipowners
|              |                  | also switched to Panamanian registry to avoid wartime requisitioning of their vessels. |
| 1946-1949    | Panamanian       | More than 150 ships sold under the US Merchant Sales Act of 1946 were registered
|              |                  | in Panama - as it offered liberal registration.                             |
| 1949         | Liberian         | Low registration fees, absence of Liberian taxes, absence of operating and
|              |                  | crewing restrictions made registry economically attractive.                 |
| 1950-late 1970s | Flags of convenience | As registry in USA and other countries became increasingly uneconomical, many countries
|              |                  | competed to become 'flags of convenience' for ship registration; only a few succeeded
|              |                  | in attracting significant tonnage.                                          |
| 1982-2007    | National flags start to enforce regulations on ships in their coastal waters | 1982 Paris Memorandum of Understanding in which 14 European states agreed to work
|              |                  | together to ensure that ships visiting their ports complied with international
|              |                  | conventions on safety and pollution. Others followed.                       |

Source: Cooper (1986)

Types of registry

Ship registers can be broadly divided into three groups: national registers, international registers and open registers.

- National registers treat the shipping company in the same way as any other business registered in the country. Certain special incentives or subsidies may be available but, broadly speaking, the shipping company is subject to the full range of national legislation covering financial, company and employment regulations.

- International registers were set up by some national flag administrations to offer their national shipowning companies an alternative to registering under open registries. They treat the shipping company in broadly the same way as an open register, generally charging a fixed tax on the tonnage of the ship (tonnage tax) rather than taxing corporate profits. The aim is to provide a national flag environment which offers shipowners the commercial advantages available under an open register. In 2005 there were eight international registers, of which Singapore, Norwegian International Registry, Hong Kong, Marshall Islands and the Isle of Man were the biggest.

- Open registers (flags of convenience) offer shipowners a commercial alternative to registering under their national flag, and they charge a fee for this service. The terms and conditions depend on the policy of the country concerned. The success of an open register depends on attracting international shipowners and gaining the acceptance of the regulatory authorities. In 2005 there were 12 open registries, which are listed in Table 16.4. Panama, Liberia, Bahamas, Malta and Cyprus were the biggest.

The distinction has more to do with how registered ships are treated than access to the flag. Most national registers are open to any shipowner, whatever his nationality, who wishes to apply for registration and satisfies the necessary conditions. For example, the United Kingdom is open to any Greek, Norwegian or Danish shipowner who wishes to register his vessels under the UK flag, provided he satisfies certain requirements. Confronted with a choice of flags under which to register, the shipowner must weigh up the relative advantages and disadvantages of each of the alternatives.
REGULATION OF THE MARITIME INDUSTRY

Table 16.4 World merchant fleet by ownership and registration, January 2005

<table>
<thead>
<tr>
<th>Flag state</th>
<th>Home Registered</th>
<th>Overseas Registered</th>
<th>Total Registered</th>
<th>% on home register</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece</td>
<td>50,997</td>
<td>104,147</td>
<td>155,144</td>
<td>33%</td>
</tr>
<tr>
<td>Japan</td>
<td>12,611</td>
<td>105,021</td>
<td>117,632</td>
<td>11%</td>
</tr>
<tr>
<td>Germany</td>
<td>9,033</td>
<td>46,878</td>
<td>55,911</td>
<td>16%</td>
</tr>
<tr>
<td>China</td>
<td>27,110</td>
<td>20,702</td>
<td>47,812</td>
<td>56%</td>
</tr>
<tr>
<td>United States</td>
<td>10,361</td>
<td>36,037</td>
<td>46,398</td>
<td>22%</td>
</tr>
<tr>
<td>Norway</td>
<td>14,044</td>
<td>29,645</td>
<td>43,689</td>
<td>33%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>17,248</td>
<td>22,747</td>
<td>40,095</td>
<td>42%</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>10,571</td>
<td>16,867</td>
<td>27,438</td>
<td>38%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10,865</td>
<td>14,978</td>
<td>25,843</td>
<td>42%</td>
</tr>
<tr>
<td>Singapore</td>
<td>12,424</td>
<td>9,909</td>
<td>22,333</td>
<td>50%</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>6,846</td>
<td>10,022</td>
<td>16,867</td>
<td>41%</td>
</tr>
<tr>
<td>Denmark</td>
<td>8,376</td>
<td>8,491</td>
<td>16,867</td>
<td>50%</td>
</tr>
<tr>
<td>India</td>
<td>11,729</td>
<td>980</td>
<td>12,709</td>
<td>92%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1,530</td>
<td>3,889</td>
<td>5,419</td>
<td>26%</td>
</tr>
<tr>
<td>Others</td>
<td>70,915</td>
<td>92,055</td>
<td>163,077</td>
<td>47%</td>
</tr>
</tbody>
</table>

Total nationals registered: 387,751

1. NATIONAL REGISTERS

2. INTERNATIONAL REGISTERS

3. OPEN REGISTERS ('FLAGS OF CONVENIENCE')

The economic role of open registers

The movement towards open registers started in the 1920s, when US shipowners saw registration under the Panamanian flag as a means of avoiding the high tax rates in the United States, while at the same time registering in a country within the stable political orbit of the United States. There was a spate of registrations during this period, but the real growth came after the Second World War when the US government sold off Liberty ships to US owners. Anxious to avoid operating under the American flag, US tax lawyers approached Liberia to set up a ship register designed to attract shipowners to register under that flag on the payment of an annual fee. Shortly afterwards, Panama adapted its laws to attract shipowners from anywhere in the world, and thus the two major international open registers were established.

The use of an open register generally involves payment of an initial registration fee and an annual tonnage tax, which enables the register to cover its costs and make a profit. In return, the register offers a legal and commercial environment tailored to the requirements of a shipowner trading internationally. There are major differences in the way registers approach this task, but in general the areas addressed are:

- Tax. There are generally no taxes on profits or fiscal controls. The only tax is the subscription tax per net registered ton.
- Crewing. The shipping company is free to recruit internationally. There is no requirement to employ nationals either as officers or crew. However, international conventions dealing with crew standards and training may be enforced, depending on the policy of the register.
- Company law. As a rule, the shipping company is given considerable freedom over its corporate activities. For example, ownership of the stock in the company need not be disclosed; shares are often in "bearer" form, which means that they belong to the person who holds them; liability can be limited to a one-ship company; and the company is not required to produce audited accounts. There are generally few regulations regarding the appointment of directors and the administration of business.

In effect, open registers are businesses and the service offered is determined by the register's maritime laws and the way they are enforced. Supervising safety standards is expensive and during the 1980s recession some open registers paid little attention to this aspect of the business, but this has proved a difficult stance to maintain. To be successful an open register's ships must be acceptable in the ports of the world and to bankers lending against a mortgage on the ship. As the scrutiny of ships by shippers and port authorities has increased it has become more important for open register flags to comply with international conventions, and most open registers, whilst offering shipowners freedom in the areas of taxation and company law, enforce legislation regarding the operational and environmental safety of ships registered under their flag.
In the 1980s and 1990s many large shipping corporations bowed, often reluctantly, to commercial pressures and abandoned their national flag in favour of open registers. Because in addition to tax concessions open registers allowed freedom in crew selection, this facility became available it was widely adopted. Today about half the world merchant fleet is registered under open registers. The principal open registry flags, Panama, Liberia, Bahamas, Malta, Cyprus, and Bermuda, plus half a dozen smaller flags including St Vincent and Antigua, are listed in Table 16.4. The fact that so few ships under these flags are owned by nationals confirms their status as open registries (see Table 16.4.3, column 3).

Maritime Consultative Organization (IMCO) met in London and elected its Maritime Safety Committee. The terms of the election of the Committee stated that eight members of the committee should be the largest shipowning nations. Initially the eight nations elected were the USA, UK, Norway, Japan, Italy, the Netherlands, France and West Germany. However, objections were raised that Liberia, which ranked third in world tonnage, and Panama, which ranked eighth, should have been elected instead of France and Germany.

The dispute was submitted to the International Court of Justice for an opinion on whether the election was legal in terms of the 1948 Convention that established the IMCO. It was argued by the European shipowners that for a ship to register in a country there had to be a ‘genuine link’ between registration and ownership, and that in the case of international open registry flags this link did not exist. Predictably Liberia, Panama, India and the USA took the opposite view. The European argument was not accepted by the Court which by a 9–5 vote held that, by not electing Liberia and Panama to the Maritime Safety Committee, the IMCO assembly had failed to comply with Article 28(a) of the 1948 Convention. As a result, international open registry flags were legitimized in international law.

In a world of high taxation, offshore registration was enormously attractive, and once this facility became available it was widely adopted. Today about half the world merchant fleet is registered under open registers. The principal open registry flags, Panama, Liberia, Bahamas, Malta, Cyprus, and Bermuda, plus half a dozen smaller flags including St Vincent and Antigua, are listed in Table 16.4. The fact that so few ships under these flags are owned by nationals confirms their status as open registries (see Table 16.4.3, column 3).

Because in addition to tax concessions open registers allowed freedom in crew selection, in the 1980s and 1990s many large shipping corporations bowed, often reluctantly, to commercial pressures and abandoned their national flag in favour of open registers.

In some circumstances it is necessary for a shipowner to register a ship under two flags. For example, the owner may be required to register the ship under his domestic flag, but this flag may not be acceptable to the financing bank, so for mortgage purposes it is registered under a second jurisdiction. The way this works is that the ship is first registered in country A and its owning company then issues a bare boat charter which is registered in country B where it enjoys the same rights, privileges and obligations as any other ship registered under the flag. Obviously this only works if the registration authorities in country B are prepared to accept a bare boat charter, but several flags such as Malta and Cyprus are willing to do so for registration purposes, provided the registers are compatible.

Separating ownership from operation in this way can be used, for example, to allow the company to register in country A to maintain the nationality of the ship, whilst using the second register to circumvent restrictive national regulations such as crewing or to gain access to certain ports.

Company structures associated with ship registration

The use of open registers in shipping has given rise to a distinctive structure of company organization designed to protect the ‘beneficial owner’. A typical company structure is shown in Figure 16.4. There are four active components:

1. The beneficial owner. The ultimate controlling owner who benefits from any profits the ship makes. He may be located in his home country or an international centre such as Geneva or Monaco.